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

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Contents

Acknowledgements

Section A: Introduction

Context, need and utility of the study

Objectives of the study

Methodology and Sampling Design

Section B: Ethnographic Study on Access to toilets in AP Slums

Section C: Changing perceptions about sanitation, gaps and needs- consumer data Concerns and needs of the slum dwellers in regard to individual toilets Preferred cost of toilet

Section D: Feasibility of SaniShop- stakeholders' feedback

SHGs' perception of sanitation and willingness to take up SaniShop

Role of Masons in promotion of sanitation

Response of Sanitaryware dealers

Response of municipal officials in promotion of sanitation in slums

Section E: Market Scenario for Sanitaryware

Demand for low cost Sanitaryware in AP slums

Target market

SaniShop enterprise

Section F: Business Model for SaniShop

Sanishop – Technical Aspects

Organisational Options-SHGs, Women Entrepreneurs, APMAS

Marketing & Sales Strategy

Financial Aspects of the Enterprise

Break even analysis of different options

Recommendations

Section G: Annexures

Annexure – A Slum Profiles

Annexure – B Focus Group Discussions with Women about Sanitation

Annexure – C FGD with SHG women about Sanitation and SaniShop

Annexure – D Perceptions of Masons

Annexure – E Perceptions of Sanitaryware dealers

Annexure – F Policy environment and views of municipal officials

Table 21 Distribution of households with ration card for subsidised food grains

Table 22 Distribution of households by septic tank and underground drainage toilets

Table 23 Distribution of households by monthly expenditure on toilet maintenance

Table 24 Distribution of households who applied for government assistance for toilets

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Section A

Introduction

Context, need and utility of the study

Use and access of toilets in slums in Andhra Pradesh varies across regions and legal status of the settlement. Altogether 192.44 lakh population inhabit 110 municipalities and 15 Corporations according to 2001 census. For want of data for the whole of state the Mission for Elimination of Poverty in Municipal Areas (MEPMA) database for 31 urban local bodies may be considered as indicative of the situation with regard to toilets in slums. There are 7520 slums comprising 19.04 lakh households spread across the 31 municipalities in the state according to MEPMA. Three fourths (72.59 %) of the slums are notified slums. The remaining slums constitute non-notified slums (26.54 %) and poor pocket slums (0.86 %).

Regional variations are observed in regard to proportion of slum population inhabiting notified slums of a district. While Greater Hyderabad Municipal Corporation (GHMC), the state capital, has 86.06 per cent notified slums, it is 59.24 per cent in Rayalaseema, followed by Telangana (68.52 %), and Coastal Andhra region (74.04 %). Inter-dsitrict variations in this regard are also very high. While Vijayawada Municipal Corporation has all slums notified, it is 18.29 per cent in Kadapa district. Infrastructure facilities including drainage, drinking water and public utilities as well as tenurial security are related to recognition of slum or lack of it by the government. The non notified slums provide little incentive for the inhabitants to invest in housing or toilets. Access to toilets is low in non-notified slums. It is interesting to examine inter-district variance in tenurial security across the state.

Available data, despite gaps in regard to certain features in slums, suggests that households without toilets varies from as low as 4.63 % in GHMC to as high as 46.32 % households in Kadapa against the state average of 18.64 % households without toilets for the slums in the state. There are more households without toilets in non-notified slums compared to notified slums. About one out of every five households (21.98 %) in non-notified slums do not have toilets with significant inter —municipality variations. While 53.57 % households do not have toilets in Kadapa non- notified slums it is 8.75 % in GHMC. MEPMA data on access to toilets has to be considered only indicative of the trends across municipalities and not comprehensive since some municipal corporations, like Greater Visakhapatnam Municipal Corporation (GVMC), do not have any data on the access to toilets. Further, the data on households having a toilet may be an exaggeration as it includes also toilets that may not be functional. Thus, the limited data on access to toilets suggests there is significant section of urban poor without a toilet (see Table 1 on Access to Toilets in Municipalities).

Table 1 Distribution of slum population by access to toilets in slums of Municipalities

Units	Total Slums	Total HHs	HH sans toilet	% of HH sans toilets	Notified Slums	% NS to total slums	Total HHs	HH sans toilet	% of HH sans toilets	Non Notified Slums	% NNS to total slums	Total HHs	HH sans toilet	% of HH sans toilets	Poor Pocket Slum	% PPS to total slums
All ULBs	7520	1904224	354973	18.64	5459	72.59	1455773	255452	17.55	1996	26.54	440815	96907	21.98	65	0.86
Kadapa	410	85891	39784	46.32	75	18.29	23310	5550	23.81	315	76.83	61120	32743	53.57	20	4.88
West Godavari	307	62587	23902	38.19	298	97.07	61210	23678	38.68	9	2.93	1377	224	16.27	0	0.00
GHMC	1456	390407	18066	4.63	1253	86.06	340226	13675	4.02	202	13.87	50181	4391	8.75	1	0.07
Vishakapatnam	741	189287	NA	NA	286	38.60	79862	NA	NA	455	61.40	109425	NA	NA	NA	NA
Total	2914	728172			1912	65.61				981	33.67				21	0.72
Proddutur	54	15410	4697	30.48	33	61.11	11341	2439	21.51	15	27.78	3141	995	31.68	6	11.11
Bhimavaram	54	7953	1305	16.41	52	96.30	7833	1291	16.48	2	3.70	120	14	11.67	0	0.00
GHMC	1456	390407	18066	4.63	1253	86.06	340226	13675	4.02	202	13.87	50181	4391	8.75	1	0.07
GVMC	741	189287	NA	NA	286	38.60	79862	NA	NA	455	61.40	109425	NA	NA	NA	NA
Total	2251	603057			1591	70.68	439262			659	29.28	162867			1	0.04

Significant section of urban poor not having access to toilets requires serious attention to socio-cultural as well as other constraints that have a bearing on behaviour related to use of toilets. Available data is of little help in this regard.

Ethnographic study conducted in urban localities of Andhra Pradesh proposed to understand the cultural practices and demand for low cost toilets among varied communities. The study examined scope for promotion of low cost sanitation through self help groups (SHGs) vis-à-vis the urban renewal policy and varied schemes of municipal authorities. Comprehensive understanding of the scope for strengthening low cost sanitation and effective strategies to address constraints is attempted though detailed investigation of customers' choices, demand assessment, supply aspects, technology options, progress and constraints in regard to Integrated Low Cost Sanitation (ILCS) and socio-cultural dimensions of the demand for low cost sanitation. Business model based on the ethnographic insights into the cultural practices and demand for sanitation among the urban poor is proposed for strengthening sanitation interventions by government and other agencies.

Objective of the ethnographic study on sanitation practices

The study aimed at devising a business model of SaniShop for urban poor with detailed examination of varied factors having a bearing on the effective implementation of the prototype. The business model focused on appropriate technology options, pricing of different model(s), demand assessment, supply side factors, capacity building and awareness generation, requirement of human resources, roles and rewards of stakeholders in value chain - supplier, producer, master franchisee, sales agents etc.

Ethnographic study has been designed to gain insights into cultural aspects of diverse communities among the urban poor. The information collected through varied methods is used to explain lifestyles of the urban poor, their needs, decision making, aspirations for improvement in life, hygiene related practices and taboos, perceptions about toilets of one's choice, constraints in adoption of individual toilets and opportunities to overcome the barriers, etc

The insights gained from field studies are incorporated in developing appropriate business model as well marketing strategy for effective implementation of SaniShop for the urban poor.

Scope of the proposed study comprised the following:

- Customer research (cultural practices of varied communities, demography of the settlements, perception of sanitation, use and satisfaction with regard sanitation products and services, demand assessment, constraints in adoption of low cost sanitation, etc)
- Policy environment (ILCS and other measures in the past)
- Market landscape for low cost sanitation for urban poor (stakeholders, pricing, access)
- Business model parameters (product focus, technology insights, pricing, marketing levers, distribution, financial aspects, breakeven analysis, role of urban authorities and government schemes)

<u>Customer Research</u>: Customer research on perceptions towards quality of life and sanitation explores lifestyles and aspiration with insights into cultural practices with implication to adoption of low cost sanitation. The FGDs explored a host of aspects including how they perceived their future lifestyle to be like, their source of incomes and utilisation, their needs and savings, priorities for expenditure, improvements they plan in near future, etc

FGDs were designed to explore issues related to sanitation specific aspects such as awareness on sanitation, practices and attitudes related to hygiene, constraints in owning a toilet, perceptions towards individual toilet and public toilets, social taboos related to toilets, parameters of a toilet of their choice, pricing, model, etc

<u>Policy environment</u>: Study of low cost sanitation schemes, total sanitation campaign etc by the government, scope for leveraging the ongoing schemes

<u>Demand assessment of low cost sanitation</u>: Study of demand for toilets focused on current coverage, who owns individual toilets, demand curve and willingness to meet cost of the toilets, options for cost sharing, rating of toilets vis-à-vis other consumable goods, etc

Market Landscape and Business Model - supply side parameters and technology options: Accessibility to suppliers (location of Sanitaryware material like ceramic pans, tiles, mapping Sanitaryware shops/ sellers, current price of toilets and shelters, building materials and available alternatives), and availability of entrepreneurial skills (availability and quality of masons, access to micro finance, use of credit form MFIs)

Technology options have been studied through physical site survey covering space considerations and demographic aspects of the household, land use, security and stability of the settlement, social composition of the settlement, climate and weather conditions with implications to design of toilets, hydrology aspects including type of soil and water availability, and transportation costs for accessing building materials for toilets.

Specific objectives/research questions

- a) What is the socio-cultural background of slum households with regard to access to toilets?
- b) What factors affect demand for sanitation materials and services?
- c) What is the extent of demand for toilets in select slums across the regions?
- d) How much amount the slum households are willing to pay for having a toilet?
- e) Identify marketing levers and incentives for stakeholders in value chain of SaniShop?
- f) What additional materials /services are needed in SaniShop business model?
- g) Willingness and capabilities of SHGs/ entrepreneurs for taking up manufacturing and service provision
- h) Whether government would be willing to support SaniShop model?

Methodology

A blend of focused group discussions with stakeholders, interviews, and analysis of secondary data is adopted for the feasibility study. Field investigations included physical site survey of varied toilet designs in vogue, interaction with the urban poor, suppliers, toilet construction workers, elected representatives and officials. Field research was conducted for two to four days in each slum. Detailed checklists for each of the stakeholders have been designed for collection of data.

Data sources for the study include both secondary and primary. Secondary sources include information from MEPMA, other studies, and reports on low cost sanitation in slums in Andhra Pradesh. Available secondary data on market landscape with regard to sanitation materials have been reviewed to broaden the understanding state and civil society interventions in promotion of sanitation. Field research helped collect qualitative data through FGDs from varied communities and interviews with stakeholders in the slums. Besides, quantitative data has been collected through structured interview schedules for the customers to provide insights into patterns of behaviour in regard to sanitation, access to toilets with reference to one's socio economic background, physical conditions of the slums, tenurial security etc.

Sampling design

Sampling units for the ethnographic study include the following:

- Households of the slum
- Suppliers
- Masons
- Officials

Women self help groups/ Town Level Federations

Criteria for the selection of sampling units

Study area comprises totally ten slums representing all regions and capital city. Five districts were selected for the field study covering municipalities of varying size and social composition as well as broad regions of the state. These locations also offer scope to select diverse communities in terms of social and economic background. Ten neighbourhoods are covered from five districts across the state.

Slums in select municipalities of the districts are identified based on size and tenurial status. Slums with less than 300 households have been excluded to ensure minimum household coverage of 90 to 100 households from different social categories in a slum. Slums in a cluster (like in Ward No 7 and 27 of Bhimavaram) are considered as single a unit. Selected slums on the above criteria provides 6 notified and 4 non-notified slums across the state (see Table 2)

Table 2 Select slums for the SaniShop Study

SN	Municipality	District	Region	Slums	Select slums
1	GHMC	Hyderabad	Capital city	2	NTR Nagar & Fatullaguda
2	Proddutur	Kadapa	Rayalaseema	2	Swaraj Nagar & Modempalli
3	Patancheru	Medak	Telangana	1	Ambedkar Nagar
4	Ramachandrapuram	Hyderabad	Telangana	1	ICRISAT fencing area
5	Bhimavaram	West Godavari	Andhra	2	Ward No 7 & Ward No 27
6	GVMC	Vishakapatnam	Andhra	2	Gandhinagar & Kobbarithota

Size of sampling units

Coverage of different sampling units is based on criteria that have a bearing on perceptions of sanitation and access to toilet or engagement in business related to sanitation products and services. Information collection for the ethnographic study on feasibility of SaniShop in slums envisages a blend of tools specific to each category of respondents. Focus of information collection, tools and size for each category are as of follows:

Sampling unit	Number	Selection criteria	Research questions	Tool
Slums	10 Regional background, notified & not- notified		Slum profile, infrastructure, physical conditions, demographic composition, changing patterns in access to toilets	Observation, site visit, interviews with key informants
Slum households	Slum households 90 to 100 per slum ethnic & social categories and households not having toilets (30 to 40 per community)		Lifestyles and aspirations, perception of sanitation, access to toilets, willingness for building a toilet	Structured interview schedule
Social categories	3 to 4 groups Women, households		Gender, socio-cultural factors in regard to perception of sanitation & access to toilets	FGDs

Sanitaryware Suppliers	4 per slum	Sanitation material suppliers in a radius of 4 kms of the slum	Feedback on popular toilet models, costing, willingness for promotion of SaniShop model, marketing levers	Interview
Masons	4 per slum	Familiarity with slum and toilet construction	Skills, feedback on popular toilet models, costing, willingness for promotion of SaniShop model	Interview
Officials	1 or 2 officials per ULB	Commissioner/ health & sanitation officials	Constraints in total sanitation programme, government schemes for sanitation, perception of SaniShop	Interview
SHGs/SLFs	1 FGD per slum	Involvement in women mobilisation, entrepreneurship	Willingness, capabilities, investment capacities for taking up SaniShop	FGD

Households in each slum were selected randomly representing major communities of the settlement with reference to ethnic and social background. Further, care was taken to cover households having no toilets or toilets which are not functional to ensure proper appreciation of the needs of the households who have been left out in the sanitation programmes.

Research team for the study comprised the following:

- Project Coordinator (1) for research design, analysis & reporting Mr M Bharath Bhushan
- Associate Coordinator (1) for field coordination and FGDs Mr M Subba Rao
- Researchers (2 to 3 per slum) for FGDs with stakeholders Ms Jyothsna, Ms R Jhansi, Mr K Naresh Kumar, Mr M Subhash Chandra, Mr S S Reddy, Mr Jaganmohan Rao
- Supervision and data cleaning (1) Mr P Nandakishore
- Note takers (2) to assist in FGDs Ms Radhika and Ms Madhavi
- Statistician (1) for quantitative analysis
- Junior Investigators (8 to 12 per slum) for customer research and household interviews

The study was planned to be conducted in 11 weeks from 30 December 2011 to 15 March 2012

	1-2	3-7	8-9	10-11
Activity	week	week	week	week
Research design, pre-testing & finalisation				
of research tools	****			
Orientation to research team	****			
Field study		****		
Draft report			****	
Feedback from APMAS & finalisation of				
report				****

Field work schedule

Orientation programme for research	10 & 11 January 2012	
Hyderabad/ GHMC and Medak	4 slums	17 to 24 January 2012
Vishakapatnam	2 slums	27 to 30 January 2012
West Godavari	2 slums	1 to 4 February 2012
Kadapa	2 slums	7 to 10 February 2012

Section B

Ethnographic Study on Access to toilets in AP Slums

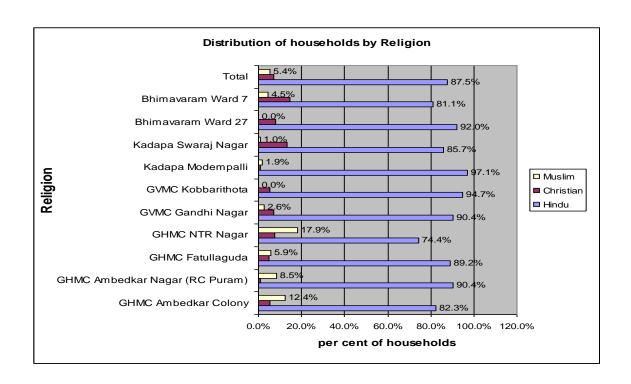
Life in slums reveals varied forms of deprivation and gaps in public infrastructure with regard to basic amenities like drinking water, sanitation, and housing among other facilities. Slum inhabitants are forced to invest one's meager resources, often mobilized from informal sources at high interest rates. They also run the risk of insecurity of demolition and relocation in many cases. They have poor access to basic comforts and lead lives of deprivation and pain.

Slum residents pay more for the basic amenities like drinking water, sanitation, cooking fuel, food and nutrition because they don't have entitlements. Life for slum residents is more expensive than their counterparts in non –slum areas.

Slums vary in size (from 200 to 15,000 population) and age from 8 years (Fatullaguda in GHMC) to 70 years (Kobbarithota in GVMC). While most of the slums are notified there are a few non-notified slums also in most of the municipalities. Infrastructural facilities like drinking water, storm water drainage and sewerage system vary significantly between municipalities and also within different pockets of a slum. Underground drainage system for sewerage is absent in most of the municipalities in Andhra Pradesh. Underground drainage is being introduced in a few slums in GVMC while in other small municipalities it is likely to take long time. Drinking water is a major problem in most of the slums as the supply, by taps or tankers, is on alternate days or twice a week for a few hours. Several households struggle to collect water from different sources. Profiles of slums covered in the field study provide a perspective on the diverse physical conditions, deprivation, tenurial security and social composition of the inhabitants across the state. Slum profiles present details of the socio-cultural aspects of the community and trajectory of progress in civic facilities including access to toilets (Annexure A).

Ethnographic profile of the slums

Slums in Andhra Pradesh reflect broadly the social composition of state population with regard to religion. Hindus constitute 87.5 per cent of total slum population followed by Christians (7.1 %) and Muslims (5.4 %). Some slums have relatively higher proportion of Muslim households (GHMC NTR Nagar, Ambedkar Colony of Patancheru and Ambedkar Nagar of RC Puram) and Christians in Bhimavaram Ward 7 and Kadapa Swaraj Nagar.



Pockets of vulnerable communities – social categories

While slums are settlements of the poor people they are also predominantly settlements of particular vulnerable communities. Households from Scheduled Castes and Backward Castes are seen in most of the slums of AP. Households belonging to SC and BC form 36.4 % and 48.6 % respectively of the total slum population. In some slums SCs constitute more than half to more than 80 % of total population.

Slums are distinct in terms of social composition. Some slums are like transplantation of a village or a particular community (ex: Ambedkar colony of RC Puram has large section of households that migrated from a particular mandal of Nizamabad [Pitlam, Nizamsagar] and Medak [Narayankhed], Budaga Jangala community from Rangareddy).

Similarly Kobbarithota is predominantly a fishermen community and Balaji Nagar of Gandhi Nagar – GVMC is mainly of families engaged in buying old clothes, Madiga community in Modempally of Kadapa, washer men in Rajakulapeta as well as Yanadi tribals in John Bishop Colony of Bhimavaram. Social cohesion and solidarity based on community is seen in most of the slums.

Table 3 Distribution of households by caste in slums

Slum	SC	ST	BC	Others
GHMC Ambedkar Colony	52.2%	1.8%	31.0%	15.0%
GHMC Ambedkar Nagar (RC Puram)	26.6%	0.0%	59.6%	13.8%
GHMC Fatullaguda	25.5%	4.9%	55.9%	13.7%
GVMC Gandhi Nagar	26.1%	0.0%	53.9%	20.0%
GVMC Kobbarithota	15.8%	0.0%	81.6%	2.6%
Kadapa Modempally	67.0%	0.0%	28.2%	4.9%
GHMC NTR Nagar	35.9%	4.3%	37.6%	22.2%
Kadapa Swaraj Nagar	83.8%	0.0%	11.4%	4.8%
Bhimavaram Ward 27	12.0%	4.0%	72.0%	12.0%
Bhimavaram Ward 7	27.3%	7.6%	50.0%	15.2%
Total	36.4%	2.4%	48.6%	12.6%

Right to shelter: Pucca or kaccha house

A house is usually classified by building materials and roof or walls into categories like permanent, semi- permanent and temporary form house type of house. This definition is misleading in reflecting the quality of house or the functional utility to its inhabitants. Houses totally cramped in a space about 20 yards without any space for kitchen, bathroom and toilet in Kobbarithota of Vishakapatnam would be classified as Pucca (permanent) because it is built of cement and brick walls with RCC roof. Around 90.4 % of the houses in Kobbarithota are built in area less than 50 yards. Houses of similar space in Bhimavaram Ward 27 constitute 20.8 %. Houses in Bhimavaram are spacious and sometimes have roof of palm leaf and therefore get classified as temporary or semi permanent.

By the traditional parameters there are 41.2 % houses of permanent type followed by 20.8% semi permanent and 38.0 % temporary in the study area.

Diversity within a slum

Residents of Gandhi Nagar in Vishakapatnam object if their area is called a slum. They would rather have it known as a 'colony'. There is a grain of truth in what they say. The house here may be small but they are well-designed with floor tiles and polished stones and a concrete roof on top. There is a school and an Anganwadi. The streets are broad and well-maintained, with street lights completing the picture. The women take active part in the SHGs and are efficient.

Almost 90 per cent of the homes here have toilets and the underground drainage connection is also in place as all of them own *pattas* and pay property tax. Some of the residents, who sell old clothes have formed an Association and

also have their own office premises. There is a community hall in the slum and the open space before it is a playground for the youngsters of the colony.

A few residents are tenants and pay rents between Rs.600-2000. Those who do not have toilets have the community toilet as an option. This is open from 5.30 am to 10.30 pm and the timings are useful for many. Two rupees/ person is the charge for using the toilet. For a family, a card for Rs.50 is issued and the members can use the toilet as many times as they require.

There is however a sore spot in Gandhi Nagar which is its second street. The huts adjoining the drains highlight the poverty of its residents. Here, the women are forced to take bath in the open. The kids typically play in the mud and look unkempt and unclean. The municipal authorities want to evict these dwellers and have deposited Rs.25000 in each householder's account. But no one knows when this resettlement programme will be completed.

Though a few of these residents are employed, most do not have any major occupation. Though a lot of these residents aspire for a toilet, they are rendered helpless because of poor financial conditions.

It is proper to take indicators such as toilet, space of house site and access to drinking water by type of source. These indicators not only reflect quality of life at present but also the scope for improvements in future as space constraints do not allow provision of an additional room or toilet if there is none now.

Right to shelter: Owners and Tenants in slums

Slums have people owning a house and some who are 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 owners sharing a portion of the house could be relatively less. Older slums and slums with tenurial security have relatively more tenants compared to slums with poor tenurial security or of recent origin.

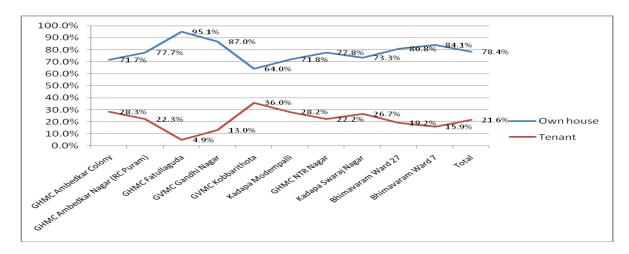
Slum residents struggle for long years to stabilize, face difficult situations for years before they can attract tenants to add extra income.

For instance Fatullaguda of LB Nagar municipality in Hyderabad, of recent origin and still faced with threats of demolition, has merely 4.9 % tenants. Insecurity and poor transport facilities are disincentive for the owners to invest in housing and less attractive for someone to take a house on rent there.

While Kobbarithota in Vishakapatnam of about seventy years history and highly crowded with matchbox size houses, has more tenants (36.0 %). Although poor in infrastructure it has less insecurity and is close to the port and employment opportunities thereof.

Similarly slums in Patancheru and Ramachandrapuram or Swaraj nagar in Kadapa have good share of tenants (28.3 %, 22.3 % and 26.7 % respectively). Slums in Bhimavaram have 16.0 to 19.0 % tenants.

Average rent is Rs 950 per month ranging from Rs 300 to Rs 1500 in most of the slums. There are exceptional cases of rent up to Rs 2000 to Rs 3000 in NTR Nagar and Bombay Colony of Ramachandra Puram. Some houses have much higher rent in slums that are old having relatively better tenurial security or located in better place or both.



<u>Hardships in slum life – too small a place to live</u>

A house in slums does not include all the components one usually imagines about a house. About one fourth of the houses in slums are less than 50 yards. There are houses also in a space that is not even 20 yards. Houses, in most of the cases, are dwelling units built in a space that is between 21 and 50 yards. There is no provision of separate space for kitchen, bed room, bath room, toilet, courtyard, balcony, etc. Such small space does not allow for a toilet. Houses that have RCC roof use the terrace as another room. Residents are forced to use the street for cooking, bathing, play, etc. Street and home is inseparable in many slums.

House in Kobbarithota of Vishakapatnam, for instance, having less than 50 yards is like a matchbox on another matchbox with stairs connecting some roof as one wall of house is attached to the next house. Houses in Ambedkar nagar of RC Puram are similar to Kobbarithota except that Kobbarithota has RCC roof and often first floor also and sometimes second floor.

Housing in BNR Nagar of Vishakapatnam on the hills has additional problems. It is difficult to climb the hill and more difficult to carry a pitcher of water from the ground to the top of the hill.

Table 4 Distribution of households by size of house site

	No	up to 20	21 - 50	51 to 100	101 - 150	151 - 200	>200
Slum	response	yards	yards	yards	yards	yards	yards
GHMC Ambedkar Colony	3.5%	1.8%	15.9%	62.8%	15.0%	0.9%	0.0%
GHMC Ambedkar Nagar (RC Puram)	7.4%	4.3%	29.8%	46.8%	8.5%	3.2%	0.0%
GHMC Fatullaguda	1.0%	0.0%	3.9%	94.1%	1.0%	0.0%	0.0%
		0.07.0					
GVMC Gandhi Nagar	1.7%	13.0%	11.3%	73.9%	0.0%	0.0%	0.0%
GVMC Kobbarithota	3.5%	4.4%	86.0%	5.3%	0.9%	0.0%	0.0%
Kadapa Modempally	0.0%	0.0%	21.4%	40.8%	35.9%	0.0%	1.9%
GHMC NTR Nagar	6.8%	0.9%	14.5%	70.9%	1.7%	5.1%	0.0%
Kadapa Swaraj Nagar	0.0%	3.8%	20.0%	67.6%	6.7%	1.0%	1.0%
Bhimavaram Ward 27	0.8%	4.8%	16.0%	50.4%	25.6%	1.6%	0.8%
Bhimavaram Ward 7	1.5%	0.0%	15.9%	64.4%	7.6%	3.0%	7.6%
Total	2.6%	3.3%	23.4%	57.7%	10.3%	1.5%	1.3%

House design, architecture and aesthetics in some slums of acute space constraints can give shock to professional architects in making optimum use of the "space".

Electricity connection

Almost all households in most of the slums have electricity connection. Old slums, especially the slums in big cities have almost all houses with electricity connection. No electricity connection for a household indicates high tenurial insecurity or sub culture distinct from the urban lifestyle like that of Budaga Jangalu community who are into garbage collection, begging, garbage collection through rickshaws, etc. BNR Nagar of GVMC situated on top of the hill, of recent origin and with no tenurial security, has no electricity connection at all. Households with no electricity connection constitute 6.3 % of the total households in study area. It is more important to notice that almost all households (97.8 %) with electricity connection have individual meters.

Access to subsidised food grains – ration card

Most of the households in slums have access to subsidised food supplies through ration cards. Having a ration card is a proof of residence or authentication one's domicile status. Besides, the food grains are available at much low price compared to the open market. Households having 'white card' belong to below poverty line (BPL) category and are entitled to rice, wheat flour, sugar, cooking oil, iodised salt, and kerosene while Pink Card holders do not get rice. Almost all the households (98.0 %) having a ration card have white card.

Households without ration card constitute 12.1 % of total households in study area. Slums with higher proportion of tenants (ex: Patancheru Ambedkar Colony), or slums with low tenurial security (ex Fatullaguda) have relatively more households without a

ration card. Households of migrant nature like Budaga Jangalu of RC Puram Ambedkar Nagar also have problems accessing ration card. Most of the households in BNR Nagar in GVMC and Fatullaguda in GHMC procure use ration cards of their earlier settlement as they have not received the ration cards in the current place of residence (see Table 21).

Cooking fuel: Firewood is the major source in AP slums

Cooking fuel is a concern of the slum residents in most slums. Firewood is the single most popular source of cooking fuel with 43.9 % households collecting from neighbourhood or buying firewood. Only 36.8 % households are fortunate enough to access the LPG. Households using kerosene, electricity, gobar, biomass sources constitute 11.4 % of total slum population. Households using more than source for cooking constitute 7.9 %. Around two thirds of slum households dependent on non-LPG sources spend considerable time and money on collection of cooking fuel. It is a major concern for womenfolk.

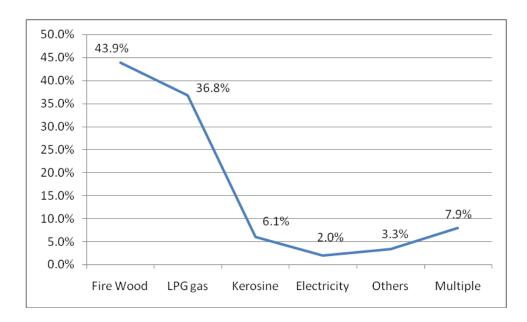


Fig Distribution of households by use of cooking fuel in slums

Access to SHG credit

Access to credit at reasonable interest rate is a major constraint for the urban poor. Their potential to invest in improvement of fixed assets and basic amenities related to housing depends largely on access to credit and tenurial security. Around three out of five households (57.1 %) in slums of Andhra Pradesh have credit through SHGs. Ambedkar Nagar (RCPuram), Swaraj Nagar of Kadapa, Kobbarithota of GVMC and Ambedkar Nagar colony of Patancheru have 40.4 % to 55.8% households as members of a SHG.

Membership in SHGs is higher in slums that are stable (Modempalli of Kadapa), higher proportion of households from BC category (Ward 7 & 27 of Bhimavaram) and owners.

Table 5 Distribution of households by membership in SHG

Slum	SHG Members
GHMC Ambedkar Colony	55.8%
GHMC Ambedkar Nagar (RC Puram)	40.4%
GHMC Fatullaguda	58.8%
GHMC NTR Nagar	58.1%
GVMC Gandhi Nagar	57.4%
GVMC Kobbarithota	49.1%
Kadapa Modempalli	68.9%
Kadapa Swaraj Nagar	48.6%
Bhimavaram Ward 27	62.4%
Bhimavaram Ward 7	67.4%
Total	57.1%

ACCESS TO DRINKING WATER AND SANITATION

Struggle for drinking water

Old slums have basic amenities like drinking water supply. Almost all slums struggle for drinking water with no support from the government. In the initial years they make their own arrangements like digging a well or collecting from public taps in the nearby areas or collecting from people in the nearest settlement. Sometimes they pay for collecting drinking water.

It is not only a question of access to water, but also the issue of how much water is available and whether it is safe to drink. Slums not having individual tap connections or public tap complain of polluted water they are forced to consume.

About half the slum population (49.8 %) collects water for drinking and other needs from public taps and another ten per cent of households from water supplied through tanker by the municipality.

Only one third of the slum households in AP have individual tap connection for water supply.

Table 6 Civic services, demographics, SHGs & infrastructure in study area

	ULB	Slum Name	Slum Type	Ward No	Slum HHs	Slum Population	SHGs	Water Supply	Storm Water Drainage	Sewerage System
District				ĺ	01	F		W	St	• 1
W Godavari	Bhimavaram	ST Colony	Notified	7	83	365	5	PC	NC	NC
W Godavari	Bhimavaram	Rajakulapeta	Notified	7	53	212	5	PC	PC	NC
W Godavari	Bhimavaram	Kaunjuvaripalem	Notified	7	64	292	6	PC	NC	NC
W Godavari	Bhimavaram	Gandhinagar Leprosy Colony	Notified	7	102	408	10	FC	PC	NC
W Godavari	Bhimavaram	Leprosy colony	Notified	7	205	646	11	FC	PC	NC
W Godavari	Bhimavaram	BC Colony	Notified	29	165	564	15	FC	FC	NC
W Godavari	Bhimavaram	Balusumudi Yanadula Colony	Notified	29	110	392	10	FC	FC	NC
GHMC	LB Nagar	Fatullaguda	Notified	7	74	324	18	FC	FC	NC
GHMC	LB Nagar	NTR Nagar	Notified	36	3686	12459	146	FC	FC	FC
GHMC	RC Puram	ICRISAT Fencing Area	Non-Notified	19	700	3524	58	FC	PC	PC
GHMC	Patancheru	Ambedkar Colony	Non-Notified	13	654	4581	44	PC	PC	PC
Kadapa	Proddutur	Swaraj Nagar	Notified	7	686	5820	41	FC	NC	NC
Kadapa	Proddutur	Sanjeev Nagar	Notified	8	793	6830	37	FC	NC	NC
Kadapa	Proddutur	Modempalli HW	Non-Notified	16	100	458	11	PC	FC	NC
GVMC	GVMC	Kobbarithota	Notified	29	1797	8986	75	FC	FC	FC
GVMC	GVMC	Gandhi Nagar	Non-Notified	2	450	2025	20	FC	NC	NC
GVMC	GVMC	Balaji Nagar	Non-Notified	2	250	1125	30	FC	NC	NC

FC = Fully connected, NC = Not connected, PC = Partially connected

Water supplied though public taps or individual taps is available for a few hours a day or once in two to three days. Water supplied through these means also depends on availability of power. Many slum residents have to collect from multiple sources - public taps and bore wells - as the water from individual tap connection is not adequate. BNR Nagar slum of GVMC depends on bore well water and Fatullaguda in GHMC depends on public taps and tankers. Both slums in Kadapa depend almost totally on public tap.

Because the water is inadequate and irregular many households have shortage of safe drinking water. Some households in Kobbarithota GVMC pay Rs 60 per month to their neighbours who have individual tap connection to permit them to collect five to six pitchers of water. In BNR Nagar the families living on top of the hill pay some people to fetch the water to top of the hill. Households in some slums having no individual tap connection pay Rs 60 to 150 a month to collect drinking water from neighbours.

Drinking water is a problem here. Water from public taps is there for an hour only. That is not enough to collect 2 or 3 pitchers. We buy water from neighbours who have individual tap connection. We pay 60 a month rupees for six pitchers of water.

- a resident of Kobbarithota, Vishakapatnam

A small section of the slum residents buy water (water cans). One eighth of slum residents in Ward No 7 of Bhimavaram buy water cans.

Table 7 Distribution of households by source of drinking water in slums

	Own	Public	Bore	Tanker	Water	Multiple
Slum	tap	Tap	well	Tanker	cans	source
GHMC Ambedkar Colony	64.6%	33.6%	0.0%	0.0%	0.9%	0.9%
GHMC Ambedkar Nagar (RC Puram)	26.6%	73.4%	0.0%	0.0%	0.0%	0.0%
GHMC Fatullaguda	16.7%	71.6%	0.0%	4.9%	2.9%	3.9%
GVMC Gandhi Nagar	39.1%	39.1%	19.1%	0.0%	2.6%	0.0%
GVMC Kobbarithota	28.1%	68.4%	3.5%	0.0%	0.0%	0.0%
Kadapa Modempally	0.0%	98.1%	1.0%	0.0%	0.0%	1.0%
GHMC NTR Nagar	80.3%	12.0%	0.9%	0.9%	5.1%	0.9%
Kadapa Swaraj Nagar	4.8%	94.3%	0.0%	0.0%	0.0%	1.0%
Bhimavaram Ward 27	33.6%	8.8%	0.8%	54.4%	2.4%	0.0%
Bhimavaram Ward 7	30.3%	22.7%	5.3%	28.0%	12.1%	1.5%
Total	33.3%	49.8%	3.2%	9.9%	2.9%	0.9%

Poor hygiene and ill health

Lack of safe drinking water and poor sanitation in slums affects health of the residents. That not only causes pain and considerable expenditure on treatment but also loss of working days.

More than half the slum households (56.3 %) complained of one or more members of the family having fallen sick. It is a serious concern in slums with high crowding, lack of safe drinking water and individual toilets. Several slums complain of mosquito menace.

Table 8 Distribution of households by incidence of illness during last 6 months

Slum	1 fell sick	2 or more fell sick
GHMC Ambedkar Colony	55.8%	3.5%
GHMC Ambedkar Nagar (RC Puram)	58.5%	17.0%
GHMC Fatullaguda	45.1%	20.6%
GVMC Gandhi Nagar	24.3%	5.2%
GVMC Kobbarithota	57.0%	4.4%
Kadapa Modempally	44.7%	5.8%
GHMC NTR Nagar	36.8%	36.8%
Kadapa Swaraj Nagar	40.0%	8.6%
Bhimavaram Ward 27	43.2%	7.2%
Bhimavaram Ward 7	45.5%	7.6%
Total	44.8%	11.5%

Sunnam Shyam (27) and Archana (23) have one year old son. Their first son died in 2009 due to jaundice. Shyam's mother, 50 years old, also lives with them. Shyam works as ward boy in a hospital for a salary of Rs 4000. His mother works in Arya Samaj as ayah. She gets Rs 2000. Earlier they used to live in Chaluva thota, another slum of the district. They live in a rented house. They are thinking of shifting to a less expensive house as they find it difficult to pay Rs 2000 rent.

- S Shyam, 27 years, Kobbarithota, Vishakapatnam

Water borne diseases sometimes cause catastrophic expenditure to the slum dwellers. Smt Narsamma, aged 55, of Ambedkar Nagar of RC Puram was hospitalised for two weeks in December 2011 for treatment of diarrhoea. They had to spend Rs 30,000 for hospitalisation and medicines. Her son, Ramesh, is a daily wage worker in a factory at Patancheru. He had to borrow the money for his mother's treatment. His daughter Pragna, aged 1 year, also had fever and motions for three days in January 2012.

Health Problems among Yanadis

Yanadis are a scheduled tribe. There are skin diseases and outbreak of rashes among the Yanadis of Ward No. 7 in Bhimavaram municipality. The community is occupied in catching rats and fish. Since they are unhygienic, there are many problems. The kids regularly suffer from diarrhoea, rashes, vomiting bouts, allergies, fever, cold and cough and skin diseases. A few suffer unfortunately from heart problems too. They do not indulge in any medication to the extent of denying their children polio drops also. Between 2008-10, three to five women even died to pregnancy related complications. Deliveries are still at home and the midwife is called Mantrasani or Erukamma. Presently, there are some winds of change. Deliveries are being carried out at hospitals. Still the maternal mortality rate and infant mortality rate are high.

The men do not have food in time and consumption of toddy is alarming. Lack of hygiene is the prime reason for all health-related complications. While many men are afflicted with STD, the women suffer from bleeding problems during their menstrual cycles.

Access to toilets: Half of slum population without toilets

Sanitation practices in slums have a trajectory or upgradation / modification over a period of time with improving tenurial security. Various stages from open defecation to individual toilets connected to underground drainage system are seen in slums of Andhra Pradesh.

Around half of slum households do not have individual toilets. Households having access to individual toilets constitute only 45.4 per cent of total slum population. Half the slums have more than half its households without individual toilets. GHMC Ambedkar Nagar of RC Puram, Kobbarithota in GVMC, Modempally in Kadapa and Ward 27 of Bhimavaram slums have 54.3 % to 77.7% households without toilets. Access to toilets varied slightly with the religion of the slum households. Relatively higher proportion of households among Muslims have toilets (48 out of 61 households or 78.7 %) compared to Christians (44 out of 79 or 55.7 %) and Hindus (520 out of 980 or 53.1 %).

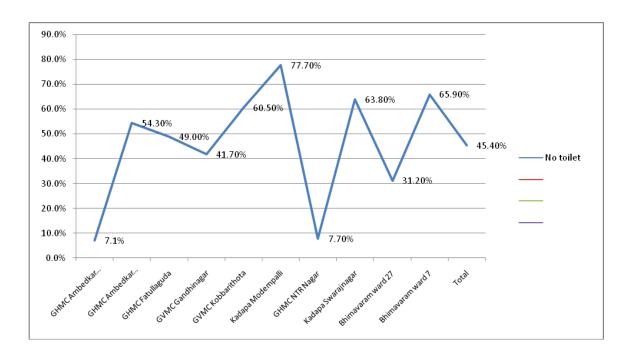


Fig Households without individual toilets in AP slums

Some households in the slums had toilets in the past which are abandoned now or collapsed due to poor construction. Toilets constructed by the government under ILCS phase I to III through contractors were of poor quality. For instance, many toilets constructed under ILCS in Modempally and Swaraj nagar of Kadapa district and in Bhimavaram are abandoned now. In Bhimavaram the toilets collapsed also due to water logging problem.

Type of toilets

Those who have individual toilets have invested huge amounts on modifications of the toilet corresponding with the changing situation of tenurial security and progress of infrastructure in the slum. Super structure of the toilets has undergone many changes in the slums over the years. Toilets constructed with cement rings or poor walls have been changed to brick walls and standard roof.

Among those who have a toilet, many have moved from twin pit toilet in the past to septic tanks. In some area they have connected to the underground drainage. Households in Kobbari thota, Gandhi Nagar, Ambedkar Nagar of Patancheru slums are now trying to connect the toilet with the main drainage. Households have to pay taxes to municipality to get approval for connecting their toilets to underground drainage. Households opting for connecting to the drainage are required to clear all tax arrears which is a serious concern for some households, especially in non-GHMC slums.

Among those who have toilets the most popular type is the septic tank which needs to be cleaned once in few years when it gets filled. There are toilets with septic tanks constitute 72.55 % of the toilets in slums followed by toilets connected to underground drainage developed by the municipality (25.65%).

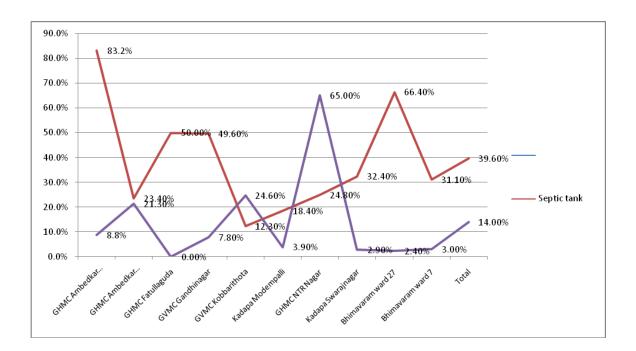


Fig Distribution of households by septic tank and underground drainage toilets in slums

Local specific issues of toilet construction

Many slum dwellers across the state prefer to construct bathroom-cum-latrine if there is no constraint due to space. Toilet design reflects local conditions and varies in specific aspects of the design like depth of pit, cost of the toilets, building materials used etc. Many areas of Bhimavaram suffer from water logging and the sandy loam soils without any drainage facilities for storm water or sewerage make sanitation a very difficult task. Most of the slums in Ward No 7 and 27 in Bhimavaram are beside canals with serious problem of water logging. Toilets constructed without strong foundation tend to cave in

and break. Like houses, even toilets are in these areas are built a few feet above the ground on the concrete beams. Thus the cost of toilets is high, going sometimes up to Rs 30,000. Toilets constructed by the government ten to fifteen years ago have cracked and collapsed. They need to be repaired to fix the pans in new flooring or rebuild the walls.

Space constraints require toilet designs that occupy less space. Popular type of toilet in Proddutur, like in many other towns of the state, comprises pit latrine, locally called as Bombay latrine or Septic tank toilet with Orissa squatting pan and super structure of brick walls and a roof with asbestos sheet. However, the walls of the pits are covered with pieces of Kadapa stones which are locally available.

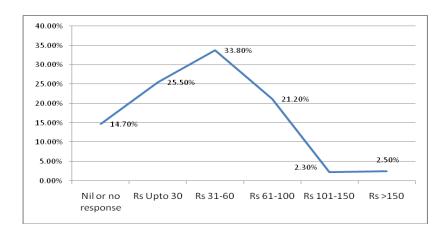
There are changes in toilet designs due to introduction of underground drainage in some of the municipalities. Now some households in Vishakapatnam are connecting the toilet to the underground drainage by paying Rs 410 to the municipal authorities. Cost of the toilet can be reduced if there is underground drainage connection.

Clogged underground drains in Vishakapatnam are cleaned in the slum by Relli community.

Cost of regular maintenance of toilets

Recurring expenditure on maintenance of toilets indicate the importance attached to sanitation by the toilet users. Cleaning agents costs Rs 360 to 1200 per annum in families having a toilet.

Individual toilets are cleaned regularly to be hygienic and free of odour. More than half of the households having toilets spend Rs 31 to 100 per month on cleaning agents used in maintenance of the toilets. The cleaning agents are phenyl and acids locally made or branded.



Details of the expenditure on cleaning agents across slums are furnished in Table 24.

Sanitation practices of slum residents without toilet

Slum households without individual toilet resort to multiple alternatives depending on the location they live and opportunities available due to public infrastructure developed by the municipality. It is a matter of grave concern that 72.40 % of these households practice open defecation.

About three fourths of households without toilets are primarily practicing open defecation. Only 20.70 % of the households without individual toilets are using community toilets. Slum households resorting to open defecation constitute 32.86 per cent of total slum population. About one fifth (20.70%) households use community toilets. Similarly 6.90 % slum families use other's toilets. Other's toilets are usually one belonging to the parents or siblings, owner's or neighbour's toilet. Sometimes they also use the toilet at work place.

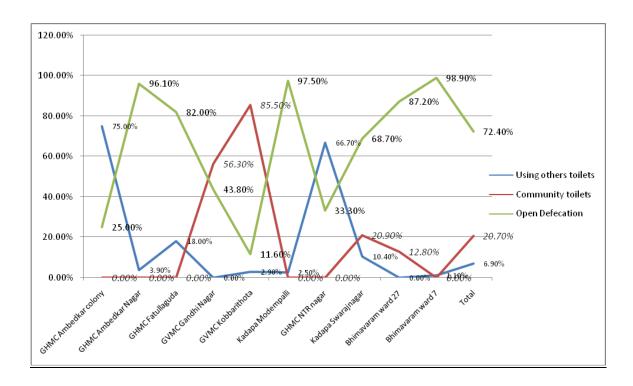
Table 9 Distribution of households by sanitation practices in slums

Slum	Using others toilets	Community toilets	Open Defecation
GHMC Ambedkar colony	75.00%	0.00%	25.00%
GHMC Ambedkar Nagar	3.90%	0.00%	96.10%
GHMC Fatullaguda	18.00%	0.00%	82.00%
GVMC Gandhi Nagar	0.00%	56.30%	43.80%
GVMC Kobbarithota	2.90%	85.50%	11.60%
Kadapa Modempally	2.50%	0.00%	97.50%
GHMC NTR nagar	66.70%	0.00%	33.30%
Kadapa Swaraj nagar	10.40%	20.90%	68.70%
Bhimavaram ward 27	0.00%	12.80%	87.20%
Bhimavaram ward 7	1.10%	0.00%	98.90%
Total	6.90%	20.70%	72.40%

There are several problems faced by people going for open defecation owing to growing pressures on open spaces in slums. It is becoming increasingly difficult to continue open defecation as there is no open space in most of the slums. Open defecation is practiced in areas like agricultural land (Bhimavaram), railway track (Ambedkar colony GHMC, 7 ward in Bhimavaram), adjoining private land, even graveyard (Modempally- Proddutur). Deaths due to accidents on railway track are reported in Bhimavaram. There are also cases of snake bites in some slums.

Open defecation is a serious threat to health and safety of women in some areas (ex: RC Puram ICRISAT Fencing area and Swaraj Nagar of Kadapa have menace of pigs with which the women have to be careful. There are incidents of pigs attacking women and hospitalization)

Open defecation in Modempally of Kadapa is considered unsafe as the place used for defecation is a graveyard. Women going for open defecation carry metal objects like sickle or knife to ward off evil sprits in the graveyard.



There are complaints by women and adolescent girls of harassment by local youth in sites of open defecation.

Many households in Kobbarithota of GVMC are using bathroom as urinals also. Some of them also use bathroom as toilet in emergencies and flush the excreta into the open drains. A few households in Balaji Nagar of Gandhi Nagar- GVMC built bathrooms which are used as toilets in emergencies.

"We have to walk in groups of 4 or 5 into the open area with bushes every day in the morning. Women and men have separate groups. Each person gets the turn while others will guard the place from strangers, pigs and snakes. It takes us 30-40 minutes in this process and we are very scared to go there in the nights".

a woman in Fatullaguda of GHMC

Menace of Pig Attacks

Women and adolescent girls of Ambedkar colony, also known as ICRISAT Fencing Area slum, have been facing so many problems in open defecation. Especially, the defecation area is located very far away from their houses and that

it is very difficult to go there during nights and rainy season especially. The men usually pass through this place where women go for defecation. Stray cases of teasing by men take place.

The other main problem is with the pigs. The open defecation place has turned out to be totally infested with pigs and their population is also high. Most of the time pigs create problems for adults and children and due to this, children and adolescent girls were terrified to go for defecation.

Laxmi, aged 40 years, and her husband came and settled in this colony 20 years back. The husband does masonry work and she works as a maid servant at a nearby colony and earns 1000/- per month. In 2011 July, one day she went for open defecation to the spot which takes 15 minutes walk from her home.

While she was passing stools, a pig came and attacked her aggressively and she immediately fell down. The pig again attacked her and bit her very deeply on her entire bust area and backside of the body. Somehow she escaped and came back home with bleeding wounds. She was admitted in government hospital initially and they gave first aid and sent her back but her wounds were deep and the pain severe. Her family members decided to admit her in a private hospital at Kukatpally as her wounds had swelled alarmingly by then.

Laxmi's right leg was fractured and she could hardly move. She was bed ridden for six months although her wounds healed after 3 months totally. She was not in a position to do anything on her own and her daughter in law came and helped out with domestic work for two months.

They spent nearly Rs 160,000 for medication and other hospital charges. Laxmi borrowed money from her siblings and took a loan at high interest.

Presently she is only doing domestic work. She is walking and performing domestic work very slowly. She stated that now she was not in a position do any kind of work without any body's support. Her only support was her husband. When she needs to go to attend nature's call she does it with the help of her husband. She told that due to the pig attack the family was deeply disturbed and deep in debt. The family was planning to construct a toilet immediately.

Community toilets- More expensive for the urban poor in the long run

There is no substitute for individual toilet in terms of comfort and hygiene. It could be an option in areas where there is no scope for individual owing to space constraints. It is only second best option compared to open defecation.

Slum residents using public toilets not only spend considerable amount on access to toilet but also suffer great inconvenience. Slum households using public toilets with user fee spend from Rs 1500 to 3000 per annum.

Community toilets are of two types viz., free and user fee. Community toilets in GVMC charge user fee of Rs 2 per person in Kobbarithota and Gandhi Nagar. Community toilet in Balaji Nagar of Thotagaruvu area in GVMC has monthly family card also for Rs 50. Besides, they are closed from 9.30 pm to 5 AM forcing the households to resort to open defecation. There is long queue at the community toilets in the early morning.

Several community toilets constructed ten to fifteen years ago in the state are now defunct and closed due to poor maintenance. For instance, community toilets in Ambedkar Colony of RC Puram have been abandoned due to poor maintenance and water shortage.

Individual toilets replaced community toilets

Ambedkar colony is located nearby ICRISAT at Ramachandrapuram, Patancheru Mandal, Medak district. The colony was established in 1970-1975 and most of the families came from Medak and Nizamabad district. Nearly 2000 families are residing in the colony, each of them residing in homes spread over 60 sq. yards each. Most of the men of Ambedkar Colony work as labourers in BHEL and other industries located nearby Patancheru and others work in construction sector as masons or labour. The women are engaged as domestic help and as daily wage employees in ICRISAT.

In 1990, the municipality constructed 2 community toilets in two corners of the colony. These community toilets were used by most of the people initially. Over the years these toilets became defunct due to lack of maintenance because of water problem in the colony.

In 2000, MCH (Municipal Corporation of Hyderabad) initiated construction of individual toilets and about one third of the families came forward to construct individual toilets. The MCH provided Rs. 5000 of financial assistance and one bag of rice (100 kgs). About 10% of families constructed toilets on their own and spent an amount of Rs. 13,000- 15,000. The toilets were constructed with one pit of 8-10 rings depth, though the general trend was to have 10 rings for taking care of the requirements for a longer period. Toilets are constructed by masons who are residents of the colony.

Community toilets with adequate water facility and maintained by NGO are better (Gandhi Nagar GVMC). Such toilets have monthly family card for a fee of Rs 50 per month. It started in 2005 with Rs 25 monthly fee for the whole family.

Community toilets in Swaraj Nagar of Kadapa and BC Colony of Bhimavaram are free. Free community toilets are relatively unhygienic and poor in maintenance. Sanjeev Nagar SC (Mala) households have conflicts with Swaraj nagar SC (Madiga) households on the use of community toilets during monsoon when it is difficult to go for open defecation.

Community toilets are used mostly by women, while men practice open defecation.

'As construction activities are on, there are men around and so the women have to first ensure that it is 'safe' enough for them to move for defecation. This means that time is wasted and the household chores get delayed. We go only after it turns dark.'

- A resident of Modempally, Proddutur

'Teenaged girls and women who have delivered carry a knife to ward off evil spirits when they visit the graveyard to defecate as it is widely felt that carrying iron makes them immune to such unholy attacks. Even the other women who go there carry a knife'.

- A resident of Modempally, Proddutur

'We have a house of 35 yards. We don't have a toilet. We don't have space to build a toilet. GVMC doesn't allow if we build one on the drain. So we use public toilet by paying two rupees every time. It is closed in the night from 9 PM. One cannot think of going alone for open defecation in the nights. So we take family members or neighbours along with us if we need to go. One can imagine the problem of women during periods or sickness'.

- Mrs Boddu Kameswari, 40 years, Kobbari thota, Vishakapatnam

'There is the menace of pigs that hover around and attack the defecating women. So they are forced to carry sticks for self-protection. Recently, one woman was attacked by a pig and she fell, fracturing her hand.'

- A resident of Swaraj Nagar, Proddutur

Free community toilets are not maintained properly and the users do not flush the toilets because they cannot carry enough water walking several hundred meters.

Municipalities are not showing interest in constructing community toilets despite pressure from the slum residents.

Section C

Changing perceptions about sanitation, gaps and needsconsumer data

Demand for individual toilets in slums is assessed through customer research to collect data from primary stakeholders i.e., the slum households and other key stakeholders in sanitation like women SHGs, masons, sanitaryware dealers and municipal officials. Specific information has been collected though household survey from primary stakeholders about how important they view toilets and factors that enable them to have an individual toilet. Similarly information about the demand for sanitaryware materials and scope of individual toilets in slums has been collected through FGDs or interviews with other stakeholders. Key findings of the research on scope for individual toilets from the varied stakeholders are presented below.

Concerns and needs of the slum dwellers in regard to individual toilets

There is growing importance for individual toilets in the slums. Increasing favourable attitude towards having individual toilets is both due to changing perceptions of self respect and declining possibilities of not having a toilet. The change in favour of individual toilets is a function of both material conditions of space constraints making it more and more difficult to go for open defecation and subjective phenomenon of increasing value attached decency, comfort and self respect. Other factors responsible for the growing demand for toilets are literacy and exposure to mass media. Toilets are becoming an inseparable element of life. Long exposure to urban lifestyle is also one of the factors pushing the urban poor to build toilets with their own resources.

The importance attached to toilets by urban poor is evident in the increasing number of slum households having toilets although the government support and subsidies for toilets have been stopped for more than a decade.

Almost all the slum residents covered in the customer research said toilet is part of sanitation. It is more important to notice that overwhelming section of slum residents feel importance of toilets is high. The importance is almost same across the inhabitants who are different by social category and occupations. Only 5.0 % of the slum households felt it was of medium to low importance.

Table 10 Distribution of households by importance attached to toilet

Slum	How important is toilet in your life				
Siuiii	High	Moderate	Low		
GHMC Ambedkar	112	1	0		
Colony	99.1%	0.9%	0.0%		
GHMC Ambedkar	93	1	0		
nagar	98.9%	1.1%	0.0%		
CHMC Estalla and a	99	2	1		
GHMC Fatullaguda	97.1%	2.0%	1.0%		
CVMC Condhinagon	110	5	0		
GVMC Gandhinagar	95.7%	4.3%	0.0%		
GVMC Kobbari thota	106	8	0		
GVMC Koddari tnota	93.0%	7.0%	0.0%		
Vadana Madamnally	93	10	0		
Kadapa Modempally	90.3%	9.7%	0.0%		
GHMC NTR Nagar	112	5	0		
Offivic IVIK IVagai	95.7%	4.3%	0.0%		
Kadapa Swarajnagar	101	3	1		
Kadapa 5 warajilagar	96.2%	2.9%	1.0%		
Bhimavaram Ward 27	116	8	1		
Diffinavaranii Ward 27	92.8%	6.4%	0.8%		
Bhimavaram Ward 7	122	8	2		
Diminavarani (valu /	92.4%	6.1%	1.5%		
Total	1,064	51	5		
20001	95.0%	4.6%	0.4%		

Important reasons cited for considering the toilet important include reduced incidence of illness and expenditure of medicare, avoid ridicule, self respect, less inconvenience during sickness. Self respect and comfort of women is one of the reasons pushing the demand for toilets. Perception of slum women with toilets and no toilets in regard to sanitation and rationale for individual toilets is presented in detail in Annexure B on FGDs with women and Annexure C on FGDs with SHGs.

Changing aspirations

Mallaiah (65 years) is a resident of Ambedkar Colony of Ramachandrapuram municipality since 35 years along with his wife and children. He constructed toilet on his own and spent Rs. 10,000 with one pit, 8 rings in early 1990s. Mallaiah worked with BHEL and her wife stays at home. They have two sons who got married and have settled on their own and residing in same colony and one daughter stays with them.

Three years back Mallaiah had fallen severely sick and he was admitted in a hospital for long period as he was struck with paralysis. Since he was finding it

difficult to use the Indian style commode, the family has recently spent Rs.18000 to change the toilet to the Western commode style, affixing tiles and making it a cleaner and better maintained place.

Table 11 Distribution of households considering that having a toilet enhance respect

Slum	Do you gain respect by having a toilet					
Sium	NA/ No response	Yes	No			
GHMC Ambedkar	8	104	1			
Colony	7.1%	92.0%	0.9%			
GHMC Ambedkar	8	85	1			
nagar	8.5%	90.4%	1.1%			
CHMC Fatullaguda	10	89	3			
GHMC Fatullaguda	9.8%	87.3%	2.9%			
CVMC Conditions	16	97	2			
GVMC Gandhinagar	13.9%	84.3%	1.7%			
CANCK II : 4	14	100	0			
GVMC Kobbari thota	12.3%	87.7%	0.0%			
Vodono Modomnolly	3	100	0			
Kadapa Modempally	2.9%	97.1%	0.0%			
GHMC NTR Nagar	26	88	3			
Offivic NTK Nagai	22.2%	75.2%	2.6%			
Kadapa Swarajnagar	1	104	0			
Kadapa Swarajilagai	1.0%	99.0%	0.0%			
Bhimavaram Ward 27	8	117	0			
Dillilavaralli Walu 27	6.4%	93.6%	0.0%			
Bhimavaram Ward 7	10	122	0			
Diffiliavarani wafu /	7.6%	92.4%	0.0%			
Total	104	1,006	10			
10111	9.3%	89.8%	0.9%			

Preferred cost of toilet

Slum residents are not expecting some external agency to build a toilet for them, although it would be really nice if that could happen. Very few households, 34 out of 1120 or 3.0% of the total sample, reported having applied for government sanction for a toilet and only 9 (or 0.8%) of them expect the government to sanction the request. These households are mainly from Kobbari thota of GVMC (12 households), Nehru Nagar of ward 7 in Bhimavaram (6 households) and Leprosy colony of Ward 7 Bhimavaram (4 households).

Slum residents prefer toilets costing between Rs 10,000 and Rs 12,500 with super structure costing up to Rs 6,000. The cost preferences are closer to the market rates of

toilet construction with leach pits or septic tanks. The cost of the toilet will be actually less if the toilet does not require a pit that can be directly connected to the underground drainage. Details of the cost preferences for toilets are discussed below.

Slum residents are willing to have a toilet that costs Rs 10,000 to Rs 12,500. Already 54.6 5 households have a toilet and the remaining wish to construct one. Some households wanted to repair the existing toilets (ex: GHMC NTR Nagar). Preferred cost of the toilet among 562 respondents (50.2 %) of total sample is furnished below:

Table 12 Distribution of households by cost preference of a toilet

Slum	Preferred cost of toilet					
Siulii	Rs 12500	Rs 10000	Rs 7500	Rs 5000		
CHMC A 1 II C 1	3	9	0	1		
GHMC Ambedkar Colony	2.7%	8.0%	0.0%	0.9%		
CIMC Auch officer access	30	10	5	2		
GHMC Ambedkar nagar	31.9%	10.6%	5.3%	2.1%		
CHMC E-trill l-	15	33	14	6		
GHMC Fatullaguda	14.7%	32.4%	13.7%	5.9%		
CVIMC C II.	11	29	7	2		
GVMC Gandhinagar	9.6%	25.2%	6.1%	1.7%		
CVMC V-bb-si 4b-4-	41	20	9	4		
GVMC Kobbari thota	36.0%	17.5%	7.9%	3.5%		
V - d M - d 11	47	34	0	1		
Kadapa Modempally	45.6%	33.0%	0.0%	1.0%		
GHMC NTR Nagar	9	13	9	4		
Offivic NTK Nagai	7.7%	11.1%	7.7%	3.4%		
Kadapa Swarajnagar	29	33	5	8		
Kadapa Swarajnagai	27.6%	31.4%	4.8%	7.6%		
Bhimayaram Ward 27	22	9	4	3		
Diffinavarani Ward 27	17.6%	7.2%	3.2%	2.4%		
Bhimavaram Ward 7	40	25	9	7		
Diffinatarani (tara /	30.3%	18.9%	6.8%	5.3%		
Total	247	215	62	38		
10111	22.1%	19.2%	5.5%	3.4%		

Large section of the households having no toilet is willing for a toilet superstructure that costs anything between Rs 3001 and Rs 6000. They constitute 36.02% among the households without a toilet. Around one third (32.28%) of households without a toilet prefer super structure costing up to Rs 3000. Table 13 provides distribution of households without toilets by their cost preferences for super structure.

Table 13 Distribution of households by cost preference of toilet super structure

	Cost of super structure							
Slum	NA/ No response	Rs Up to 3000	Rs 3001- 6000	Rs 6001- 9000	Rs 9001- 12000	Rs 12001- 15000	Total	
GHMC	102	6	3	0	0	2	113	
Ambedkar Colony	90.3%	5.3%	2.7%	0.0%	0.0%	1.8%	100.0%	
GHMC	53	26	7	1	5	2	94	
Ambedkar nagar	56.4%	27.7%	7.4%	1.1%	5.3%	2.1%	100.0%	
GHMC	40	26	14	4	14	4	102	
Fatullaguda	39.2%	25.5%	13.7%	3.9%	13.7%	3.9%	100.0%	
GVMC	67	11	17	20	0	0	115	
Gandhinagar	58.3%	9.6%	14.8%	17.4%	0.0%	0.0%	100.0%	
GVMC	46	35	12	17	3	1	114	
Kobbari thota	40.4%	30.7%	10.5%	14.9%	2.6%	0.9%	100.0%	
Kadapa	19	10	57	5	1	11	103	
Modempally	18.4%	9.7%	55.3%	4.9%	1.0%	10.7%	100.0%	
GHMC NTR	92	6	8	1	10	0	117	
Nagar	78.6%	5.1%	6.8%	0.9%	8.5%	0.0%	100.0%	
Kadapa	37	12	26	18	8	4	105	
Swarajnagar	35.2%	11.4%	24.8%	17.1%	7.6%	3.8%	100.0%	
Bhimavaram	88	12	13	7	5	0	125	
Ward 27	70.4%	9.6%	10.4%	5.6%	4.0%	0.0%	100.0%	
Bhimavaram	59	20	26	16	6	5	132	
Ward 7	44.7%	15.2%	19.7%	12.1%	4.5%	3.8%	100.0%	
Total	603	164	183	89	52	29	1,120	
Total	53.8%	14.6%	16.3%	7.9%	4.6%	2.6%	100.0%	

Requirement of loan for building a toilet

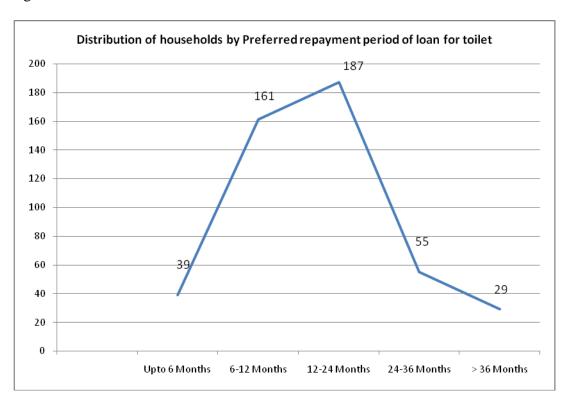
A large section of the households who did not have a toilet considered taking a loan, if available. Against 45.4% households who do not have toilet, loan was required by 43.0%. A few households of Fatullaguda, NTR Nagar and Ambedkar Colony of GHMC wanted to avail loan for repairs and or a new toilet. Large section of the households (80.9%) planning for a toilet required a loan of Rs 5000 to 15,000. Those who required loan up to Rs 5000 constitute 17.2% of the households planning for a toilet.

Table 14 Distribution of households by need for taking loan to construct a toilet

	Is loan required for toilet			Loan requirement for the toilet				
Slum	NA/ not required	Yes	Total	Rs Up to 5000	Rs 5001- 10000	Rs 10001- 15000	Rs 15001- 20000	Total
GHMC Ambedkar	97	16	113	1	4	10	1	16
Colony	85.8%	14.2%	100.0%	6.3%	25.0%	62.5%	6.3%	100.0%
GHMC Ambedkar	50	44	94	5	12	25	2	44
nagar	53.2%	46.8%	100.0%	11.4%	27.3%	56.8%	4.5%	100.0%

CHMC Fatulla guda	46	56	102	18	28	10	0	56
GHMC Fatullaguda	45.1%	54.9%	100.0%	32.1%	50.0%	17.9%	0.0%	100.0%
CVMC Condhinacon	71	44	115	9	25	10	0	44
GVMC Gandhinagar	61.7%	38.3%	100.0%	20.5%	56.8%	22.7%	0.0%	100.0%
GVMC Kobbari thota	59	55	114	14	11	30	0	55
GVIVIC KODDAII tilota	51.8%	48.2%	100.0%	25.5%	20.0%	54.5%	0.0%	100.0%
Vadana Madana alla	32	71	103	9	26	35	1	71
Kadapa Modempally	31.1%	68.9%	100.0%	12.7%	36.6%	49.3%	1.4%	100.0%
CHMC NTD Nagar	92	25	117	9	13	2	1	25
GHMC NTR Nagar	78.6%	21.4%	100.0%	36.0%	52.0%	8.0%	4.0%	100.0%
Vadama Cyvanaina aan	51	54	105	5	23	25	1	54
Kadapa Swarajnagar	48.6%	51.4%	100.0%	9.3%	42.6%	46.3%	1.9%	100.0%
D1-:	86	39	125	3	18	18	0	39
Bhimavaram Ward 27	68.8%	31.2%	100.0%	7.7%	46.2%	46.2%	0.0%	100.0%
Dhimayanam Wand 7	54	78	132	10	27	38	3	78
Bhimavaram Ward 7	40.9%	59.1%	100.0%	12.8%	34.6%	48.7%	3.8%	100.0%
Total	638	482	1,120	83	187	203	9	482
Total	57.0%	43.0%	100.0%	17.2%	38.8%	42.1%	1.9%	100.0%

Three fourths of the households (73.88 %) planning to take loan preferred repayment of the same from 6 months to 24 months. A small section (8.28%) preferred up to six months, while very small section preferred up to three years and beyond. Up to a year and two years is preferred by most as it would not put much pressure on their purse or require significant diversion of resources from other needs.



Section D

Feasibility of SaniShop- stakeholders' feedback

SHGs' perception of sanitation and willingness to take up SaniShop

Women Self Help Groups (SHGs) constitute the largest agency having presence in every village and slum. SHGs play multiple roles in their interface with government and non government as well as financial institutions. Today more than 4.8 million women are mobilized into SHGs in Andhra Pradesh and large amounts of funds are being mobilised through Bank linkages. SHGs vary widely in their focus and capacities and are largely conduits through which micro credit is routed to the poor in the state. SHGs initially promoted by NGO efforts at various levels acquired the form of a movement which has been incorporated into welfare programmes by the Government through the IKP and MEPMA. SHGs form the critical element today in poverty alleviation programs in Andhra Pradesh. There are 3.7 lakh SHGs part of the IKP in rural areas and 9004 SHGs as part of MEPMA in urban areas of the state.

Ethnographic study on the feasibility of Sanishops also attempted to assess specifically the scope of SHGs involvement in promotion of sanitation products as a group enterprise. FGDs with SHGs were conducted to understand their experiences in entrepreneurship, capabilities and investment capacity as well perceptions about SaniShop and willingness to take up SaniShop. Details of the situation across municipalities are presented in Annexure C on 'FGD with SHG women about Sanitation & SaniShop'.

Membership & age of the SHG: All SHGs are having 10 women as members and are 3 to 12 years old. Most of the SHGs are functioning effectively with regard to savings and repayment. Leadership is strong although their focus is mostly limited to savings and repayment of loans.

<u>Group Savings and latest loan</u>: SHGs existing for more than ten years started with Rs.30 as monthly individual savings and graduated to Rs 50 a month and at present save Rs100 per month. Repayment rate is satisfactory in all SHGs. Total savings amount in the groups range from Rs.4920 to Rs.100000. No. of bank linkages per each SHG is ranging from 1 to 5 times. Amount of the latest loan for each member is ranging from Rs.10000 to Rs.40000.

<u>Willingness to involve in SaniShop</u>: All SHGs welcome the idea of SaniShop, but only six SHGs expressed in exploring the scope of taking up a group venture for manufacture and marketing of sanitation materials. Two SHGs, associated with APMAS, came out with positive response to try out the SaniShop concept. Three SHGs expressed interest to discuss the idea further with the members and decide possibilities of taking up the SaniShop. Three groups expressed inability to take up any group venture.

<u>Investment capacity</u>: Investment was not major concern. SHGs in NTR Nagar and Fatullaguda were confident of mobilizing government subsidies and bank loans. Two SHGs are willing to invest Rs.20000 as initial investment, two groups could invest nothing and two groups didn't want to invest anything but were willing to work as employees if some other agency starts a SaniShop.

<u>Training needs of SHG</u>: As the subjected they were faced with was new, the SHGs wanted training in all aspects of the enterprise. SHGs require not only training but also hand holding till the groups become confident and self reliant. "About six months of monitoring and guidance may be required to help us plan and address problems. Monthly review is required with exerts to provide us inputs" said one of the SHG leaders of NTR Nagar. SHGs training needs vary, four groups want to take training in manufacturing, marketing and book keeping and two groups want to take training in OD as well as marketing and manufacturing. Reaming SHGs were not specific about what training they wanted.

<u>Concerns of the SHGs</u>: Concerns expressed by the SHGs reflect potential and need to be careful with several aspects in making a pragmatic decision. SHGs had several concerns indicating the need to look into multiple factors of skills, market, investment, organisational abilities and cooperation from family, etc. Concerns of product mix, market survey for targeting, group dynamics in collective enterprise and strategies for enlisting support of their own families weighed important in the list of issues.

Constraints and limitations of SHG for taking up SaniShop: Many SHGs are wary about taking up the SaniShop primarily because they haven't been involved in any group enterprise so far. The SHGs are convinced of the need and scope for entrepreneurship, but not sure whether they will be able to undertake a collective enterprise. SHGs are aware that a collective enterprise requires different dynamics of working with collective interests and collective responsibility which they have not been exposed to hitherto. Members of the SHGs feel they need to educate and seek cooperation of their family members to take up a collective enterprise. "If you demonstrate the success of one SaniShop, our family members will also be ready to support us taking up Sanishop" told one of the SHG leaders. "Working outside the house, running a unit where a few more are employed and marketing our products seem very risky at the moment although we made phenyl or papad and sold it successfully" told another member. "All doubts and fears are temporary, will not be hindrance once you start the programme. We did not know how well we could do in taking a contract for an internal road. We realized we did a better job than other contractors when we completed the assignment" said Lakshmamma, SHG leader in NTR Nagar.

Role of Masons in promotion of sanitation

Masons are key actors in sanitation activity as they are direct contact with the customers seeking to construct a toilet. They are the main agents of information and medium through which customer's idea is converted into reality by advising them what popular

and feasible design according to their knowledge is. Toilet design is affected by their skill set and understanding of a desirable toilet. Most of the masons are also residents of the slums and they are experienced by their work in the slums and outside.

Masons are important stakeholders in the industry. Availability of skilled masons is necessary for the industry and crucial to the costs of toilet construction. Mason, often residents of the slums of interest to SaniShop, is favourable to the proposed enterprise as it would provide them employment with construction of more toilets. Masons are more interested in the possibility of constructing large number of toilets since that ensures them enhanced income per day as the mason completes almost a toilet per day instead of working on a single toilet for four to five days for all operations to be completed in a sequence.

Masons are concerned with wages and volume of work. Masons in some municipalities get small 'commission' of Rs 50 to Rs 100 from sanitaryware shop for the materials purchased for a toilet. They recommend the slum household to buy materials form the shop where the material is cheaper for the customer and commission for the mason.

Masons' perceptions	GHMC	GVMC Bhimavaram		Proddutur	
No. of toilets constructed per month per mason	10 to 20	10 to 15	5 to 15	5 to 15	
Area specific problems in toilet construction	Space constraints, no underground drainage system in some slums, threat of eviction	Sewage from underground drainage entering into toilets in parts of GVMC, threat of eviction	Water logging, no underground drainage system, high cost of toilet due to water logging	Space constraints, no underground drainage system in some slums,	
Critical factors in construction of toilet	Low cost/ occupying less space/ cement bricks/ asbestos or tin roof	Low cost/ occupying less space	low cost/ less space	Low cost	
Average cost of toilet with super structure	Rs 10,000 to 15,000	Rs 13,000 to 20,000	Rs 15,000 to 25,000	Rs 10,000 to 15,000	
Average cost of the toilet without super structure	Rs.5000-7000	Rs.5000-10000	Rs.6000 to 9000	Rs.5000-7000	
Depth of the septic tank/ pit	12 ft in some parts like RC Puram	7 to 9 ft	10 to 15 ft	8 to 10 ft	
Gulper charges	Rs.1500 to 2500	Nil to Rs 2000	Rs.1500-2000	Rs.4000	
Mason's daily wage	Rs.350	Rs.400-500	Rs.270-300	Rs.350-400	
Helper's daily wage	Rs.250	Rs.200-300	Rs.200/250	Rs.250	
No. of helpers needed per mason	1	1	1 to 2	1	

Commission to masons from sanitaryware shops	Rs 100 to 200 per toilet	2 to 5 % of the total cost	Nil to 5 %, gifts on festivals	2 to 5 % of the total cost
Marketing levers for masons	high quality material, competitive price, Construction of toilets in large number	Low cost & good quality	Low cost, good quality, branding	Low cost
Response about SaniShop model	Very Positive	Positive	Positive	Positive

Most of the masons engaged in individual toilet construction are independent and get the work assigned by the customers. Some of the masons work with contractors who pay them annual advance of Rs 40,000 to 60,000. They go to different locations to work in the town as the contractor instructs them from time to time. Masons on such annual contracts are not free to take up any other on their own. Those who want to break free from the clutches of the contractor have repay the amount received as advance. Builders and contractors do not prefer masons from the local adda. Builders in Bhimavaram, for instance, usually they hire masons and helpers from the Rayagada, Orissa who are paid an advance of minimum Rs.10000 and paid daily wage Rs. 150 plus food and accommodation.

Masons and helpers are part of the community obligations. Masons in Proddutur coming from surrounding villages are not be available for construction work during the plantation and harvest seasons because they work as farm labor although they are paid less than what they get as masons in the town. Yet, they work because the obligations one has with the villagers who help in times of crisis and unemployment.

Masons are the key actors in designing of a toilet as the customers listen to the advice of mason. Interests of masons and their views on SaniShop are provided in Annexure D.

<u>Incentives from the sanitaryware dealers</u>: Occasional gifts and small commission of Rs 50 to 100 is the practice now. Masons do not have significant incentives from the dealers in towns covered by the study. One of the dealers from Bhimavaram organized promotion campaign for Maha Cements. About 50 masons attended the meet where they received measuring tapes printed with company name along with tiffin box packed with biryani. Similarly, for KCP cement campaign they received chicken biryani for lunch and a silver coin each.

About SaniShop: Masons will recommend the SaniShop products if they are attractive and competitively priced. It is good if all toilet construction material is available in one shop. Masons are prepared to take training if it is conducted in Bhimavaram. Working with government is risky and payments are not made on time. Masons suggested that sanitation programs should to be implemented through the masons by eliminating contractor system.

Usually sanitaryware dealers located in one or two streets of the town. If the SaniShop is located closer to the slums it helps reduce the cost by reduced expenditure on transportation.

Response of the Sanitaryware dealers

Sanitaryware business requires facing competition from other retailers in the market. Sanitaryware shops may be classified in the following ways:

Shop for the rich vs shop for the poor: Sanitary shops vary by different categories of customers they cater to. Some Sanitaryware shops cater to the rich and sell only branded materials which cost Rs 10,000 to Rs 20,000 for the basic toilet unit. These shops have usually the European commode with flush cleaning and 24/7 water supply system with over head tanks. These shops do not sell material required for super structure and pits /septic tank. These shops also sell material of wide range of faucets required in the bath rooms. Dealers of Hindware or other branded product showrooms are examples of this type. Sanitaryware of this type caters to the section of society where bathroom is a lifestyle statement. In contrast to these shops for the rich, there are Sanitaryware shops that cater to the urban poor where all the material for toilet including super structure and pits /septic tank.

Complete vs limited menu shops/ product group vs product base: Shops also vary by the range of products they sell. Some shops sell only some parts of the toilet or hardware like toilet pans, roofing materials, pipes, taps, doors, cement jaalis/ ventilators, drain pipes, water tanks, tiles, hinges, etc. Highly focused in particular items and often they are distributors or wholesalers. Such shops are in bazaars focused on hardware and Sanitaryware products. Scale of operations is high and involves huge investment. Troop bazaar of Hyderabad is an example for such shops. In contrast there are shops selling whole set or most of the products required for the toilet. Such shops are located away from the exclusive bazaars of Sanitaryware and are closer to the end users.

<u>Wholesale vs retailers</u>: The shops engaged in wholesale are focused on product base or on a range of items on a particular sub group. Some shops focus on end users and have large range of products.

Complete range of products for particular type of customers: Some shops cater to the needs of urban poor with a large range or complete range of products required for a toilet. Some provide options like European commode and Orissa pans while others have limited choice to make a complete unit that suits a pocket of specific customer. These shops are in the commercial centres or away from the general market of the town. Many such shops are found on the highways where the fixed costs are lower and also ensure the advantage of being closer to the expanding areas of the town. SaniShops are closer to this category of the competitors.

Many 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 when government implemented ILCS programme. They believe toilet construction materials will have new demand with introduction of underground drainage system also. They are willing to sell any new product if the quality is good and competitive in price.

Response of the municipal officials in promotion of sanitation in slums

Municipal authorities form part of the larger forces that drive the industry of sanitation and toilet construction. Municipal authorities are planning to launch ILCS Phase IV under which altogether 644,911 toilets are planned to be constructed in the state in two years period. The renewed interest in total sanitation programme of the government provides demand for a few thousand toilet units in each municipality.

Municipal Commissioners are interested to involve SHGs and slum level federations in construction of the toilets if they are trained. Proddutur Commissioner expressed keen interest to facilitate the SLF to take SaniShop enterprise by availing subsidies available from Urban Self Employment Programme (USEP) and Urban Women Self Help Programme (UWSP). Similarly Bhimavaram Commissioner expressed interest in training SHG members in toilet construction or income generation activities in materials required toilet construction (see Annexure F for response of the Municipal Authorities). Municipal authorities could extend the financial assistance for toilet construction undertaken by SHGs or local NGOs that adhere to the model specified under the Integrated Low Cost Sanitation (ILCS) Guidelines on toilet design and budget.

The research team, as part of their interactions with various stakeholders, Director of Municipal Administration, GoAP, Project Director UCD of GVMC, Commissioners of Municipalities and other staff involved in planning and community mobilisation in the regions covered by the study. Interviews with officials helped understand the policy landscape, latest plans proposed for total sanitation under slum free municipalities and response to innovations in the areas of sanitation.

These interactions helped to know first-hand the various initiatives being undertaken by the municipal administration to tackle problems of poor sanitation, open defecation, burgeoning growth of slums and what were the constraints involved. Other than the head of municipal administration in these locations, efforts were made to gather critical inputs from other government functionaries working at various levels and executing various schemes of the state/central governments in this regard. The broad sweep of officials and field staff included TPRO, project resource persons, ICDS Anganwadi workers who gave information at the field level, in a manner, to counterbalance the macro schemes and announcements made by the government.

Section E

Market Scenario for Sanitaryware

Demand for low cost Sanitaryware in AP slums

Sanitation industry is fast growing and independent of the government policy, although support of the government would add additional market.

Demand for Sanitaryware is due to demographic factors as well as changing urban policy with regard to sanitation. There is growing demand for material required in construction of individual toilets. Increasing pressure on land in municipalities is making open defection highly inconvenient if not impossible. Besides, changing aspirations, literacy and exposure to urban lifestyles is contributing to demand for individual toilets.

Demand for toilet construction materials in slums is growing for the following reasons

- There is explosion of slum population in the state
- Construction of toilets during the past decade has been exclusively with personal investment of the slum dwellers as government assistance or subsidies for toilet construction have been stopped since 1990. Continued construction of individual toilets in the slums indicates the demand and growing importance attached to the toilet
- Demand for toilet construction material is likely to increase owing to launch of ILCS phase IV scheme. There is going to high demand for toilet construction material in the near future with government planning to implement slum free city planning under Rajiv Awas Yojana (RAY). Revised ILCS Scheme Guidelines 2008 is likely to start toilet construction programme in a big way from 2012-13. A massive programme for construction of 644911 toilets with an outlay of Rs 64,491 lakh is awaiting approval of Government of India
- There is also demand for toilet construction material owing to modifications and upgradation of the existing toilets. Old toilets of septic tank or twin pits model are being replaced by toilets that are connected directly to underground drainage system in the municipalities. Some households are constructing a new toilet that is for long term due to changes in infrastructure facilities.
- There is a small section of slum population who add one more toilet with the growing tenurial security and as part of incremental housing typical of slums
- A few items of Sanitaryware like taps, tiles, roofing sheets are also required additionally although basic toilet material is not required repeatedly. Cleaning agents are purchased regularly by all households. Harpic and a few other branded

cleaning agents are popular. Toilet cleaning agents are estimated to have Rs 60 crore business every year.

• In municipalities where there is no underground drainage facility, there is need for cleaning of the septic tanks once in a few years. Currently there are private agencies to clean the septic tanks. While in some slums the municipality provides septic tank cleaning services.

Target market

The end users and customers for the SaniShop are slum households. About half of slum population in the state is the market for SaniShop. Households without individual toilet in slums constitute 45.4 per cent of slum households. Urban renewal programmes under reforms in urban government improving tenurial security and regularisation would promote upgradation of basic amenities in old slums increasing the potential for sanitation industry.

However, there is need to focus on a few municipalities where there is large section of slum households without individual toilets. A cluster of slums is the potential market.

SaniShop would be attractive proposition for the end users as the material is more competitive in price. Reduced costs through appropriate design changes or competitive prices to ensure the toilet is constructed within Rs 10,000 which is the government budget under ILCS, would ensure all urban poor to build toilets as they would not be required to invest large sums. Customers also benefit by reduced cost on the toilets with proper counselling on appropriate toilet design and avoiding unnecessary expenses on the extra depth of pit or building materials.

Besides, loan facility for construction of the toilets by NGOs would ensure urban poor to take advantage of the sanitation programmes of the government. Many slum households finding it difficult to build a toilet for want of resources or loan on reasonable interest are deprived of the opportunities of having a toilet. Such households would find a great opportunity to realise their demand and more willing to have it when it costs less because of competitive prices and also avoiding transportation on procuring materials more than shop.

SaniShop enterprise

SaniShop is seen by stakeholders to help make individual toilets affordable and a reality for the urban poor by reduced costs and counselling for appropriate services required for informed choices about the toilet design.

SaniShop is the one-stop-shop for materials required for low cost individual toilet for slums in Andhra Pradesh. All the essential materials of a low cost toilet are made available in one place. SaniShop is primarily for urban poor who need not go searching

for required material from several shops. SaniShop enables the urban poor to realise their dreams of an individual toilet that is linked with comfort, health and respect.

Unique feature of SaniShop is also that it is run by self help groups of urban poor or non-government organisation.

SaniShop could be of two types viz., retail SaniShop or a blend of retail with manufacture of select materials.

SaniShop sells toilet pans, P traps, drain pipes, cement ventilators, doors, roofing sheets, red oxide, cement bricks, cement rings, cement, sand, and stone which are essential for construction of a toilet as well as consumables like cleaning agents. Depending on the local conditions SaniShop could include in future optional materials like faucets hardware, paints, tiles, etc. Low cost European commodes may also be added on to meet changing needs of the urban poor.

Upgradation of the SaniShop enterprise could explore possibilities of manufacturing a range of materials that can be produced locally to make the products more cost effective and generate employment for members of the SHGs. Manufacturing of cleaning agents, doors, cement bricks, ventilators may be examined.

Strengths of SaniShop to face the competition

- SaniShop enterprise has unique advantage with regard to the target market. SHGs of women in slums have direct contact with the urban poor who are the end users.
- Self interest of the SHG members as entrepreneurs of SaniShop develop niche markets with regard to the end users.
- SHGs/ NGOs are collaborators of SaniShop enterprise by extending loans to the end users.
- Masons are beneficiaries of increased demand for toilet construction.
- SaniShop also provides information on appropriate design that could reduce the costs of toilet construction which benefits the end user.
- Slum residents who plan to construct a toilet if they could get loan are exclusive market for SaniShop that runs in collaboration with NGOs like APMAS or SHGs/ SLFs.

Business Model for SaniShop

This section discusses critical aspects related to implementation of SaniShop enterprise. The analysis presents findings of field study of market scenario and feedback by stakeholders with regard to the feasibility of SaniShop as well as various options for translation of SaniShop concept to address the gaps in access to individual toilets of urban poor. Technical aspects of costs and product focus present average costs and general range of product focus of sanitaryware shops based on data collected from field study which varies across municipalities. Organisational aspects and marketing strategy applies to SaniShops in any municipality. Financial aspects and breakeven analysis present the assumptions to enable modifications as required to customise for specific locations that have cost slightly varying for rents, wages or some of the raw materials.

TECHNICAL ASPECTS – Costs and product focus

SaniShop essentially is a retail unit selling all materials required for low cost individual toilets. SaniShop model combining manufacture of cement bricks involves simple technology that slum residents, especially women of SHGs, can be trained. Details of machinery required, raw materials and manufacturing process involved is discussed in detail in the subsequent part of this section.

Toilet construction in Andhra Pradesh costs between Rs 10,000 and Rs 20,000 across the municipalities owing to local conditions of soil, access to underground drainage connection, terrain, preferred type of toilet, wage rate of masons and labour among other factors. In slums of Hyderabad toilet construction costs up to Rs 15,000 while in Bhimavaram municipality the cost of building a toilet is around Rs 25,000 due to water logging problem which necessitates constructing the toilet on beams raised a few feet above the ground. Government is proposing to construct a toilet for the urban poor costing Rs 10,000 wherein government provides financial assistance of Rs 9000 and beneficiary invests Rs 1000.

Cost of toilet proposed by government approved model includes basic components like pan, p trap, drain pipes, cement bricks, cement rings for leach pits, sand, cement, roof, stone/ granite for foundation. Design includes super structure with roof, door, walls of brick, floor, toilet pan connected to twin pit or single pit of 8 feet depth where space is a constraint.

Based on the field data from ten slums the following toilet cost is proposed. It is on the higher side to meet requirements of toilets in most of the slum situations of the state. Labour charges vary from place to place and also owing to depth of the pit. That may be

assumed to cost around Rs 2000 to 6000. With appropriate design modifications (for instance avoiding single pit of 12 feet depth when normal 3 to 6 feet deep pit would do) and or engaging local labour with proper training the labour charges could be reduced to Rs 2000 to 3500.

Table 15 Average cost of individual toilet in AP (excluding labour costs)

Materials required for a toilet	Cost (Rs)
Pan	250
'P' Trap	50
10 drain pipes	450
Cement jaali/ventilator	40
Red oxide 1 Kg	90
Asbestos sheet for roofing	500
Wooden door/ Metal door	1000
150 Cement bricks @ Rs 11/ brick	1650
Granite for foundation	500
5 bags cement	1400
Sand	900
7 cement rings @ Rs. 150 per ring	1050
Total Unit Cost	7880

Note:

- a) These are average costs that could be calculated for a scenario across the state. Prices could vary with reference to a specific location.
- b) Costs of toilet products are compared with pricing in different location and the proposed costs are average price of varied items. It is assumed that margin for retailers are 30% on the items although it varies between the items and place to place. However, it is assumed convenient as the margins are around 30% on the whole for a unit. The cots would come down further when purchased in large number.
- c) The requirement for cement, cement rings, and sand also varies depending on the option of a leach pit/septic tank and its depth.

SaniShop product focus

Twelve items, essential for toilet construction, are examined viability through SaniShop. Different items have varying scope for manufacturing and margins for retail. Some items are purchased for multiple uses in addition to toilet construction. The items recommended for SaniShop include pan, P trap, drain pipes, ventilator, asbestos sheet, door (wooden/metal) red oxide, cement bricks and cement rings with scope for additional items as optional.

Sanitaryware	Option to manufacture/ supply	Margins/ option for retail trade	Remarks
Pan	Low	High	Range of pans, while Orissa pan is most popular low cost pan. May add European commode in small numbers to meet special needs or changing preferences of customers
'P' Trap	Low	High	
Drain pipes	Low	High	
Cement jaalis/ ventilator	High	Medium to high	Has multiple use and recommend for SaniShop
Asbestos sheet	Low	High	Has multiple use and recommend for SaniShop
Metal door/ PVC door, wooden door		Medium to high	Has multiple use and recommend for SaniShop
Red oxide	Medium to high	High	
Cement bricks	High	Low to Medium	Traditional bricks may be good for retail trade, while cement bricks may be good for manufacture as it has multiple uses
Cement rings	High to Medium	Low to medium	Recommended for SaniShop, use can be optimised with proper planning
Cement	Low	Low	
Sand	Low	Low	
Granite stone	Low	Low	Limited option, only retail is preferred

Manufacturing can also be undertaken to make cement bricks. Cement rings and ventilators may also be manufactured which require no special skills and also not much investment on moulds.

SaniShop could start with retail activity and expand to manufacture or straight away have a blend of both. Calculations and break even are provided for both options. A blend is recommended as it provides employment for members of the SHG which could mobilize resources for investment and also gainfully employed.

ORGANISATIONAL OPTIONS - SHGs, WOMEN ENTREPRENEURS, APMAS

SaniShop could have three kinds of entrepreneurs: enterprising group of women, SHG or SLF, and APMAS.

Field study indicates that SHGs or SLF are not prepared for starting an enterprise through collective effort. Besides, the SHGs are not experienced in manufacturing of materials related to toilet construction. They are apprehensive. However, they are willing to work as wage employees in the SaniShop or manufacturing of Sanitaryware. For practical reasons this group could be expected to take up the enterprise in future on seeing successful functioning of SaniShops.

Group of women from slums are potential entrepreneurs. APMAS could identify potential women and provide them orientation and guide for six months. This group could avail the subsidies from government under USEP/USWP. The potential women may be formed into a group to avail the subsidy. The investors would share the profits besides paying salary for those who work for the unit.

APMAS could also pilot the SaniShop strategically in select municipalities in three or four regions to demonstrate the viability so that more SHG/SLFs could come forward. Initiative of this nature could have high relevance for the demonstrating the feasibility for replication through several agencies, both in Andhra Pradesh and elsewhere. Success of the pilot helps mainstreaming SaniShops through SHGs and NGOs

MARKETING & SALES STRATEGY

SaniShop promotes sales primarily on the strength of competitive price and affordable cost due to appropriate design. Another important element of the sales strategy of SaniShop is its collaborative nature of linking SHG/NGO/APMAS that helps translating the plans of slum dwellers to have individual toilet translated into a reality. This feature is unique to SaniShop that its competitors lack.

SaniShop leverages the contacts it has with SHG members and loans that could be accessed for toilet construction. Loans or financial assistance could be accessed from the SHGs/ APMAS or municipal authorities.

Masons would promote sales in order to ensure they have more employment.

Other options that could be explored are incentives/ discounts to SHG members and masons. Amount that could be offered may be in terms of per cent on total cost or a fixed amount like Rs 200 or something that could be attractive for the customer which would meet part of transport cost. The incentives /discounts could be offered for a particular group of customers like members of SHG. Incentive of fixed amount could be offered for masons who recommend the customer.

Sales are maximised by expanding product range initially through manufacture of cement bricks required for any construction activity besides toilets and sales or manufacture of cleaning agents that are required on a regular basis. Customers buying one item will be buying other items later depending on the need.

FINANCIAL ASPECTS OF THE ENTERPRISE

Financing of the SaniShop

The funds required for the enterprise may be mobilised from:

• **Bank loan** 60% (without any collateral security and repayment schedule ranges from 3 to 7 years after initial moratorium up to 18 months)

- **Subsidy** 35 % under USEP and UWSP (there is scope for the SHGs and TLFs to take up SaniShop activity as group enterprise under USEP and Urban Women Self-help Programme (UWSP) group of 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 related to SaniShop. There is no maximum limit of the project cost)
- Entrepreneurs' investment/ Margin money is 5 % of the project cost

Details of expenditure required on fixed and recurring costs

<u>Fixed costs</u>: Fixed costs towards advance for the shop, furniture and fixtures require around Rs 50,000. It may be relatively more in locations like GHMC and may be on higher side slightly in small municipalities. Rs 50,000 towards fixed costs may be taken as average that includes Rs 20,000 advance for rent and Rs 30,000 furniture and fixtures.

Recurring costs:

Recurring costs on human resources are estimated at Rs 10,500 per month. Human resources proposed for the SaniShop includes:

- Manager -cum-accountant @ Rs 6000 pm
- Assistant @ Rs 3000
- Attender @ Rs 1500

Recurring costs are also estimated for rent, electricity, maintenance and hospitality in SaniShop

- Rent & electricity @ Rs 5000 pm
- Shop maintenance @ Rs 1500

Materials/ Stocks of 50 units of toilets are proposed @ Rs 275800 @ Rs 5516 X 50 units

Table 16 Variable costs of Sanishop selling sanitaryware

Particulars	Cost (in Rs)
Toilet Unit Cost	7880
Unit cost @ of 30% margin for the retailers in the market.	5516
So Cost per unit to SaniShop (from dealer)	
Selling Price for SaniShop (assuming 25% margin)	6895
Contribution Margin per Unit	1379

Table 17 Fixed costs of Sanishop selling sanitaryware

S No	Particulars	Rs
1	Initial Advance	20000
2	Initial Furniture & Fixture	30000
3	Salaries & Wages per month	10500
4	Rent & Electricity per month	5000
5	Shop Maintenance per month	1500
6	Monthly fixed Costs (3+4+5)	17000
7	Initial Purchase Cost (50 units)	275800
8	Total Initial Investment (1+2+7)	325800
9	Interest on bank loan	12%
10	Govt. subsidy (35%), So Initial Investment for SHG	211770
11	Interest Expense	2118
12	Total Monthly Fixed Costs	19118

Income/ revenue

Each unit of toilet materials is proposed to be sold at Rs 6895 which is Rs 985 less compared to market price. For each unit sold SaniShop will have a margin of Rs 1379 It is proposed to sell 20 units giving a margin of Rs 27600 pm

BREAKEVEN ANALYSIS FOR SANISHOP

The breakeven analysis is based on approximated figures and a few assumptions that are detailed below:

Assumptions

We assumed that a group of women entrepreneurs promoting SaniShop avail government subsidy of 35% on the initial investment of 3.26 Lakh

The interest expense that we calculated here is arrived by assuming simple interest formula. In reality, the interest is at a compounded rate for a specific period of time. Interest rate is assumed to be 12 % although co-operative banks could give at 10% interest for the Self Help Groups

SaniShop enterprise requires a loan amount of Rs 211,770 @ 12 % interest It is required to sell 15 to 20 toilet units to realize their initial investment of Rs 211,770

Table 18 shows the initial cost of Rs 50,000 split (initial advance, furniture & Fixtures) across months

Table 18 Breakeven of Sanishop selling sanitaryware

Particulars	6 month	12 month	18 month	24 month
Initial Rs 50,000 investment	8333	4167	2778	2083
Monthly Fixed Costs (excluding initial 50000 investment	19118	19118	19118	19118
Total Fixed Costs	27451	23284	21895	21201
Break Even (Units)	20	17	16	15
Break Even (Units) after realisation of the initial 50000 investment		j	14	

If SaniShop plans to realize the initial investment of Rs 50,000 within 1 year, then for that one year every month we need to sell 17 units each month to break even

If SaniShop plans to realize the initial investment of Rs 50,000 within 6 months, then for those 6 months we need to sell 20 units each month to break even, and after that six months we need to sell 17 units every month to break

Brick Manufacturing Unit

A brick manufacturing unit is also examined to augment the revenue of SaniShop with additional demand for other construction activity in the area. Part of the cement bricks would be required for the customers buying materials for toilet construction. Bricks could be purchased by same customers or others for other construction activity also. About 150 bricks are required for a toilet unit and it is expected that 20 units are sold by the SaniShop. If additionally two fold units (bricks) are sold for additional construction needs of the same customers or other customers the unit would have break even in two years.

Raw materials as well as the skills required for the unit are locally available.

Table 19 Variable costs of brick manufacturing unit

Particulars	Rs
Cement	2.97
Rock Powder+ Metal 6mm	2.94
Water	0.25
Fuel for Transport & Rent for Vehicle	1
Total Variable Cost per brick	7.16
Selling Price of each brick	11
Contribution Margin on each brick	3.84

Table 20 Fixed costs of brick manufacturing unit

S. No	Particulars	Rs
1	Advances	50000
2	Bore well	40000
3	Electricity Connection	15000
4	Brick Machine	36000
5	Die per 10 pieces (assumption: to invest on 10 dies so simultaneously produce 10 pieces)	40000
6	Trolley (Type 1)	4500
7	Trolley (Type 2)	9000
8	Total Initial investment for manufacturing	194500
9	Total Monthly Fixed Costs for Bricks Manufacturing (includes labour, rent, electricity & interest expense)	27764.25

Table 20 Breakeven for brick manufacturing unit

Particulars	6 months	12 months	18 months	24 months	30 months	36 months
Investment for manufacturing cement bricks	32416.67	16208.33	10805.56	8104.167	6483.333	5402.778
Monthly Fixed Costs (excluding initial 50000 investment	27764.25	27764.25	27764.25	27764.25	27764.25	27764.25
Total Fixed Costs	60180.92	43972.58	38569.81	35868.42	34247.58	33167.03
Break Even (Number of Bricks)	15663	11445	10039	9336	8914	8632
86 Break Even (Number of bricks) after realisation of the initial investment	7226					

Recommendations

APMAS could facilitate the SaniShop enterprise and cement bricks unit by identifying enterprising women from slums. Strategically it could initiate the SaniShop in a few locations where large number of slum households do not have individual toilets. APMAS could explore the possibilities of providing or assisting the slum households to access loans for construction of the toilets. Policy environment of the government is favourable towards promotion of low cost individual toilets.

Innovative initiative to facilitate all slum households have access to toilets would be appropriate and timely when the government is planning to launch ILCS Phase IV. Providing access to loans to urban poor for construction of toilets would ensure that urban poor who are deprived of toilets for want of resources or credit also have individual toilets. The goal of total sanitation would be strengthened along with enhancing income generation activities of a few SHGs who run the SaniShop.

It would be viable if SaniShop targets a cluster of slums, which would give it more market base rather than targeting only one slum. Manufacturing of consumables like toilet cleaning agents would be a regular source of income as would be sales of cement bricks

APMAS could facilitate SaniShop through SHGs by identifying potential women who require training and handholding to form into a collective for group enterprise, mobilise resources from government under USEP/USWP, plan and implement a business model that could demonstrate viability of SaniShop to address sanitation needs of the urban poor in rapidly urbanizing AP.

APMAS could also pilot the SaniShop strategically in select municipalities in three or four regions to demonstrate the viability so that more SHG/SLFs could come forward. Initiative of this nature could have high relevance for the demonstrating the feasibility for replication through several agencies, both in Andhra Pradesh and elsewhere. Success of the pilot helps mainstreaming SaniShops through SHGs and NGOs.

Slum Profiles

Slum profile - NTR Nagar, Hyderabad

Population: Around 15000 How old is the slum? 27-30 years

Status of slum: Notified slum

Tenants- Around 20 %

Rent Rates: Rs 1000 to 2000

House site: Each house plot – 80 to 100 sq.yds, some around 50 yards after splitting

among the children

Land Value: with the value at Rs.15000 to 20,000/ sq.yd.

Type of house: Pucca houses mostly, few houses with asbestos sheet roofing too

Occupations: The residents are engaged in daily labour, construction work, painting work. They are also employed in local fruit market. The women work as sweepers in local schools and colleges. They also are employed as domestic help.

Evolution of the slum: The power supply was commenced around 8-9 years after these huts came up. Prior to this, the residents used to illegally tap power from the transformers. Once power supply was provided, water supply was given 4-5 years later and roads laid a year after. Most of the residents have pink ration cards.

Infrastructure: Around 8-9 years after the establishment of this slum power supply came and 4-5 years later the residents were provided water connections too. The roads were laid about six years ago and the drainage connection, even before it was laid.

Health problems: Four to five years ago, the residents were afflicted with chikungunya. Routinely they are down with cold and fever. One resident was even afflicted with dengue. A decade ago, there were bouts of vomiting and diarrhoea in the slum. Most of the slum residents go to the private hospitals nearby for treatment.

Sanitation practices & Type of toilets: Most of the households have individual toilets. 15 years ago, the government constructed toilets - Twin pits with five cement rings and a ceramic basin - which was availed by the residents with the exception of a few. Once the underground drainage connection was set up, they connected the toilets to it. A few residents had constructed toilets on their own rejecting the ones that the government wanted to provide. The reason was that the cement road was at a higher level and their homes at a lower level. Hence they demolished the existing toilets and built new ones. Most of them took loans to build toilets. Those building a toilet currently spend about 15,000 to 20,000 with superstructure comprising RCC roof. A small section has toilets with European commode also.

Slum profile – Fatullaguda

Population: Currently around 2000 population. There was more population a few years ago when it had about 500 households before the slum was demolished repeatedly in 2005-06

How old is the slum? –This slum was established somewhere in 1993-94

Status of slum: Non- Notified

Tenants- About 5 % are tenants because of poor tenurial security and transport facilities

Rent Rates: Up to Rs 1000

Size of the plot: 60 sq.yards

Land Value &Size: Around Rs 800 to 1500 per sq yard

Type of house: Mostly built of hollow cement blocks and asbestos roofing. There are huts scattered here and there.

Occupations: Many of the residents are masons, drivers, daily wagers, vegetable sellers, and security guards. Carpentry, Auto driving and painting are a few other occupations. The women are working as domestic help, labour work in construction work, sweeping and cleaning in hospitals, bars, hotels and selling vegetables. Since going out for work involves walking at least 4-5 kms and that there were no jobs available in the neighbourhood, half of the women were mostly confined to their homes. They were engaged in petty trade like running kirana shops, rice business, flour grinding, preparing *papad* and also selling vegetables.

Evolution of the slum: This slum is situated on an area of 29 acres. It is owned by the government under the Land Ceiling Act. A year after the slum got established, power supply was made available in 2005. After power, the water supply was introduced. Till then, they were dependent on the neighbouring colony for the same. A few brought tankers into the slum by putting in their own money. Two bore wells were sunk too. Six months ago, a new bore was sunk and a motor affixed to enable water supply through taps. World Vision, a NGO installed tanks on every street which was useful for the residents to store water. In 2006, around 40 residents of the slum got ration cards. In 2011, during the Rachabanda programme, a few applied for ration cards with the local MLA and 360 residents got the white ration cards. There is no drainage facility in the slum. In 2006, SHGs were set up and now there are 32 groups, out of which two are defunct.

Infrastructure: There is power and water supply. There are no roads and drainage facility. There is no Anganwadi centre. There is a primary school belonging to the Fatullaguda village where classes are held till the V Std.

Health problems: Mosquito menace is widely prevalent, and the residents fall sick frequently. In the year 2006, the chikungunya epidemic struck the slum badly.

Sanitation practices & Type of toilets: Many households are gradually constructing individual toilets and open defecation is on decline. In 2009, APMAS, a NGO sanctioned toilets for 120 houses with financial assistance of Rs 5000. Some of them already received the assistance and completed construction of toilets. Some are constructing the toilets. Another NGO, World Vision also gave material for construction of toilets. In 2011, APMAS approved assistance for 97 toilets. Single pit, 8 feet, Orissa pan, clay pipes with super structure comprising door and roof.

Slum Profile: ICRISAT Fencing Area Ambedkar Nagar

Population: Around 4500

How old is the slum? The slum located adjacent to ICRISAT fencing was established

between 1970-1975.

Status of slum: Non-notified

Tenants: Around 25 % are tenants

Rent Rates: The rents are between Rs.1000-1500 for one to two rooms. It is up to Rs

3000 in Bombay colony.

House site: small house sites of 40 to 60 yards house sites hardly having 2 rooms **Land Value & Size:** There are no pattas and land value is around Rs.3000/sq.yd

Type of house: Most of the houses are semi permanent to temporary

Occupations: Men work construction labour, daily wage employees in BHEL and other industries in Patancheru and other labour work. Women are engaged as domestic help and as daily wage employees in ICRISAT.

Evolution of the slum: The beginnings were modest with huts and later the residents were economically stable enough to go for semi-permanent or permanent structures. The fear of demolition and evacuation is a deterrent for sure.

Infrastructure: The roads are laid with stone slabs and the passages are very narrow even inhibiting the movement of two-wheelers. Water supply is through tankers and there is power supply installed by the municipality over a decade ago. Most of the families have ration cards.

Health problems: The stagnant water around the slum has resulted in mosquito menace and the alarming growth in population of pigs has resulted in attacks on residents and related health issues. During rainy season, an outbreak of fever and malaria too is not uncommon with the stagnated water entering homes too.

Sanitation practices & Type of toilets: In early 1990, the municipal officials constructed two community toilets in one at entrance of the basti and second one was located near the railway track on the end of the settlement. It was 'pay and use toilets' and some households could access it. These toilets were defunct within three years. In 2000 individual toilets were constructed with MCH support of Rs. 5000 of financial assistance and one bag of rice (100 kgs). About 10% of families constructed toilets on their own and spent an amount of Rs. 13,000- 15,000. The toilets were constructed with one pit of 8-10 rings depth and some toilets have up to 12 rings deep pits. Lack of underground drainage and lack of space in the house site has negated option of constructing own toilet for several households. Those homes which have toilets are used by women, adolescent girls and old age people only and men prefer to go out. Most of the women are in favour of pay-and-use community toilets if they cannot have individual toilets. They are willing to pay 50-100/- per family per month.

Slum profile- Kobbari Thota

Population: Around 15000 population (3000 households) **How old is the slum?** –This slum was established 70 years ago

Status of slum: Non- Notified

House site: Most of the houses are between 40 and 60 yards

Land Value: Around Rs 5,000 to Rs 10,000 per sq yard, however very few transactions

are observed.

Tenants- About 35 % are tenants because of location advantage despite crowding and

unhygienic conditions

Rent Rates: Rs 500 to Rs 1000

Type of house: Most of the houses are permanent with RCC roof and often with first

floor

Occupations: Majority of the householders work in the Visakha port as loading and unloading hamalis. The remaining work as electricians, plumbers, sales executives, rickshaw pullers, auto drivers and car drivers. A small section is monthly wage employees, including a handful of government employees.

Evolution of the slum: Located in the heart of the city, behind the Indira Priya Darshini stadium. The colony is bordered with Boudara road and 75 feet Road on both sides. One side of the slum is municipal colony and other side big open drainage and no scope for further expansion. There were three fire accidents in the slum during the years 1978, 79 & 80 and five people died. Subsequently tiled houses were built on their own. 1000 families from the Howrah bridge area of Visakhapatnam were given house sites by the government and 100 families migrated from the Uppada, Bheemili and Konada in 1990 for employment in the port. Some in the slum were given house plots in the Arelova area and subsequently relocated in 1987.

Infrastructure: There is power and water supply. Underground drainage is being laid and many houses are connecting toilets to it. On paying the house taxes fully, government provided tap connection to houses. Remaining households depend on the public taps for drinking water or wells. In some streets water is bought at Rs.2 per 3 pitchers. All streets are covered with cement roads. The area is well connected with electricity and roads network, to the city through public conveyance and sharing auto system. There are three public toilets; two are along the Boudara road and one on the banks of the open drainage canal, while the municipality built toilets is maintained by a contractor from Bihar.

Sanitation practices & Type of toilets: In the beginning, it was open defecation and there were separate places for the men and women. During 1988, public toilets were built separately for men and women in the earlier places where they used to go for open

defecation. At present charge is one rupee for both men and women. About 30% of the households are practicing open defecation, men and children among the majority households with toilets defecate in the open, while women, aged, infirm and sick people use toilets. A section of the households built toilets with Orissa pan and excreta released into the open drains till 2010, since there was no space to build septic tanks or pits. Remaining households were having septic tank.

Willingness to construct under SaniShop model: Majority of the households are willing to construct toilets on loan basis ands willing to repay in monthly installments. Members of SHG/ Federation are willing to take up production and distribution of sanitary material and cleaning agents.

Slum profile – Swaraj Nagar, Proddutur, Kadapa district

Population: 900

How old is the slum? –This slum was established in 1976.

House site: Swaraj Nagar has 315 house plots laid out. Three cents is the average size of the house site. Earlier, the IKP Pattas were given. Then D.Form Pattas followed. The first homes were huts. But there were fire accidents around 10 times and the homes were razed. The government paid a compensation of Rs.5-6000. The local MLA provided rakes which replaced the huts, making the dwellings semi-permanent.

Status of slum: Notified

Tenants- About 20 % are tenants

Rent Rates: up to Rs 1000

House site: 50 to 80 sq.yds, mostly three cents house site

Land Value: Rs.2000 to 3000/ sq.yd.

Type of house: Pucca houses mostly, few houses with corrugated/asbestos roofs too.

Occupations: Daily labour, farm labour, painting works, mechanical labour, driving work, running autos, labour work in ground nut, cotton and rice mills.

Evolution of slum: Prior to the recent housing scheme which was introduced six years ago, homes were allotted under IKP. A few of them did not avail of this. There are over 200 homes which have toilets in this slum, which was sanctioned by the government in 1998.

Infrastructure: The colony got power supply as early as 1976. Piped water supply was provided in 1995 and all homes have taps. Prior to this, water tankers used to provide water supply. Now a two-hour water supply is made through taps. The cement roads came in 1995. The water tanks were constructed in the colony itself and it began in 2010. The water purification unit too came up in 2011. The drainage connection was set up in 1995. Under NTR rule, ration cards were given to the residents in 1993 earlier and the new ones were given in 2005.

Health problems: In 2006, owing to consumption of polluted drinking water, two children and an adult died after being afflicted by intense vomiting and diarrhoea. After that incident, this slum has been provided with an urban health centre. Though chikungunya epidemic struck in 2009, not many were affected.

Sanitation practices & Type of toilet: In 2006, the Housing Board too sanctioned the construction of over 200 toilets. Once the residents got them constructed, the Board transferred Rs.3000/ head into the bank accounts of these households. Now the construction is of a single pit one with 14 feet depth. Once the pit gets filled up, it is drained through manual labour by paying Rs.2500 or using the machine by paying Rs.4000. Besides, there are two community toilets at Swaraj Nagar and Sanjeev Nagar exclusively for women which are free to use.

<u>Slum profile – Modempalli Harijanwada, Proddutur, Kadapa district</u>

Population: 520 belonging to Madiga community

How old is the slum? –This slum was established in 1955 although a few residents claim to be inhabitants since four to five generations.

Status of slum: Non- Notified

Tenants- About 30 % are tenants

Rent Rates: up to Rs 1000

House site: There are 120 house plots laid out. Most of the houses have about 100 yards to three cents.

Land Value: Rs.2000 to 3000/ sq.yd. However, there have been very few cases of property sales in the slum

Type of house: About 65 % of the houses are pucca with RCC roofing while the remaining houses have corrugated/asbestos roofing.

Occupations: Most of the residents are daily wage labourers in construction or farm. About one fifth of the residents are engaged in driving, cotton and rice mills. Some of the residents go to Mydukur for labour

Evolution of slum: The slum belongs to a few families of Madiga community who grew in number over the years into 120 households. There were 36 families in 1955. Organised housing and infrastructural activities with government support started since 80s. In 1983 government provided grant of Rs 8000 and Kadapa stones and 3 tractor loads of sand each for construction of 84 houses. Households provided free labour and additional money to the extent of Rs 10,000 to 15,000 for the house. Subsequently 6 houses were constructed under VAMBAY scheme in 2002-2003 with financial assistance of GOI/HUDCO/APSHC & Syndicate bank. VAMBAY houses are provided on loan. Residents are receiving notice from the bank for repayment. Currently there are 120 houses of which 78 houses were built with own money of the residents. In 2009 government sanctioned housing programme for 44 houses. Only 15 of that list are being reconstructed currently. These households are complaining of delays by APSHC officials in the release of grant for the houses. The residents used to collect drinking water from 2 km distance as the bore well water is brackish. Drinking water tank is constructed for supply though public taps. It was inaugurated on 7 February 2012 when the slum study was in progress.

Health problems: Chikungunya, malaria and typhoid are widely prevalent. Water borne diseases are reported by many respondents. Diarrhoea is major concern. There were about 30 cases of vomiting and diarrhoea in 2007 and many had to be hospitalised.

Sanitation practices & Type of toilet: Open defecation is practiced by many households. Proddutur Municipality built 60 toilets in 1985. Beneficiaries had to pay Rs 300 each. About 25 families could not pay Rs.300 and their applications were not approved. Toilets were built by contractors and soon they were abandoned because of poor quality. Basement was constructed with pan and walls and the beneficiaries were provided with a wooden door and tin sheet to get it fixed with their own money. These toilets were defunct within a year. Most of them are razed to ground due to rains.

Slum profile - Sanjeev Nagar, 29th Ward- Bhimavaram, West Godavari

Population: Around 2500 population. There are five colonies in the 29th ward – Sanjeev Nagar, Prakash Nagar, Gandhi Nagar, ST Colony and BC Colony. Other than BC Colony, all the four are situated on Gollavani Thippa Road and around 500 houses are estimated to be located in these slums. These slums are situated next to a canal. There are 120 houses in Sanjeev Nagar

How old is the slum? Around 40 years. **Status of slum**: Non-notified slum

House site: 100 to 150 yards

Land value: Rs 5000 yards sq yard

Types of houses: Huts and semi-permanent structures.

Occupations: Major occupations include farm labour, masonry, and livestock rearing. Between the months April-June, they have nothing much to do. The educated lot migrate

to Hyderabad and work there.

Evolution of slum: Residents of these slums occupied this land and put up huts. Their request for pattas is pending as the Irrigation and PWD objected. This colony got its name from the renowned politician's name – Neelam Sanjiva Reddy. During NTR rule, the residents paid a property tax of Rs.16 for their thatched huts which were waived by Chandra Babu Naidu regime. Presently, the semi-constructed houses are being taxed, only for the super structure and not the plot size at a rate of Rs. 143 for every six months. Residents of the slum have not benefited from any scheme for construction of houses. Since it is proposed to expand the Gollavani Thippa Road, a few affected on one side of the road are likely to be relocated.

Infrastructure: Power supply was made around 12 years through the efforts of a BJP councillor, Paka Satyanarayana. Those who could afford got meters installed. Water tankers come once in two days, which is used for drinking purposes. The water from the canal is used for other purposes. The residents have ration cards issued during the reign of NTR.

Health problems: During monsoons, the children are affected by vomiting and loose motions. Typhoid attack and fever are regular occurrences. This year, a few were also afflicted with dengue.

Sanitation practices & Type of toilets: Open defecation is practiced by almost all. The likely attack by snakes is one fear and venturing out after dark is even more fearful. There is a dog menace too and a few have been bitten by them. The bushes are thorny and it is a problem during rainy season. At that time, the older residents go near their homes while the younger ones travel a little farther away into the open lands. Only two families have toilets. One has a septic tank and the other has a single pit with five cement rings. Four years ago, a municipal contractor took Rs.250 from the residents and gave them 27 cement bricks. A few dug pits for toilets but did not proceed beyond that.

Slum profile - BC Colony, 29th Ward- Bhimavaram, West Godavari

Population: Around 700

How old is the slum? It came up in 1983

Status of slum: Non-notified slum

Type of houses: Pucca Houses, semi-permanent houses and thatched huts

House site: 100 to 150 yards

Land value: Rs 7000 to 10,000 sq yard

Tenants: 20 % are tenants

Rent: Rs 800 to 1500

Occupations: Agricultural labour, petty trading like selling milk and other menial jobs are being undertaken by the residents. Masonry is another occupation here. The women usually are domestic helps.

Evolution of slum: During NTR rule, the government bought seven acres of land from one Sairama Raju and allotted 140 *pattas* to the economically weaker section representatives. Initially, the houses were mere huts. Ten years ago, over 50 residents were sanctioned permanent structures and material worth Rs.20000 was supplied to them individually as well as a loan of Rs.20000 to each of them. These loans have been repaid by the slum dwellers. During the Congress rule, over 10 families benefited under the house construction was supported under Indiramma scheme with government grant of Rs.37000 and beneficiary contribution of Rs.3000. The municipal water supply has been made over 15 years in this slum and under the BPL Tap Connection scheme a few have been provided individual taps also. But the water supply is irregular and there is water problem in the slum.

Infrastructure: This colony was provided with power supply first followed by water supply, drainage and then roads were laid.

Health Problems: Typhoid and Malaria.

Sanitation practices & Type of toilets: Most of these 60 households had individual toilets. Government constructed toilets for those living in thatched huts without toilets. There are community toilets, constructed over 20 years ago, which are free for women. There was running water facility but it is defunct at present. The toilet is being cleaned by a woman from the local municipality but since the users do not pour enough water, the toilets are very dirty.

Slum profile – Leprosy Colony, 7th Ward- Bhimavaram, West Godavari

Population: 500 population (around 100 households)

How old is the slum? It came up in 1971

Type of houses: Pucca houses **House site:** 80 to 100 yards

Land value: Rs 3000 to 6000 yard

Tenants: No tenants

Rent: No tenants

Occupations: The prime earning source is begging. For those who are afflicted by more than 40 per cent Leprosy, pension of Rs.500 is given. Less than 40 per cent entails them to receive Rs.200. Some of the children of these leprosy patients have bagged government jobs. The jobs range from a government teacher (one male), government hospital nurse (one female), APSRTC Conductor (one male). The others are employed in house painting, daily labour, masonry, driving auto rickshaws and private buses. There are two welfare associations. One of them is New Jyothi Vikalangula Welfare Association, whose President is Vanguri Veeraraju, affiliated to the state-level body – Society for Leprosy Affected Persons (SLAP).

Evolution of slum: This colony was earlier known as New Jyothi Leprosy Colony. Now it has got changed to Dr. B V Raju Colony. The residents used to stay earlier in the Roman Catholic Mission (RCM). There was a missionary who was looking after the affairs there and later the sisters from Kerala took over. During their time in RCM, the inmates used to get food and lodging. But their kids were denied this benefit. Hence, they applied to the government for rehabilitation and during NTR rule, they were provided space and 27 out of 30 applications were favourably considered. These slum dwellers put up thatched huts. Later these were converted under a government scheme and a loan of Rs. 14000 was provided to them in 1974. This is still to be repaid. During YSR rule, this loan was waived.

Infrastructure: This colony was provided with power supply in 1981. Piped water supply was provided two years ago. It is four years since the roads were laid. Ration cards were given 15 years ago.

Sanitation practices & Type of toilets: Out of the 75 houses, only 25 of them have toilets, which have been built on their own digging a single pit with six cement rings. The government had constructed toilets for a few but since it was located inside the house, the residents expressed their reservations and did not use them. Since they do not have a financial capacity of their own, they have not been able to construct toilets all by themselves and when they go near the coconut grove, the farmers shoo the residents away. They resort to open defecation near the railway tracks.

Focus Group Discussions with Women about Sanitation

District: Hyderabad ULB: GHMC- LB Nagar Slum: Fatullaguda

FGD with women (without toilets)

Why there were no toilets constructed and reasons thereof

- 'The lack of financial well-being and poverty'
- 'There is enough space for toilet construction but we do not have the money to get it done'.

Where do the people go to defecate? What are their problems?

- 'There is a wild growth area around the slum where we usually go. Or there is another open space nearby which also meets our requirements. But now since there is construction going on, it is a problem using this space.'
- 'Since both men and women frequent the same spot, it is a delicate issue. Carrying a pail of water before men is quite a ticklish thing and is demeaning. Hence we go before the dawn breaks. We are afraid of being mugged and also attacked by snakes and scorpions when we venture in the dark.'
- 'Children face problems and the elderly are hesitant to go alone.'
- 'Under the trees, the men usually keep drinking and indulge in gambling. Once a girl was confronted by a few of them and she was dragged into the nearby bushes but some passers by saved her'.
- 'Rainy season makes our lives even more wretched. The entire area stinks and becomes slushy.
- 'There are mosquitoes all around especially during the evenings'.

What is the kind of toilet that the women want to be constructed and how much can they spend? 'We were planning to construct a single pit toilet and this would cost around Rs.12-13000. During digging if there are rocks then the expense is bound to shoot higher as it would cost Rs. 1000-1500 to smash a boulder. The women are willing to spend Rs.3000 out of the total expenses.

- 'We keep saving a little out of our wages but would be very happy if the government lends us any assistance'.
- 'Some applied to APMAS and got assistance for latrines. Some could not get their latrines sanctioned. They are waiting for the assistance'

District: Hyderabad GHMC Slum: ICRISAT Fencing Area Ambedkar Nagar

FGD with women (without toilets)

Why there were no toilets constructed and reasons thereof

'A few could not construct because of space constraints and a few owing to lack of funds' For those who lacked space, the feeling was that they would have gone ahead and constructed a toilet somehow or the other instead of open defecation

Where do the people go to defecate? What are their problems?

- 'Defecation is done behind trees and bushes. There is severe pig menace in the slum area. One of our women got attacked by a pig and she had to spend money in thousands for treatment and restoring her normal health'.
- 'We are afraid to go out to attend nature's call in the nights. We are also wary of men lurking around and peeping at us from tree tops, which seem to be common in the slum.'
- 'There have been times when our jewels have been snatched. Owing to such serious concerns affecting us, we have decided to go only in groups'.

What is the kind of toilet that the women want to be constructed and how much can they spend?

- 'Since there is no space for digging pits, if there is a drainage system made available, we could connect our latrines to it as and when it is constructed'.
- "We do not know how much it costs to build a toilet, may be Rs.10000 or 20000?"
- 'Since it is miserable during rains, we feel that a toilet would be ideal to tide over that period".

If it is costing Rs.15000 or more we can contribute Rs.5000 if there is grant form government or loan of Rs.10000 or more which we would repay in installments every month.

District: Hyderabad GHMC Slum: ICRISAT Fencing Area Ambedkar Nagar

FGD with women (with toilets)

What kind of toilets and how much was spent?

'Most of the toilets here have single pit comprising 9/12 cement rings with a ceramic basin'.

'The toilets were self-constructed and the expense incurred was about Rs.10000'

Some had constructed toilets along with the house construction and could not estimate how much it costed.

Why were toilets built?

'It was a problem venturing out into the open to defecate during the rainy season. It was felt most comfortable to have a toilet in the home premises itself. Moreover, the danger of slipping and falling in the slush was an overriding fear in many. Also, when one fell ill the need for a toilet was the strongest'

'The men used to ogle us when we used to go to the nearby hillocks to attend nature's call. Then too we felt that we should have a toilet in our homes'.

Who is using it?

'It is only the women who use the toilet while men go into the open because of the fear that the pits would fill up fast if all family members use the toilet'.

Issues and cost of regular maintenance of toilets

'A sum of Rs. 30-150 is the routine expenditure incurred in cleaning the toilets using acid and phenyl. There have been no maintenance/repair issues till now'

District: Kadapa Municipality: Proddutur Slum: Swaraj Nagar

FGD with women (without toilets)

Why there are no toilets and reasons thereof

- 'We have no wherewithal to build toilets. So we are forced to go in the open'.
- 'We are daily labourers. So how do we build toilets? That is why we are forced to defecate behind bushes'.
- 'Some of the households do not have toilets because they don't have the space to construct toilets.'
- 'The municipal officials sanctioned latrine construction twice in 2004 and 2005. The contractors put up a show as if they had constructed a regular toilet. They had dug two pits and installed cement pipes for this. But it was not constructed properly. Moreover, it was not sanctioned for everyone.'
- 'Only those whom the administration favoured were extended this privilege. The common public was left out'. A few even admitted that they did not know that they had latrines constructed for their use.
- 'The toilets constructed by the contractors were not done properly. Those who paid extra were provided with better constructed units while those who did not suffered. Most of the money went into their pockets while the toilet construction activity was a mere eye-wash. The constructed ones were so small that it did not have enough space even for a person to squat.'

Where do the people go to defecate? What are their problems?

- 'Earlier, we used to defecate in an open space where there were bushes for cover. Now on that very location, a college has been constructed and road has been laid. So, we are now forced to retreat behind the bushes on the roadside. If we want to use the space near the college, the watchman shouts at us and prevents us from defecating there'.
- 'We now go only before daybreak or after it turns dark. Since there is movement of people during the day, we are not able to attend nature's call during that time'.
- 'When men come, we are forced to get up till they move from that spot. At times, owing to knee problems for a few, they are forced to put up with stares and complete the task'.
- 'During the rainy season, it becomes unbearable owing to slushy and muddy conditions and water logging at the spots where we usually defecate. Many have slipped and fallen, with older women being the most affected, but none seems to bother about this problem of ours'.

'The women have the maximum problems. When the younger women want to go, then the parents usually accompany her. Girls who have attained puberty usually go with company. Or else, the men keep ogling at them from the trees and behind the bushes'.

Young women with children and infants who have none to take care of them at home are forced to take them along to the defecating spot. These women hold the kids along as they defecate and return home.

'Added to this, there is the menace of pigs that hover around and attack the defecating women. So they are forced to carry sticks for self-protection. Recently, one woman was attacked by a pig and she fell, fracturing her hand. Still, it is being said that the place is clean only because the pigs are around!'

Problem with community toilets

'There are community toilets in Swaraj Nagar. But as it is situated in one corner of the colony, the residents of the other have problems accessing it. These are free to use toilets but the conditions are lamentable. Though there is water supply source through a bore, since its motor has gone defunct a month ago, there is no water available. But when water supply was there, the residents of the slum used to visit these toilets.'

'These toilets had been constructed eight years ago, soon after the Congress government took charge in 2004. As there was government land available, these community toilets could be constructed on one corner of the colony, while the other was deprived owing to no availability of land there'

'During the monsoon, as the area turns slushy, when we visited the Sanjeev Nagar community toilet, we were refused access. Since the community toilet pits were not constructed deeply enough, once it gets filled, an expense of Rs. 15000 had to be incurred. So, with no further support from the government and these toilets remained in an abandoned state, using them also becomes difficult.'

'The community toilet was constructed for Harijans (Madiga community) at Sanjeev Nagar. During monsoons, if we go to that community toilet, we find them locked and we are told that this is exclusive for Harijan use and not for the Mala community and Christians.'

What is the kind of toilet that the women want to be constructed and how much can they spend?

When enquired what could be the cost for constructing a toilet, it was said that it may cost around Rs.20000. When probed further, it was made known that around Rs.10000 would be spent on digging a pit of 12-13 feet.

'Why are they digging so deep?' Since there is a fear of overflow and quick filling up of the pit if dug at a lesser depth, this is necessary was the reply. If dug at a depth of 13 feet, the women felt that it could withstand for a 'generation'.

If the cost of a toilet would work out to Rs.15000, the women said they would contribute around Rs.2-3000, even by taking a loan if necessary.

Health Issues

'In 2004, owing to the pig menace, a 10-year old boy died of encephalitis'

'The mosquito menace is very high and in 2005, the slum was affected with chikungunya. Since then, it has become a regular feature here'.

'In 2008-09, we were struck with dengue in the slum and five children and five elders were affected'.

District: Kadapa Municipality: Proddutur Slum: Modempally Harijanwada

FGD with women (without toilets)

Why there were no toilets constructed and reasons thereof

- 'In this slum, there are 150 houses and none have toilets. Everyone defecates in the open' 'Toilets were constructed during the rule of N T Rama Rao, but since they were of poor quality they collapsed. The ward councilor then- Mr. Pulliah- had constructed them.'
- 'A single pit of 2-3 feet was dug with a stone wall with a cement lid. A plastic basin was installed but it was so small that even a person could not squat. There were no doors and so it was not used by anyone.'
- 'We could not construct a toilet owing to our financial condition, though there was no problem of space'.

Where do the people go to defecate? What are their problems?

- 'We go to the burial ground or the bypass road which is situated at a distance. The vacant land around where there were bushes has now been cleared for constructing apartments. This has made our lives difficult'.
- 'As construction activities are on, there are men around and so the women have to first ensure that it is 'safe' enough for them to move for defecation. This means that time is wasted and the household chores get delayed. We go only after it turns dark.'
- 'The pig menace is widely prevalent. They attack us from behind forcing us to take bath as we return home. Hence, we carry sticks for self-protection'.
- 'During daybreak, we have dogs for company as we go to defecate'.
- 'As we squat, we are attacked by mosquitoes, leading to rashes. We clean ourselves with cold water as we return home, or else the pain is unbearable.'
- 'Teenaged girls and women who have delivered carry a knife to ward off evil spirits when they visit the graveyard to defecate as it is widely felt that carrying iron makes them immune to such unholy attacks. Even the other women who go there carry a knife'.

What is the kind of toilet that the women want to be constructed and how much can they spend?

'We plan to dig a pit of at least 15 feet to prevent it from filling up early'.

It is estimated that the expense would work to out to Rs.15000 and the women could contribute around Rs.1-2000 per head. If the money for constructing these toilets were handed over to them directly, the women said that they could do a better job as the government record in this case has been shoddy.

Health Issues

'Over five years ago, around 20-30 suffered from vomiting and diarrhea but there were no fatalities.'

'Chikungunya, malaria and typhoid are diseases are widely prevalent. Currently, a pregnant woman is affected by malaria'.

District: Visakhapatnam Municipality: GVMC Slum: Kobbarithota

FGD with women (without toilets)

Why there were no toilets constructed and reasons thereof

'The houses are small and there is no space for toilet construction. The bathrooms have been constructed on the drains and if the toilets are constructed outside the house, the municipality would demolish it'.

'If we wanted to keep a basin within the bathroom, the municipal authorities have refused permission and have demolished those who have done so'.

Where do the people go to defecate? What are their problems?

'We use community toilets which have been in existence over 12 years. These are the replacements to the earlier ones which were rendered unusable. The old ones were free to use but the new ones have separate toilets for men and women. A charge of rupee/ person is levied whenever anyone uses it.'

'During the time when there were the old toilets existing, the women used to defecate in the open as they were in a bad shape. The new community toilets are closed between 11 PM and 4 AM.'

'If one has to attend nature's call during the night, a group of women go to the nearest spot. Or else, one has to wait till the toilets open in the morning'.

'If one is affected by loose motions, then they use the open drain outside their homes or use the bathrooms meant for taking bath. Since the kids too are charged for using the toilet, kids below 10 years are sent for defecation in the open'.

'For a family of four, an amount of Rs.100-120 is spent per month for using the community toilets'.

'The toilets for women are comparatively more crowded than those of men and the women are subjected to abuse by their men if they are delayed while completing the task'.

'This toilet is also being used by the traders and the visitors to the neighbouring Rythu Bazaars.'

'The community toilets are sometimes clean and sometimes not, though there are two men to take care of it'

What is the kind of toilet that the women want to be constructed and how much can they spend?

'We hope that the government gives us an alternate space to construct toilets as we do not have it here'

'If we were to construct toilets at the place where we stay, then we could contribute only a maximum of Rs.2000'.

'We will be able to construct a decent toilet if we can get some loan as it costs more than Rs 10,000 for a good toilet'.

District: Visakhapatnam GVMC Slum: Kobbarithota – Vada Balija Veedhi

FGD with women (without toilets)

Why there were no toilets constructed and reasons thereof

'No space and money to do so'.

'This street has an underground drainage connection and also a cement road to boast of. Owing to space constraints, the bathrooms have been constructed on the drains and when the municipal authorities threatened to demolish them, we were told to stop from doing so. '

'The drainage connection for the street residents was taken during the cement road construction and if we now need an underground connection to the toilets, the road has to be dug up. For the drainage connection, a sum of Rs.1500 was incurred for material and labour charges. The cement pipes are partially visible on the roads itself which are covered with plastic sheets. However there are no drainage connections, yet.'

'If the government gave a couple of feet space on the road, we would construct toilets'.

A few added a basin in the bathroom itself. But it is not possible for most of us because the bathroom itself is very small and cramped and keeping a basin in it is not possible'.

'Other than this, these houses are on the slope while the road is on a higher plane, making the construction of toilets that much difficult'.

During the election time, the women said that they were planning to appeal to the government for sanctioning space for toilets. If they approached the government presently, their application would be thrown into the dustbin was the feeling.

Where do the people go to defecate? What are their problems?

'The women use the community toilets, while a few men defecate in the open'.

'The toilet for men is empty many a time but still they go into the open to defecate'.

- 'When we need to use the toilet, at times we do not have a rupee. Since the toilets are closed during nights, it is a problem'.
- 'After 10, if we need to go, then we use the open drains inviting a lot of abuse from the neighbours.'
- 'We do not stop eating just because we do not have bathrooms. We eat and then go where we need to'

'We queue up if we need to use the toilet in the morning, much like a cinema theatre queue. There is always a rush and 'me first' feeling'.

'When we get delayed, our men abuse us and ask us why are we so late and who will take care of their food and tea? If we reply, we get beaten up and if we remain quiet, we just escape with abuses'.

What is the kind of toilet that the women want to be constructed and how much can they spend?

'If we get a couple of feet space, we would take a loan or do something to get the toilet constructed'

One of the women took a risk and constructed a toilet on the road spending Rs.15000. She mortgaged her gold ornaments and now is paying an interest of 2-3 per cent per month for this.

District: Visakhapatnam Municipality: GVMC Slum: Kobbarithota

FGD with women (with toilets)

Why were toilets constructed and reasons thereof?

'We didn't have toilet for several years because there is little space in the house. And there we have community toilet also. Yet, we thought we should have the toilet because we have three daughters who are no longer small to go for open defection or wait in the queue at public toilet'.

'I have constructed a toilet because of age. My sons are able to support the family and we old people cannot walk the distance in odd timings to public toilet'.

What is the kind of toilet that was constructed and how did they raise the money?

'It is a small toilet cum bath room. Toilet basin is fixed a few inches above the bathroom. It is 4 ft by 5 ft.'

'Some women have underground drainage connection and have connected it to their bathrooms. As they are not able to afford a separate toilet they are using the same area for defecation by fixing a basin. Since they cannot go out and do not have the wherewithal for a community toilet, this seems to be the best arrangement.'

'We constructed the toilets with our own money'.

'Now we are connecting the toilet to the main drainage'.

Who is using these toilets?

'All members of the family use the toilet'.

'Initially only women and girls in the family used it. But now other members also got used to the comfort of the toilet'.

'All members use it. Now there is no open defecation. Public toilets are expensive and dirty'.

Maintenance Issues

'There is water problem in summer and cleaning the toilets is problem sometimes. People without tap connection buy water from others collect a few pitchers of water every alternate day.'

'The drains are not properly laid and they overflow creating mosquito menace'.

'The drains are faulty. We complained to GVMC that sometimes there is overflow of the sewage from the drains that makes bathrooms and toilets unusable'

'GVMC sends the team to clean the septic tanks. GVMC helps in cleaning the tanks when they get filled up'.

Issues and cost of regular maintenance of toilets

'There is no problem in cleaning of the toilets. We clean our toilets'.

'We buy the liquids from the shop or from people who come on cycle to sell the phenyle'.

'We spend 30 to 50 rupees every month to clean the toilets'.

District: Visakhapatnam GVMC Slum: Gandhi Nagar- Balaji Nagar

FGD with women (without toilets)

Why there were no toilets constructed and reasons thereof

'There is space available for toilet construction, but no finance'

'There are only a few in this colony who have no toilets'.

Where do the people go to defecate? What are their problems?

'Before the community toilets came into existence, the women had to go to the nearby hillocks and defecate. These areas were infested with snakes making them feel scared always'.

'It used to be especially very difficult for women who were expecting to climb up the hillock. However, with these community toilets coming into being, the situation is very comfortable'.

'We visit the community toilets and there are two of them. We pay two rupees/ person if we use the toilet once in one toilet while in the other, they charge just a rupee. For a family, the charge is Rs.50/ month and we furnish photo ID proof of each one of our family members. When relatives visit us, they have to pay and use the toilets.' 'Both the toilets have running water facility'.

'One toilet, which is 12 years old, started collecting 25 paise to begin with and went to hike it subsequently to 50 paise, a rupee and now it is two rupees. The other toilet which charges a rupee per head is fairly recent, having been constructed six years ago.'

'The older toilet has improved its appearance from the earlier cement flooring to one that of tiles, done up six months ago'.

'Both the community toilets are cleaned twice a day using bleaching powder and phenyle'.

'In the older toilet, during power cut, they used to keep the cement tank filled up with water. However, this was not necessary if there were no power cuts.'

'The older toilet is being run by a couple working in the municipal office on an annual contract.'

'The morning hours between 6-9 am were the rush hours and each person had to spend a minimum of an hour to complete the task'.

What is the kind of toilet that the women want to be constructed and how much can they spend?

- 'The colony has an underground drainage system and a few residents are in the process of connecting their toilets to it'.
- 'For connecting the individual toilet to the underground system, property tax payment is a must. A few of the residents are already proposing to do so.'
- 'An expenditure of Rs.5000 is to be incurred for connecting to the underground drainage, out of which Rs. 410 is to be paid to be the Municipality and the rest for laying of the pipes and other labour charges'.
- 'A sum of Rs.10000 is to be incurred if a toilet is to be constructed even as the expense on the digging of the pit has been done away with'.
- 'Generally, the work is outsourced to a mason who does everything. A few however visit the hardware shop for purchase of material and pay the labour charges to the mason'. During the tenure of Chandrababu Naidu, there were a few who constructed toilets. A few even paid Rs.250 as DD charges but they were not sanctioned toilets. This money was refunded later. The government constructed single pit toilets with four to five cement rings.

If a loan of Rs.10000 is provided, the women were willing to save on their food expenses to repay the amount every month and get this facility installed.

District: West Godavari ULB: Bhimavaram Slum: Ward No. 7 Nehru Colony

FGD with women (without toilets)

Why there were no toilets constructed and reasons thereof

- 'Since we are dependent on daily wages, what we earn is barely enough for our food and taking care of the kids. Hence we are not in a position to build toilets'.
- 'Though there is no shortage of space, with no financial support or ability, we are not able to construct toilets'
- 'Even when the government came forward to construct toilets, we were young then and we did not know that it would be useful for us and we did not have the awareness that it could be a great source of relief and cleanliness. Moreover, we were earning very less then.'
- 'The government assisted us only in construction of houses. Since we did not have money for toilet construction, we could not do it'.
- 'The government constructed toilets for a few toilets, but the contractors did a terrible job. Since it was in a bad condition, it was rendered unusable. Now they are going for open defecation.'
- 'Since the land around is agricultural and the soil is loose, we have to build the toilet a few feet the ground by raising the beams. This means an expense of Rs. 30000 at least, which is beyond the reach of many'.
- 'Four years ago, when the Councilor promised that there would be toilets constructed by the government, all of us paid an advance of Rs.230 with our photos too handed over. But nothing came of it and the tenure of the Councilor was over.'

Where do the people go to defecate? What are their problems?

- 'There are no community toilets in this slum.'
- 'Since there are no toilets, defecation is in the open and obviously the old and the women face the problems'.
- 'When men come, we get up and when they leave we continue with our activity. During the sowing season, we can go out only in the dark and usually, we venture out only when it is dark. If we get the urge during the day, we have to just suppress it which leads to many health issues'.

'During the post-delivery phase too the situation is the same. The women who have delivered are taken to the field with a broom in their hand to ward off the evil spirits. Similarly, the girls who have attained puberty too are taken to the field covering them with yellow cloth and a broom in hand'.

'Nowadays, the girls are wearing Punjabi dresses more than saris and this is more problematic when it comes to open defecation'

'When we go into the open, we are attacked by dogs. There is also persistent problem of snakes lurking around. Old people and kids above five years too go into the fields for defecation. The kids have to be carried physically for this.'

'The farmers of the surrounding lands keep threatening the women and tell them not to enter the area by confining them physically in that place. We have to wait for them to go away before we do it. Many times they ignore us but at times they really create an issue by asking for some mediation from outside parties to prevent us from doing it in the open. Hence we are planning to construct a toilet as soon as possible'.

'The kids below five defecate right outside the homes and this raises a stink and buzzing of houseflies all around. But we are helpless as there is no go'

What is the kind of toilet that the women want to be constructed, what do they expect from the government and how much can they spend?

'Since it is loose soil all around, we have to raise the beam and construct a toilet. We also need to dig deeper pits and put ceramic basins in the toilet which means an expense of Rs.30000.

'The government should subsidise half of this expense and give the remaining half as loan. We will repay this loan in installments every month. Or, even if the government contributes Rs.15000 we would take a loan and complete the work. It would be ideal if the government does it totally.'

District: West Godavari ULB: Bhimavaram Slum: Ward No 7 Nehru Colony

FGD with women (with toilets)

Why were toilets constructed and reasons thereof?

'There was no open space for defecation and it was embarrassing to do it in the open'.

What is the kind of toilet that was constructed and how did they raise the money?

'Some constructed the toilet at their own cost with a 13-feet pit, a porcelain basin and with cement rings in the pit.'

'The government toilets are constructed on a single feet foundation and the height of the walls was less. There was no cementing done, leaving it incomplete with just the brick walls. The rake above the walls was of cement and a single pit was dug with just five or six rings.

'Still a few are continuing to use the toilets constructed by the government, making repairs wherever necessary. Replacing plastic basins with porcelain, raising the compound wall and cementing the floor are a few steps taken'. With *vaastu* issues coming in, these toilets have also been demolished by a few and re-built according to necessary corrections'.

'Not more than nine rings are placed in the pit said the women. A few have constructed septic tanks and said that an expense of Rs.7000 was incurred when they were constructed six years ago.'

Who is using these toilets?

'The toilets constructed by the government have been used very carefully by the residents as the pits are shallow and making them prone to filling up faster. Hence, it is primarily for the women and the men still practice open defecation. However, people with own toilets have both the men and women using it.

Maintenance Issues

'The houses on either side of the road are at uneven levels and hence the cement rings are sunk into the ground for people who have houses at the slope while it is above the ground for those on the elevated portion. During rainy season, the water gets into the pit and there is a back push into the toilet, routinely. When this happens, the residents go into the open. Owing to this problem, the depth of the pit varies from the location where the house is situated, between one feet and two feet.'

'Other than this, the pipes connecting to the pit too get blocked for which the plumbing services are put into use, which enables him earn a day's wages'.

'The sanitary material for toilet is being sourced from Bhimavaram and the women did not know enough details as it was the men who procured them'.

Issues and cost of regular maintenance of toilets

'Toilet cleaner, Phenyle, Bleaching Powder and detergent powder are used to keep the toilets clean. Based on the utility pattern, a sum of Rs.50-200 is spent by the women.'

District: West Godavari ULB: Bhimavaram Slum: Ward No 29 BC Colony

FGD with women (with toilets)

Why were toilets constructed and reasons thereof?

- 'During rainy season, it is difficult for men for attending to nature's call as there are community toilets for women.'
- 'It is a problem for women to go in the open as there are men around and they feel ashamed. Girls who have attained puberty will find it even more embarrassing. So it is a delicate issue for men with women and vice versa'.
- 'The well near the community toilet is dry and carrying a bucket of water to the community toilet is a problem. Hence we carry water in small pitchers. So it becomes a problem for the next user as the toilet is not clean. Moreover, the sanitary napkins are also thrown around in the toilet making it a bigger problem.' 'The open space available is also less and there is a presence of snakes which makes the situation even more miserable'.

What is the kind of toilet that was constructed and how did they raise the money?

- 'Both the bathroom and toilet are located at the same place'
- 'The toilet basin is of ceramic. It has a depth of nine rings with a cement lid and there is no septic tank'
- 'Since the pit was of lesser depth, the water is overflowing and hence the pit has been dug deeper'.
- 'Some have improved the toilets constructed by the government by spending a little from their side too'.

Who is using these toilets? 'Both the men and women of the household are using it. Though the women have the community toilets too and the men find it difficult, once these toilets have come into being, none defecate in the open anymore'.

Maintenance Issues: 'There are no major difficulties as such but during hot afternoons with the water supply in the area being a problem, the women have to carry water from far to keep things going. It becomes difficult then for them to keep the toilets clean'.

Issues and cost of regular maintenance of toilets: 'Phenyle and toilet cleaning liquids like Harpic are being used. We spend anywhere between Rs.40-60 per month'.

FGD with SHG women about Sanitation & SaniShop

FGD with SHG women

District: Hyderabad ULB: GHMC Slum: Fatullaguda

Status of SHG

Jeevan Jyothi SHG is five years old, and it has an account in Andhra Bank. Total Savings in the group is Rs. 10300. Jeevan Jyothi SHG is involved in individual income generation ventures like saree selling, buying sewing machine for tailoring, retail trading of rice, fruits and vegetable vending, and kirana shop. These income generating activities have an investment ranging from Rs.60000 to 100000. SHG is the main source of financing for these ventures taken up by women. Members of the SHG are also into group based ventures like Sabina and Papad making along with marketing over last 6 years and income generated per member per member is Rs.500 to Rs 1000 per member very month. These are small ventures catering to the demand of households in the neighbourhood. These activities have no branding and involve no transport cost.

Investment capacity of the SHG is Rs.100000.

Status of toilets

"Not many people have toilets yet. You can see lots of construction activity in progress".

"Still many people practice open defecation because there is some place around. But many are also constructing toilets and APMAS also provided supported for construction of toilets".

"We were not keen to construct toilets because we were actually worried of municipal officials threatening demolition of the houses. But now these fears are not there. There is also lot of construction activity going on because of the assurance from the MLA".

SaniShop- Feasibility

The group is not having any experience of promotion of sanitation products or low cost toilets. However, the SHG is interested to take up manufacturing and marketing of sanitation products under SaniShop model if there is attractive profit margin and useful for the promotion of livelihoods.

Strengths of SHG

SHG members feel they could come together for a profitable group venture. There are several young and enterprising members. The slum is growing and there is considerable construction activity in progress in the area.

"Availability of construction material and sanitation products will be received well by the residents who currently spend significant amount on transportation of these products from Nagole and LB Nagar".

The group plans to sell 26 toilets per month. Group is also convinced of the local demand for steel, cement, iron sheets which are required for the toilets as well as for any construction activity. SHG is particularly enthused by the demand and margins in selling toilet cleaning agents and cleaning equipment.

Constraints/ Concerns/Apprehensions

Constraints of the SHG include lack of experience in the sanitation products and collective effort in a single venture of or venture involving investment of several members.

Training needs of the SHG

"We need training and guidance as none of the members have any experience in manufacture or trading of toilet construction materials".

District: Hyderabad ULB: GHMC Slum: NTR Nagar of LB Nagar Municipality

Status of SHG

Arunodaya SHG is 4 years old with 10 members. Currently monthly saving is Rs 100. It has a total savings of Rs 90,000. Arunodaya SHG had three bank linkages, through which the group got a loan of Rs.300000 and members got an amount of Rs. 30000 each. Loan is utilised by most of the members primarily for household and livelihood purposes. Loan repayment rate is 95%.

Status of Toilets

Almost all residents have individual toilets. "We are an old slum and long back we have constructed toilets with government assistance. Now all those toilets are gone and we have built new toilets with our own money".

"Some are going for additional toilet also or changing the toilet to western type"

"A few poor families are planning to repair the told toilets, but they need loans to do that".

Strengths of the SHG

We have good leaders in the slum. There are so many groups and there are several leaders with long exposure to government policies and many types of income generating activity. We can learn for other groups in the slum. Some groups have taken up road laying activity in the slum and have started many types of business activities.

"Mobilising money for investment may not be a problem with the support of officials and NGOs".

SaniShop- Feasibility

There is demand for bricks, doors, and pans of different kinds. But more scope is there in manufacturing and selling toilet cleaning products. Every house spends fifty to a hundred rupees on toilet cleaning.

"All members of the group can find employment in toilet cleaning materials manufacturing. We can sell the material at discount price in our regular meetings to the SHG members".

"We are willing to take up group ventures. But, we can invest only Rs.60000".

Constraints/ Concerns/Apprehensions

The SHG did not involve in any group based ventures so far. Not many pans will be sold as most of the houses already have toilets. Selling to people in other slums and colonies will be a difficult task. Bricks, doors and cleaning agents will have demand.

"We need to discuss the SaniShop idea with our family members and need to discuss in the SHGs. Our Federation needs to organise discussions on the subject".

Training needs of the SHG

"We need training in manufacturing and sales and also how to plan and run a collective venture"

District: Hyderabad GHMC Slum: ICRISAT Fencing Area

Status of SHG

'The SHG activity began seven years ago with a few groups, six years old and a few three years old'. 'The groups have all been provided loans, with a few of them getting it five times, a few three times and one time respectively'. 'The loan amount was spent on domestic needs and could not be even used for any business or petty trade activity'.

<u>SaniShop – Feasibility</u>

'Not everyone is same with needs differing from one to the other'.

'Everyone has something or the other to do all by oneself. A few have some tailoring or stitching work. It is not possible for all to get together and do some joint activity like businesses. 'Earlier, the bank people had asked us to do *papad* business but we expressed our inability'

Status of toilets

Why were toilets not constructed? 'A few had no space and a few did not have the money to do so.'

Where do they go and what are the problems?

'In this slum, 75 per cent of the residents had toilets and only 25 per cent did not have them.' 'There are many problems with open defecation, the pig menace being the main one'

About constructing community toilets: 'There is no space for constructing a community toilet in this slum'. 'The women were not totally in support of the community toilets with a few opposing it in their slum area'. 'If the government constructs a community toilet we will use it. We are even willing to pay Rs.50-100 per month just like how we pay our electricity bills every month. 'Separate toilets for men and women – about 10-15 numbers- would be very good'.

What is the kind of toilet they would like to get constructed?

'A few are keen on individual toilets. Since there is no space for digging a pit, they are waiting for a drainage connection to be provided which will enable them connect the bathroom and the toilet to it'.

District: Hyderabad ULB: GHMC Slum: Patancheru - Ambedkar Colony

Status of SHG

'Members of two groups participated in which one group was in existence for 10 years while the other was for four years.' The first group has got loan assistance five times and the second group got it twice.

'The repayment is pretty good in both the groups'.

'Loan amounts have been for varied purposes like repayment of personal loans, selling vegetables, cloth business, tailoring activity and ironing work, setting up small kirana shops and health and education purposes and has not been put into use for any common activity'. 'The repayment is being made with two percent interest.'

'The senior group must be having a corpus fund of Rs.100,000 while the junior group must be having anywhere between Rs.30-40000'.

SaniShop- Feasibility

'Since the members have their own businesses, getting together for a new activity like this may not be feasible and the members expressed their inability'.

Constraints/ Concerns/Apprehensions

'We all will work hard and invest in this activity. But what will happen if we incur losses? Then, we may have to pay from our own resources'.

'There is no space for setting up SaniShop in the slum'

'If the products get sold then it is okay. Or else, how do we manage? For example, items like cement rings are being produced by many and hence the ones these women manufacture may not get sold'.

'We can operate out of our homes but we may not be able to do anything else'.

District: Visakhapatnam Municipality: GVMC Slum: Kobbarithota

Status of SHG

'The members of the FGD had a SHG which got disbanded. Now they are trying to regroup again'

SaniShop- Feasibility

'In KobbariThota the men and women are keen on income-generating opportunities and would gladly support any if it helped us earn more money'.

SaniShop activities

'Since the slum already had an underground drainage connection, the cement rings for pits would not have any demand'

'Prospects of manufacturing phenyle and toilet acid may not be very great because there is already such an activity in the neighbourhood. Most of the residents here buy from the shops at any rate it is being sold. Manufacturing cleaning agents will have to face competition.'

Constraints/ Concerns/Apprehensions

'There is competition but also there are so many people buying these products. So we could learn to make and sell the cleaning agents like there is competition for grocery shops and fish vending which would not stop one more from entering the business. We can also sell it to people in the neighbouring slums.'

'It would take time but once the confidence level about the quality and delivery is established, there may be takers for such products. If at least 10 women are convinced in the neighbouring areas, then automatically the market will pick up'

District: Visakhapatnam ULB: GVMC Slum: Gandhi Nagar-Balaji Nagar

Status of SHG

'SHGs have been in existence here since 2000. Three years ago, owing to some differences of opinion, these groups were disbanded. Once again, it got re-grouped and now there are 22 groups in Balaji Nagar.'

'The groups existing have all been given loans with a few of them getting it thrice and the others getting it twice. Most of them are good at repaying their loans and a few who are defaulting are replaced with new members'.

'Each group has a corpus fund of Rs.25000'.

SaniShop- Feasibility

'The loan amounts are basically used for meeting domestic expenses and petty business. So getting together to do businesses in a group would not work out'.

'Instead of all of us getting into business, if one person who is found apt to do so is identified, she should be given the responsibility'

Constraints/ Concerns/Apprehensions

'If we have to function as a group, some may work harder and some may take it easy. But everyone would want a share in profits. But if one person does a business on behalf of the group and incurs losses, then all the members would find it a problem and feel bad'.

'If everyone shares responsibilities, then business can be done. Or else, it would not be feasible'.

Training needs of the SHG

We need guidance and orientation on running income generation activities collectively.

"So far we knew of taking loans and doing some activity individually with the help of family members. Now we need to coordinate with others, outside the family. This is getting into a larger group and needs leadership and better business skills"

District: Visakhapatnam Municipality: GVMC Slum: Gandhi Nagar

Status of SHG

'There are 23 SHGs in Gandhi Nagar, which came into being about fifteen years ago. Newer groups too have also been established recently. The old groups have received loans while the new ones are yet to get them. The loans are being repaid in time and though the scheme is *Pavala Vaddi*, they are repaying it at a rupee interest.'

'The loans are being split among the members. There is no joint activity and the members are all individually doing their own small-time businesses. For example, a few are dealing in pulses, *kirana* shops and selling *idlis*, clothes etc. The remaining use it for their domestic expenses.' 'The corpus fund would be anywhere between Rs.6-60000 '

SaniShop- Feasibility

'If this activity has to be done, then the members should be united. Presently, it seems unlikely as all of them have something or the other of their own'.

'Since this slum has few homes bereft of toilets, instead of constructing cement rings, if phenyl could be manufactured, it would be useful for all. However, the product should be of a good quality'.

'Coming together for this business is not a smooth affair and each has his own apprehensions'.

Constraints/ Concerns/Apprehensions

"The members may not be keen on any additional investment as they would like to know its viability, the returns that are possible and whether they would at least get a day's labour worth". What about a loss was another query.

'Just mere training would not help in accomplishing the task and hand holding was necessary till the members are confident. Where would we source the material was another question.'

Requirements/Needs

'Training is required for manufacturing and sourcing. The marketing skills need to be improved and continuous support is a must'.

District: Kadapa Municipality: Proddutur Slum: Swaraj Nagar

Status of SHG

There are two SHGs in operation at Swaraj Nagar – Soujanya Group and Chaitanya Group. There is a federation for the SHGs, but these two groups didn't take membership in the federation. They have a Bank account in Canara Bank. Each member is saving an amount of Rs. 50 per month to be done for a period of 4 years. Over the last two months each member has saved Rs.100. Total Savings of Soujanya Group is Rs. 20000 and Chaitanya Group is Rs.5000. Chaitanya Group is relatively a new group and has not accessed any loan so far. Soujanya accessed two loans through bank linkage, 1st loan-Rs.5000 and 2nd loan-Rs.200000.

Loan accessed through the bank was used for: household expenses, buying sewing machines, fruit vending business, house construction and house repair. Loan repayment is to be done for another 8 months. The instalments are being paid to the bank regularly.

Status of Toilets: Four out of 10 homes don't have toilets. Those who have toilets get it cleaned with acid and phenol. Acid costs Rs.50 and lasts for two months; Phenol costs Rs.50 and lasts for around the same period. There is water problem in the public toilets as one pot of water is to be carried to clean the toilet before defectaion. The health problems faced by the colony members are fevers, headache, gastric problems and diarrhea. Moreover, the women said that water problem will be aggravating in summer.

Toilet units are available in nearby Gandhi Nagar, it costs about Rs.250 for the pan and cost of constructing a toilet (ISL) may cost about Rs.15000.

SaniShop- Feasibility: SHG members don't take up any group ventures, but some of them have heard of group activities like running a flour mill on the TV, through relatives etc. One of the members who is new to the group said that they never thought about taking up a group activity. Many felt that joint venture would be difficult as women will have a lot of domestic work, but it can be possible if members have understanding and unity.

The members were prepared to take training for the manufacture of accessories of a toilet. They could not invest in the venture, but if some funding is provided by MEPMA, then they said the venture could be taken up. Final decision regarding the investment from the Group Savings could be taken after discussing in the group only, and are planning to discuss in the next meeting.

<u>Constraints/ Concerns/Apprehensions:</u> Toilets couldn't be constructed due to lack of money. But the women said they can involve in the toilet construction by helping the labourers and assisting the masons.

District: Kadapa ULB: Proddutur Slum: Modempalli- Christian Colony

Status of SHG

There are eight SHGs in operation at Christian Colony, Modempalli. These groups have been in existence between three and four years by now. Each group member has saved between Rs. 50-100 per month. The loan amounts taken by each of these groups range between Rs.40-50000. The members used the loan for house extension, purchase of sewing machines, zigzag & embroidery machines, investing in husband's mechanic shed, setting up a small provision shop, saree business etc.

The repayment schedule of four groups is very regular, while two hover between 80-90 per cent. Two of the groups face irregular payment problems.

Status of Toilets

50% in the group don't have toilets. If toilets are constructed in their households they are prepared to pay Rs.150-200 per month as instalments.

SaniShop- Feasibility

The group has heard about bags, candles and leaf plates manufacturing in the neighbourhood, but the members in the group never thought about working as a group. They however said they could decide after consulting other group members about taking up the venture or investing from the Group savings.

Constraints/ Concerns/Apprehensions

However, if at all they are taking up any new activity, they were in need of training, linkage with the bank loan, book keeping and accountancy training and they were not confident enough to decide without consulting their CO and other group members.

District: Kadapa Municipality: Proddutur Slum: Modempally- Harijanwada

Status of SHG

There are eight groups in this slum. The oldest group is existing from 1999 and youngest group is 3 years old. The group savings are ranging from minimum Rs.30000 and maximum Rs. 60000. At present members save Rs.50 per month.

The loan amount ranges Rs.5000 minimum to Rs. 50000 maximum. Majority of the groups received loans through bank linkages three times, three groups couldn't graduate beyond first linkage due to the defaulters' problem and groups are not very active. The repayment rates range from 50-100 per cent

Status of Toilets

100% members in the groups don't have toilets.

The loans were used for small businesses like fruit vending, bangles selling, vegetable vending, livestock rearing and buying rickshaw.

SaniShop- Feasibility

The group is aware of various group activities like leaf plate making, chilli powder packing and papad making etc.

They can't participate in the SaniShop model as equal stakeholders, since they are illiterates, no experience or investment.

Constraints/ Concerns/Apprehensions

If the savings were to be used as investment all the member groups have to accept it. Ultimately they are willing to work as daily wage workers as they don't want partnership or share in the profits.

Perceptions of Masons

Perceptions of Masons in GHMC

Popular toilet designs: There are two types of toilets in GHMC area viz., toilets with septic tanks where there is no underground drainage system, and the toilet that si connected to the underground drainage. Most of the old slums already have underground drainage. Toilets with pits go up to 10 feet depth and have superstructure of six or seven feet high walls with asbestos roof and door (PVC/ metal) with brick walls. Orissa pan is most popular although there are some households preferring a European Commode. Average cost of the toilet costs around Rs 15,000.

Masons' Work and conditions: Masons are mostly independent who take up assignment form individual households. Masons who work for contractors do not usually take up construction of individual toilets. The masons engaged in construction of individual toilets are charging a lump sum amount of Rs 5000 to 8000 depending on the design of toilet towards labour charges of masons and assistant.

Response to new products and SaniShop: There are several masons interested in trying out with new products, but they insist quality should be on par with the market. A shop with all low cost sanitaryware in one place along with cleaning agents will be preferred because the density of population in slums makes it viable. Masons are willing to recommend the customers to SaniShop because it provides them additional work.

Interviews with Masons

Banka Kumar, of Fatullaguda, aged 30 years, works under a senior mason. They are paid by sq feet work done so that a contractor is not required to persuade the mason to complete work on time. The mason is compelled to finish the work on time or earn less. Mason gets Rs 130 per sft and contractor charges Rs 800 to Rs 1000 from the house owners towards cost of labour and materials. Interiors and other electrical fittings is part of the sft cost contractor charges.

Thanneeru Chakrapani of Fatullaguda, self employed, constructed toilets and houses in slums and other areas as well. He is in the field since 2000 and has 5 helpers and 4 assistant masons to work with him. He constructs about 20 toilets in a month. There is great demand for toilet construction in Fatullaguda where toilet construction started since a year or two. Average cost of a toilet is 13000 and super structure costs about Rs 8000. Current model of toilet comprises a pit with 8 rings depth, walls of cement bricks and roof with sheets, door, and Orissa squatting pan.

Cost of the toilet can be reduced if there is underground drainage connection, said Chakrapani.

B.Yadaiah of NTR Nagar, employed with Seenu senior mason, constructed low cost toilets since 2003. He constructs a dozen toilets in three weeks. He also does house construction. There are not many people constructing the toilet as almost all households have a toilet already. Currently masons in NTR Nagar build toilets as part of the house and there are some old houses being reconstructed.

Mason charge Rs 5000 to 6000 lump sum for each toilet. He is not enthused by toilet models that are low cost than what is in the market now because he feels it is not possible to construct a quality toilet with Rs.5000.

D. Narsimhulu of NTR Nagar, self employed, has been in the field construction for last 5 years. He has constructed about 100 toilets during last year in NTR and surrounding slums. SHG groups can take up SaniShop providing all sanitaryware and cleaning agents in one place.

Perceptions of Masons in Bhimavaram

FGD with Group of Masons in Prakash Nagar

There were 8 masons in the FGD. All of them are residents of ST Colony, Prakash Nagar of Bhimavaram. Two of them worked in Hyderabad for some time. Three masons work under a senior mason and three work independently. How many toilets one constructs a month varies with availability of work and season. Ramakrishna can construct 15 toilets in a month if there is full work. Shankar did not construct even one toilet in this month.

Popular toilet designs: Bathroom –cum- latrine is the preferred option. Convenience and easy maintenance for the long time is preferred in the construction of toilets. Average cost of the toilet including superstructure is around Rs. 20,000 (minimum of Rs 15000 and a maximum of Rs 30,000) and average cost superstructure alone is Rs.6000. Because of the soil conditions, the pit is very deep. It is normal to see pits of 12-15 cement rings depth and each ring costs a minimum of Rs 150. Convenience is the main factor in design of the toilets. Average cost of the toilet with the super structure is Rs. 18000. It costs around Rs 9000 without super structure. Generally sanitaryware materials are purchased from a few shops in Undi Road.

Masons' Work and conditions: Mason's daily wage is Rs.300 while helpers get Rs.250. Builders and contractors do not prefer masons from this adda. Usually they hire masons and helpers from the Rayagada, Orissa who are paid an advance of minimum Rs.10000 and paid daily wage Rs. 150 plus food and accommodation. Occasionally sanitaryware

dealers offer festival gifts and small commission of Rs 50 to 100 when any material is purchased. Masons do not have significant incentives from the dealers.

Response to new products and SaniShop: Masons are interested in attending training if the design and materials used in toilet model of SaniShop is new. There sanitaryware dealers located in one or two streets of the town. If the SaniShop is located closer to the slums it helps reduce the cost by less transportation expenses.

Three masons (Ramakrishna, Rambabu and Rajkumar) prefer to work with the government. Remaining masons felt that working with government is troublesome as bills are delayed and margins of contractors are high.

Availability of materials: Mason will take care of fixing the doors, pans and construction. Local sanitary suppliers are Thatavarthi Bhaskar Rao, Juvvalapalem Road, Nanaji Enterprises, P P Road and Ayyappa agencies, Nachuvari center. Sand is the locally available material, cement rings and doors are made locally.

FGD with Masons in Mavullammagudi center, Bhimavaram

There were seven members in the FGD. Participants included Koneti Veeraiah, Golusu Venkateswar Rao, Motta Narisimham, G.Prasad rao, Venakteswarlu, Konti Anjaiah, and Balusu Krishnayya.

There are about 150 masons, and 200 helpers engaged in construction work from this adda. Women don't come to this adda, they are recruited by the masons who get work assigned by the customers.

Masons and workers from this added are hired by the customers directly. Masons are paid Rs. 300 and the helpers get Rs. 200 to Rs 250.

Toilet material and products will be purchased from the women groups, if the product is good and price is realistic. Masons are willing to recommend these products if they are given work and also any commission on the materials purchased.

Bhimavaram Masons

L. Kavish aged 26 and Srinivas aged 25 of BC Colony work under Eswar Rao, a senior mason residing in ST Colony. They are engaged in construction work since 2006. They are related to Easwar Rao and has paid them Rs 10,000 and Rs 15,000 advance respectively. They get daily wage of Rs 270. Both of them constructed 10 toilets each during last month. If work is available they can construct 10 toilets a month, they said. Each mason needs a helper who is paid Rs 200 to Rs 220. They never worked with the government agencies.

"If the SHG SaniShop materials have good quality, customers or dealers will buy the material" said Srinivas.

Perceptions of Masons in Vishakapatnam

FGD with masons in Allipuram Adda

Popular toilet designs: Households prefer low cost toilet –cum- bathroom with colored Orissa squatting pan. Masons are the key actors in designing of a toilet as the customers listen to the advice of mason. Now some households are connecting the toilet to the underground drainage by paying Rs 410 to the municipal authorities. Most of the toilets in Vishakapatnam have septic tank. A household needs gulper once in five years to empty the septic tanks. Cleaning of septic tanks cost Rs.1750. Three litres kerosene is poured into the septic tank to avoid odour.

Masons' Work and conditions: There are about 200 masons and 500 helpers engaged masons in construction, white washing, mixing and carrying cement, concrete, sand etc at construction sites. They arrive at adda by 7 AM and start the work by 10 AM. Households, contractors and builders select the masons and helpers they like as per their need. A mason is paid Rs.400 while helpers get Rs. 300 a day. Women helpers are paid Rs.200 only. One mason can build 20 toilets in a month, with the help of two assistant masons. Each mason needs a helper. Majority of the masons are local people while the helpers are from Srikakulam.

Masons and helpers don't have enough work some times. They are ready to take up any construction activity so they don't go unemployed. Work opportunities have declined due to slump in the real estate sector. Big contractors hire masons and helpers from Orissa, who are given advances and paid low wages with food and accommodation.

Response to new products and SaniShop: SaniShop model will be successful, if free transportation is arranged. Products must be low cost and with high quality. SaniShop will click if it has all the accessories. Discount should be provided to the masons on material purchased through them.

Masons feel that women SaniShop model would be viable if the cost is less and quality is good. They also suggest that it would do well if the SaniShop is available locally in the residential areas.

Kondapalli Jagadeeswarrao and Gandela Nagaraj, Thotagaruvukonda, Vishakapatnam

They are aged 30 to 35 years and are self employed. They can construct comfortably 20 toilets each every month if there is regular work assured. Households approach them for toilet construction.

When Maha cement entered into the market they were selling a bag of cement at Rs.290. They announced through public address system in auto rickshaws about the meeting for masons. Masons attending the meeting were given small gifts and the masons promoted the cement. Each dealer sold more than two loads of cement. Masons were also given gifts during Dasara festival. Ganesh cement store did not give any gifts for two festivals and the masons are not referring the customers to buy that cement.

Kanakala Gopi, Gandhi Nagar, Visakhaptanam

Kanakala Gopi, aged 23 years, is engaged in construction work for last 4 years with Appa Rao.

Mason is paid Rs 400 a day and the helper is paid Rs 300. As Appa Rao is their relative, they have not received any advance. He has constructed toilets also.

Average cost of the toilet including superstructure is Rs.13000 and without superstructure is Rs.5000. Brick walls and tin sheets are generally preferred in the slum for the super structure. He is willing to work with SHGs in toilet construction. He is interested in having more employment and willing to get trained in new using new products.

Maila Sundaram, Isukathota, Visakhaptanam: Maila Sundaram, aged 25 years, is engaged in construction work for last 5 years with Appa Rao. Sundaram was paid Rs.2000 as advance to work for him at daily wage of Rs 400. He worked with government agencies, where he had a margin of Rs.1000 per toilet. He would construct a toilet in 3 days. Willing to work for the government or with SHGs, because he wants more work.

Constructed low cost toilets in the slums and Orissa squatting pan is popular in toilets of people living in the slums. Space constraints require toilet designs that occupy less space. Beneficiaries do not provide labour for construction of house or toilets.

V. Padmanabham, Santhi Nagar: V. Padmanabham, Santhi Nagar, aged about 48 years, is self employed. He is masonry work for about twenty years. He constructs 10 toilets a month. Three masons work under him as assistants. Orissa pans are most popular in the slum because they are low cost. Septic tank is also required because only 30% of the toilets are connected to the underground drainage system. Average cost of a toilet in the area is Rs.20000 where the cost of super structure is Rs. 10000. Usually septic tanks have 7 feet depth. He didn't work with government. Building materials are locally available. Masons charge a lump sum of Rs 5000 for construction of toilet while the material is purchased by the customer depending on their choice.

He feels SaniShop concept will be successful if local women come together to run the shop in a central point to sell sanitaryware products and cleaning liquids at lesser price.

Ambati Venkatarao, Chapala bazaar, Kobbarithota: Venkat Rao, aged 40 years, self employed, constructed low cost toilets in the slum since 2002. Many know of him the neighbourhood and he gets the work from slum residents to build the toilet or for house construction. He can build ten toilets in a month. Last year he built about 75 toilets, and some of them included repairs of defunct toilets.

He has two assistants and good rapport with the sanitaryware dealers in the area. He can give detailed costing of the toilet to help the customers choose the toilet type they want.

Clogged underground drains are cleaned in the slum by Relli community and the cost of cleaning is pooled by each household in the street contributing Rs.10 to Rs 20. Masons and plumbers are paid small commissions by the dealers.

Sanitaryware is available at Captain Ramarao street, jaalies are available at Thatichetlapalem, cement bricks are available from local manufacturers on order. Burnt bricks are available in Tagarapuvalasa about 25 km and also from Rajahmundry. Bricks cost from Rs.3.50 to Rs.4.50 per piece.

He has not worked with SHGs, but willing to work if they can assign building of toilets. SaniShop model may not be possible by women groups who do not have any experience till now. Any new products will be risky as there are time tested products already. It may be risky to get into manufacturing any products, instead it may be advisable to do only retail trade.

Perceptions of Masons in Proddutur

<u>FGD with Masons at Ammavarisala adda, Proddatur:</u> There were nine masons in the group- E. Venkata Subbaiah, Basha, Ankaiah, Venkataramana, G. Venkata Subbaiah, Nagaraju, Gurprasad, and Michael.

Popular toilet designs: Popular type of toilet in the area comprises pit latrine, locally called as Bombay latrine or Septic tank toilet with Orissa squatting pan and super structure of brick walls and a roof with asbestos sheet. Walls of the pits are covered with pieces of Kadapa stones. Many prefer to construct bathroom-cum- latrine. Usually masons take toilet construction on contract of Rs 5000 for labour charges excluding charges for septic tank which costs about Rs 4000. Average cost of the toilet costs Rs 13000.

Masons' Work and conditions: There are 100 masons in Ammavarisala adda and about 100 helpers trained in all types of construction work. Masons are paid Rs.350 per day and Rs 250 for helpers. Masons coming from outside the town are given food (one ragi). Masons and helpers/ workers in the adda do not accept any advances from contractors. Masons and helpers coming from surrounding villages are not be available during the plantation and harvest seasons because they work as farm labor although they are paid

less than what they get as masons in the town. Yet, they work because the obligations one has wit the villagers who help in times of crisis and unemployment.

There is another adda for masons at Talkies chowrastha in Proddutur. There are about 200 workers at Talkes adda. They are more into slab laying work.

Mason is paid Rs. 350 to 400 a day, and helpers are paid Rs. 250. Very few women work as helpers and they are paid Rs. 200. It takes a week to construct a single toilet while one he can also complete four toilets a week if there are several toilets to be constructed at the same time. One makes more money when there is more work to be done.

Response to new products and SaniShop: Mason will recommend any new product if it is making toilets cost less and the technology is simple.

SaniShop materials will have demand if the quality is assured and priced competitively. There will be demand if the SaniShop has all accessories in one place. It will sell well the toilet cleaning liquids and other materials because it has greater access to members of the SHGs.

<u>Kottapalli Subbarayudu of Modempalli:</u> Kottapalli Subbarayudu of Modempalli, aged 52, self employed, takes up work directly from customers and sometimes works for other masons so that he is not without work. But he does not take advance from contractors or senior masons so that he will not loose freedom to work independently. He works in slums and other parts of the town. He has about 12 years experience in the field. He has 4 masons to work with him if there is any big assignment.

Masons are paid small commissions by sanitaryware dealers.

E. Venkata Ssubbiah, Ammavarisala adda: E. Venkata Ssubbiah, aged about 25 years, educated up to intermediate, which he learnt in vacations when he was studying 10th class. He commutes daily to Ammavarisala adda from nearby village by bus. He arrives at Ammavarisala by 7.30 AM and starts work by 9.30 so that he can leave for home by 5.30 PM. Earlier he worked in Hyderabad as a mason and also for a short duration as an employee in the SKS Micro finance. He used to get Rs.6000 in SKS work, but left the job because there was high pressure for targets and recovery. He used to work till late night. He got married recently and wanted a peaceful life. He started working as mason and earns Rs.350 to 400 a day. He thinks it is more comfortable than salaried job in SKS.

He is willing to work with the SHGs in the manufacturing of sanitaryware products. "It is better to do some work that is regular and you have assured income" he says.

Perceptions of Sanitaryware dealers

Ambica & Co. Ramchadrapuram, Medak

Products sold: Ambica & Co, located on the national highway NH-9 between Ramachandrapuram and Patancheru, sells sanitation along with other material like cement, doors & frames, pans with foot rests, water seals, PVC & clay pipes, flooring tiles, cement manhole lid, asbestos sheets for roofing, metal doors, etc. All material required for toilet construction is available. It has a variety of pans ranging from Rs.240 to Rs.1200 including 20 inch Orissa pan and Parryware.

Volume of sales: At present 50 to 100 toilets are sold per month, while it was bout 150 to 200 earlier when sanitation programmes were supported by the government. Those constructing toilets for government buy low cost pans. Government supported toilet construction ceased from 2003.

Material procured from: Major source of suppliers of pans are from Gujarat. Cement windows and metal doors of varying size are made locally. There are no local manufacturers of pans because of non availability of raw material.

Sales strategy: The entrepreneur is the authorised agent for products and has no sales agents. There is no after sales maintenance services. Masons are not hired or provided by the shop.

Incentives for masons: Masons are offered small amounts of commission Rs. 50 to Rs.100 per sanitary unit for referring the customers to buy from the shop.

Scope for additional products/ services: No additional services are demanded by the toilet owners. Recurring items like toilet cleaners, mirrors, towels, room fresheners, mugs and buckets, cleaning brushes could also be sold. Often these items are procured from big grocery shops they visit more frequently in their neighbourhood. Sale of these items requires being closer to the settlement.

Factors supporting demand for toilet construction: Growing economic status and literacy are promoting demand for sanitaryware products. Government policy for sanitation will enhance it manifold.

Willingness for government sanitation programme: Prefers to sell material to government assisted toilet construction programs because of bulk sales.

Response to new products: There were fibre glass pans sometime ago. But it was not accepted by people because it got damaged by cleaning agents. Pan needs to be smooth and easy to clean with less water. Once the surface of pan gets damaged, there are

complaints of odour and cleanliness. Fibre pans have failed. Orissa pans are now well accepted and low cost.

Customers' preferences/ tastes: Most of the customers are interested in cost and functional aspects than brand name. Branded material is costlier. A box of tiles with 15 pieces from Gujarat companies without any branding cost Rs.150 while the same product from Regency company costs Rs.250. Customers buying branded material have more complaints of quality. Customers like to construct toilets with brick or cement block walls and asbestos roofing, metal doors and super structure of 6 to 8 feet height. PVC doors, asbestos sheets, cement ventilators and cement bricks are having more demand. European commodes are also now having demand. Toilet construction costs between Rs 12,000 and 15,000 for a low cost toilet.

Bhavani Electrical & Hardware, Ramachandrapuram, Medak

Products sold: Bhavani Electrical and Hardware, located on National Highway NH-9 between Ramachandrapuram and Patancheru, sells sanitaryware, hardware and electrical fittings. Types of pans sold include Hindustan (Orissa) pan & European commode. Sells branded pans, like Hindware and CERA, also to meet the demand of employees from BHEL and companies. Pans are available in various colours. Cost range of the pans is Rs.400-10000.

Volume of sales: Approximately 30 pans are being sold per month.

Material procured from: All types of non branded pans are procured from Ahmadabad agencies in Gujarat. Major suppliers of Pans are parry ware, (Mumbai) etc. Medium range (20") pans manufactured by Hindustan are in the price range of Rs. 450-600.

Sales strategy: Customers choose and buy pans and other material without involvement of the masons. Bhavani Electrical & Hardware is not having salesmen or agents. There is after sales /maintenance services. Masons or plumbers are suggested if customers ask, but no regular manpower of mason or plumbers is with the shop.

Incentives for masons: Occasionally some commission is given to masons. Sometimes masons take contract of toilet construction on a lump sum amount. They buy the material on behalf of the customer and make their margin.

Scope for additional products/ services: Basic products are essential and the optional material is required by section of the customers. Optional material is taps, showered, flush tanks, electrical fittings, etc. Cleaning services for septic tanks are required once in a few years.

Factors supporting demand for toilet construction: Government support for sanitation, drainage connection, reduced cost of toilet construction will enhance demand for the products.

Willingness for government sanitation programme: Prefer to supply to the government assisted toilet construction, because of the large volume of the work.

Response to new products: Medium range toilet pans are being sold more. Willing to sell sanitation material of any agency if the cost is less and quality is good.

Customers' preferences/ tastes: Regular employees of PSUs prefer branded material and see quality. Slum dwellers see cost and are not interested in brand.

Patel & Co, LB Nagar, Hyderabad

Products sold: Patel & Co sells a mix of building materials and sanitation products. Products include cement, doors and frames, shabad stone for flooring, polished stone, jali, bathroom fittings, MS Pipes, white cement, panels, cement ventilators, asbestos sheets, metal sheets, taps, Sanitaryware products like pans, water seal, pipes, tiles, cement manhole lids, etc. Also sells Hindustan and Parryware pans costing Rs. 250 to 1200.

Volume of sales: It fluctuates and is also seasonal. Sales range from 40 to 200 toilet units a month. Demand is low now with the political disturbance and slump in construction activity due to Telangana movement

Material procured from: Pans and accessories are procured from Hindustan, Parryware, non brand manufacturers from Gujarat & Pondicherry. Local manufacturers supply cement rings, lids, PVC doors on order.

Sales strategy: There is no after sale services component in these products.

Incentives for masons: No incentives given to masons.

Scope for additional products/ services: There is enormous scope for including several additional products but one needs to focus on one's customers. Our customers are both from low income groups and salaried families.

Factors supporting demand for toilet construction: Expansion of the city, rise of new colonies and slums provide large demand.

Willingness for government sanitation programme: Did not sell sanitation products to the government agencies or contractors working for government.

Response to new products: There are no new products as such. It is only colours in pans. Willing to sell if the product is good in terms of price and quality.

Customers' preferences/ tastes: Cost and quality are important for the customers. New products in demand include European commode, colour pans in 20 inch Orissa pan, PVC

doors and tiles for flooring and bath room walls. 80% of the toilets being sold are low cost toilet. Orissa pan of 20" and 18" is the popular low cost material.

Santosh Steel Enterprises at Isakathota, Visakhapatnam

Products sold: Santosh Steel Enterprises is in the business since 1985. It **sells combination of s**anitation and other materials. Sells white cement, iron, hardware, electrical, sanitaryware like pans, water seal, pipes, draining pipes, cement manhole lids, taps and cleaning materials. Sells Orissa pan and Parryware costing Rs.200 to Rs.700.

Volume of sales: About 10 toilets per month. It used to sell 20 to 50 toilet units a few years ago. Business in this street has been adversely affected by construction of the road divider. Already five sanitaryware shops in the street have been closed during last six years. This is the only sanitaryware shop left now.

Material procured from: Products are procured from Gujarat and

Sales strategy: No sales representatives or agents. Products are sold to customers who buy directly or come along with masons to choose the material.

Incentives for masons: Do not offer any commission to the masons or plumbers.

Scope for additional products/ services: Not keen to expand the product range.

Factors supporting demand for toilet construction: Government polices and support for housing sector in general. Growth of slums and colonies in the surrounding areas generates demand for the products.

Willingness for government sanitation programme: Did not sell products to any government agency. Is willing to supply the material to government agencies.

Response to new products: Basic range of products remains same. Colours and substitutes are now available like doors of PVC or metal or wood and different colours in pans. Willing to sell new products if the cost and quality are on par with the material in the market.

Customers' preferences/ tastes: Customers are keen about price. Low cost material buyers are not choosy about aesthetic aspects. Limited budget which they have does not permit them to have wide choices. Preferences are changing within a cost range. They choose Orissa pans of colour instead or prefer tiles for flooring and walls.

Peddini Mohan Rao Cement Works, Annanagar, Arelova, Vishakapatnam

Products sold: Mr Peddini Mohan Rao, aged 36 years, illiterate, is in the business over last 12 years. He migrated from the Kota Bommali of Srikakulam district at the age of 7 years. He learnt cement products by working in the other unit located at the Isukathota. Now he has an assistant to help him. He manufactures cement rings of 1.5 inch thickness and 1 feet height. He also makes several other decorative items of cement used in stair cases, balconies on order. He has a wide range of moulds for manufacturing a variety of cement products used in house construction.

Volume of sales: Demand for cement rings considerably came down due to the introduction of underground drainage system in the neighbourhood. Other products like ventilators, cement poles and cement pots have same demand. Cement rings had good demand during sanitation drive by the government before 2006.

Material procured from: Buys cement from the local Ganesh shop bag by bag. Also buys sand and chips locally. He got the required moulds for making the products with an investment of Rs. 1.1 lakh. He bought the moulds from Gajuvaka,

Sales strategy: He prepares a wide range of jaalis, cement rings and lids. Customers buy the products directly from him as the sanitary shops do not keep them since it occupies space. Some sanitaryware shops also buy jaalis (ventilators) from him.

Incentives for masons: He does not pay any commission to the masons, households will directly buy.

Scope for additional products/ services: He is not contemplating to add any new products. House construction and toilets as part of that is still in progress in the slums and colonies in the neighbourhood.

Factors supporting demand for toilet construction: Notification of new slums (like BNR Colony) or government support for toilet construction will boost the sales. Infrastructure changes like interdiction of underground drainage.

Willingness for government sanitation programme: Did not supply to the government agencies.

Response to new products: He does not want to diversify into other products. He is content with what he earns and there is assured market for his unit to be viable. These products could be made by the SHG members with proper training.

Customers' preferences/ tastes: Cement ventilators, cement poles, cement pots are not available in other shops. Customers in the neighbourhood buy from him whenever there is need for these products for toilet construction or for general construction purposes. Most of the households are using cement bricks for the walls of the super structure and tin sheets for the roof.

Thatavarti Veera Venkata Nageswara Rao, Vasavi Hardware, Bhimavaram

Products sold: Selling sanitaryware of leading companies in the country, water seal, pipes, flooring tiles, bathroom accessories, toilet paper roll holders etc. Focus is on middle to higher income customers. They sell more of European commodes that cost between Rs. 6000 and 14000.

Volume of sales: About 50 to 70 toilet units. Mostly faucets and accessories that many households are adding on to the existing toilets and bathrooms

Material procured from: Material procured from manufacturers

Sales strategy: No sales representatives or agents. Very few competitors in the town selling the products of reputed manufactures

Incentives for masons: No incentives offered to masons

Scope for additional products/ services: Interested in adding faucets, wash basins and kitchen bath tubs and

Factors supporting demand for toilet construction: Changes in income levels of middle class and government support for new colonies and slums

Willingness for government sanitation programme: Not interested in supplying to government agencies

Response to new products: Positive to introduce new products of quality

Customers' preferences/ tastes: Products that add to lifestyle statement. New sanitaryware products and faucets to compete with imported material

Thatavarthi Venkataraju (Nanaji), Nanaji Enterprises, Bhimavaram

Products sold: Selling sanitaryware of leading companies in the country, water seal, pipes, flooring tiles, bathroom accessories, etc. They sell mostly European commodes and only around 25% squatting pans. European commodes cost between Rs. 6000 and 14000.

Volume of sales: 100 toilet pans in a month

Material procured from: Product is procured form leading companies

Sales strategy: Focused on lifestyle sanitaryware. It has many accessories that are imported. Make good margin by selling the best. Not many competitors for the costly and aesthetic products. Target the rich and well to do sections of the town.

Incentives for masons: No incentives

Scope for additional products/ services: There is high scope for adding several new types of commodes, and squatting pans, faucets, showers and accessories

Factors supporting demand for toilet construction: Quality and aesthetics

Willingness for government sanitation programme: Willing to supply sanitaryware to the government offices

Response to new products: Any quality products are welcomed

Customers' preferences/ tastes: Rich customers prefer quality products from reputed companies like Hindware, Parryware, Neycer, Cera, Rac, Solo, Raasi etc. Most popular are European Commodes in the urban areas

Sri Ayyappa Enterprises, PP Road, Bhimavaram

Products sold: This shop caters exclusively to the needs of urban poor and lower middle class sections. Sells everything related to toilet construction (pans, P traps, pipes, wood and iron doors, paints, tiles, ventilators), as well construction materials like white cement, tools required by masons (spades, crow bars, ladders, nails, hammers, ropes, plumbing materials, measuring tapes, etc) among other material used in construction. Gujarat made Orissa pans are sold mostly. The shop is having basic varieties of every item. Most of the material is not branded.

Volume of sales: Pans sales came down due to the competition, increased number of players, sells every month 20 to 50 pans and all other material required for a toilet

Material procured from: Ceramic products like pans are procured form Gujarat agencies.

Sales strategy: Offers low cost materials and all products required for a toilet. Mason and customers prefer to visit the shop because every item is viable in one place. Small margin but large volume of sales makes it more profitable.

Incentives for masons: Masons are offered commission of Rs.50 to Rs 100 on the sales.

Scope for additional products/ services: Sells almost products needed in toilet construction except roofing material.

Factors supporting demand for toilet construction: Pattas for house sites in slums will promote sales.

Willingness for government sanitation programme: Had no experience of business with government agencies.

Response to new products: If the products are competitively priced without compromising on quality there will be market.

Customers' preferences/ tastes: Customers prefer products that are durable and low cost. Brand name is a myth if the customers are from low income groups.

M.Sobhakar, swamy agencies, Mydukur Road, Proddutur

Products sold: This shop was established by his father 70 years ago. In spite of selling so many low cost Orissa pans, there are hardly any complaints. It is exclusive sanitaryware shop selling range of pans, flooring tiles, MS Pipes, AC sheets, GI Sheets, faucets, etc. Pans include squatting and EWC types of branded and non branded costing Rs280 to 2000.

Volume of sales: 50 to 60 pans a month. Demand was 30 to 60 toilet units a about six months ago.

Material procured from: One of the suppliers is N. G. Patel, Ahmedabad and Gujarat.

Sales strategy: Offers low cost materials and all products required for a toilet. Mason and customers prefer to visit the shop because every item is viable in one place. Small margin but large volume of sales makes it more profitable.

Incentives for masons: Masons are offered small commission of Rs.50 to Rs 100.

Scope for additional products/ services: Sells almost products needed in toilet construction except roofing material.

Factors supporting demand for toilet construction: Government support makes a lot of difference. Before 2005 each contractor used to buy 1000-2000 Orissa pans. Now they are not buying in large quantities.

Willingness for government sanitation programme: Had no experience of business with government agencies.

Response to new products: Selling sanitaryware exclusively by women SHGs through SaniShop model will be successful, if the quality is be good and price is affordable. Will sell products supplied by the SHGs.

Customers' preferences/ tastes: Low cost pans or orissa type are the largest number but the trend is changing with good number of customers preferring European commode costing Rs. 450 to 800.

Sri. Sankaraiah, SV Agencies, Proddutur

Products sold: This shop started 20 years ago, was originally trading in motor Pumps. It started selling toilet units over the last six months. Now they sell a mix of sanitaryware (like pans, pipes, P traps) and pipes, motors, steel wash basins. Sanitaryware toilets pans range form Rs.350 to 2500-11000 for non branded to branded products. Sells EWC pans and branded sanitaryware also.

Volume of sales: 20-30 pans are sold a month. For every one branded toilet unit, 5 non branded items are sold.

Material procured from: Ceramic products are monopoly of Gujarat. Only ceramic manufacturing unit in the sate was Regency, which is destroyed in fire accident. Sells faucets imported from China and Malaysia.

Sales strategy: Spends Rs 2000 to 3000 on advertisement in local daily on Ugadi festival. Contacts with masons and builders helps add sales. Has no after sale services.

Incentives for masons: Some masons are offered small commission of Rs 100 for referring customers

Scope for additional products/ services: Low cost doors, jaalies and toilet cleaning agents

Factors supporting demand for toilet construction: Construction of apartments has increased sales of toilet units.

Willingness for government sanitation programme: Not willing to supply to the government agencies because they cannot "pursue" the officials for orders or release of payments.

Response to new products: Willing to buy sanitaryware from SHGs if they can market with a brand name. SHGs can provide toilet cleaning products with branding.

Customers' preferences/ tastes: Apartment builders are interested in branded items. The builders contact the manufacturer directly, and delivery will be given by the local dealer of the manufacturer on receiving payment. Cost is not the only factor with people going for quality and comfort.

Ravi Shankar Reddy, Sri Lakshmi Venkateswara Enterprises, Proddutur

Products sold: A small shop operating over last three years, mainly dealing in pipes. Sells sanitaryware, P traps, Pans of Hindustan and local brands and faucets

Volume of sales: Selling 10 to 20 units a month.

Material procured from: Buys from the big shops/ authorised dealers and cement rings, lids, PVC doors from local manufacturers.

Sales strategy: No no after sale services component in these products.

Incentives for masons: Masons are offered Rs 50 to Rs 100

Scope for additional products/ services: Low cost doors, jaalies and toilet cleaning agents

Factors supporting demand for toilet construction: Government support to toilet construction will boost sales

Willingness for government sanitation programme: Willing to supply to the government agencies or contractors engaged in large scale toilet construction activity.

Response to new products: Willing to sell new products if quality is assured and competitive in price. SHGs can supply toilet cleaning products at competitive price.

Customers' preferences/ tastes: Low cost sanitaryware material is most preferred. Urban poor

Policy environment and views of municipal officials

Summary of the interviews with the officials is furnished below to highlight the policy and praxis with regard to sanitation mission across the state.

Mr B Janardhan Reddy, IAS, Director of Municipal Administration, Government of Andhra Pradesh

Mr Janardhan Reddy was candid in explaining the possibilities of government involvement in innovative interventions. He was glad to know the preliminary findings of the study conducted in slums of AP. He agreed that there is growing importance attached to individual toilets as increased pressures on land in slums make open defecation no more possible. Location specific solutions are necessary for accomplishing the goal of total sanitation with active involvement of community and the government. He was open to support community toilets, although it is no more on the priority list of the government, in slums where there is no scope for construction of ILCS units.

He explained that all municipalities in the state are planning to achieve total sanitation in slums through ILCS revised scheme. "Plans have been submitted under RAY and we are waiting for the approval of GoI to launch the programme at the earliest. Sanitation Action Plan is top priority for the Municipal Commissioners. Waste management is given utmost priority and currently rules for solid waste management are followed only 35 % across the state and it is planned to reach 100% in a year's time. Segregation of wastes, eradication of open defecation through individual toilets are emphasised and monitored seriously. There are plans for construction of 6.45 lakh ILCS units across the municipalities', he explained.

Open defecation can be eradicated through mass awareness and segregation of waste will help arrest problems of chocked drains and use of plastic bags. Mass awareness is planned for reducing waste and safe disposal of waste. There are improvements in some ULBs already. Jagityal and Salur municipalities have made good progress in drinking water and solid waste management.

Community participation is critical to success of sanitation mission. Because the problem is not only one of poor infrastructure and civic facilities abut also the attitude. Role of SHGs and NGOs is vital in bringing in awareness among slum dwellers for proper maintenance of toilets and personal hygiene. "We are giving wide publicity through wall writing for availing services of Sanitary Inspectors and the drain cleaning staff" said Mr Reddy.

Pragmatic approach to public-private participation should avoid expecting financial contribution from the government. Instead government should be asked to provide space

and technical support for sanitation related programmes. SHGs and their federations will be supported if they come with group activities in the areas of sanitation. Interaction with Municipal Commissioners is possible on sharing innovations and plans for PPP in sanitation activities.

Mr Ramanamurthy, Project Director, Urban Community Development, GVMC

There are 286 notified and 455 non notified slums in the Greater Visakha Municipal Corporation (GVMC) totally 741 slums. GVMC takes up infrastructure development works in the notified and non notified slums. Slums are an ever-growing problem in Visakhapatnam and GVMC has a two-pronged strategy to improve basic amenities and prevention of further slum growth. In spite of several measures taken by GVMC there is outbreak of epidemics during monsoons owing to overcrowding and unhygienic conditions in slums. In fact GVMC has enlisted hazardous and relocation slums, where they don't want to take up any infrastructure development activities. 12 slums have already been evacuated. There has been huge protest and the protesters had even ransacked the GVMC office.

The slums which are not proposed to be evacuated will have underground drainage system which is already in progress. Pipeline has been laid and in the second phase, the toilets will be connected. GVMC has a separate cell for Sanitation. The civil society's participation is expected for implementing the RAY programme.

Under JNNURM, the municipal corporation has constructed 15320 houses. There is 8 to 9 lakh population in the GVMC slums, but 60000 houses only sanctioned and Corporation is proposing 1 lakh houses with low cost toilets under the Rajiv Awas Yojana, in which 50% is from the Government of India, 20% State Government and 30% from the GVMC. Orissa pan is being used in the low cost toilet construction. GVMC has taken up beneficiaries' awareness programs among the slum dwellers for educating about the toilet usage.

Mr. Suresh Rao, Dy. Commissioner, GHMC, Circle-13 covering Ramachandrapuram and Patancheru

Mr. Suresh Rao informed that there were seven identified slums in Circle-13, of which Ambedkar Colony was one.

A relatively newly-carved out circle, it was a village Panchayat till 2005 and it was gradually upgraded to a municipality in 2007 prior to its merger with the freshly created Greater Hyderabad Municipal Corporation, about five years ago. It has an annual expenditure outlay of Rs.20 crore, with a property tax collection potential between Rs. 4-5 crore.

When queried about the possibility of state intervention into improving sanitation facilities in Ambedkar Colony, the officer said that the Low Cost Sanitation scheme which it was undertaking till a few years ago has now been discontinued.

There is less and less allocation to this subject head as he said that the municipal administration is now decentralized with town planning, routine administration and health issues being handled independently. At the circle level, this meant that there was less and less incentive for the Commissioner to be pro-active as it was not directly his 'area of concern'.

In any case, Ambedkar Colony was a grid-locked slum, domiciled illegally on two stretches of government land, owned by the public sector BHEL and the other by the Indian Railways. The overhead transmission cables looming menacingly on the settlement makes any 'regularization' difficult, even in the future.

While the government officials have often made rightful noises about their actual ownership and making the residents sweat, the municipal official says that the railways may not operate any trains on that route immediately. If ever any thing comes through, it may be with the Hyderabad Metro Rail Authority, he opined.

Mr M Venkat Rao, Commissioner - Proddutur Municipality

Nadimpalli and Swaraj Nagar are backward and deserving in terms of infrastructure and economic conditions of the people. Most of them are manual labourers, fruit vendors, workers in the cotton and ground nut mills. Slums in municipality are classified into notified, non-notified and "poor pocket slums" like Nadimpalli, Bapuji Nagar.

Individual taps are given on payment of Rs200, along with 20 feet pipe for the slum dwellers. Monthly charges are Rs.60 for slums and Rs.100 for others. Water problem is acute in the municipality, bore wells sponsored by Municipality has dried up, and at present all bore wells are recharged with Mylavaram dam water.

A survey has been conducted in the Municipal area and it identified 3200 households without toilets. A proposal has been made for the assistance from the Andhra Pradesh Urban Finance and Infrastructure Development Corporation (APUFIDC).

Proddutur is one of the four municipalities selected by the state government to take up programs under the Rajiv Awas Yojana (RAY) through urban infrastructure development of Jawaharlal Nehru National Urban Renewal Mission (JNNURM). A survey is under process to take up housing and underground drainage activities under the RAY & USHA in which the state government share is 20%, Central government 70%, and local body has to bear 10%. Initially 1.2 KM underground drainage is proposed to be laid and it may take 3-4 years for the completion of underground drainage in all the areas of the municipality. Water supply with 24 Crore rupees outlay is proposed to be taken up.

Government is reluctant to involve in the ISL construction directly, due to various allegations which erupted previously. However, toilet design will be provided by the government. The ILCS design proposed by the municipality has budget of Rs.10000.

Self-help groups taking SaniShop model is a good idea, municipality can provide space for the activity. Cement bricks could be manufactured, one or two shops could be opened, and Municipality will recommend under MEPMA for the financial assistance under the Urban Self Employment program (USEP) and Women Entrepreneurship Program (WEP). Under Swarna Jayanti Swarojgar Yojana (SJSRY) 30% subsidy could be sanctioned.

Commissioner, Bhimavaram Municipality

There was good progress in-terms of infrastructure development in the Municipality from 1978 with the notification for identification of slums. The notified slums had 50 feet roads, drains, water supply and street lights. On receipt of DFID funds, slums were provided infrastructure during this phase and the process continued for over a decade. Department of Town and Country Planning (DTCP) could take the final decision in terms of funds allotment, while local bodies have to send the proposals.

First round of low cost sanitation program started as Vimukthi program in 1982-83, while open defecation was rampant at that time, community toilets, household toilets were taken up under this program. Various awareness programs were taken up by the municipalities over a period of time, which started in the Vimukthi program against the open defecation, later against cholera, Family planning, HIV/AIDS, Cleaning garbage.

Construction of Individual Sanitary Latrines (ILCS) phase-1 started in 1987-88, continued Phase-2 & Phase-3 till 2007; initial unit cost was Rs. 2500 and enhanced to Rs. 3000, feedback from the ground was project is inadequate and times have changed, proposals were sent to HUDCO for approval with a unit cost of Rs.10000 for the construction of Bathroom and toilet.

Bhimavaram municipality sent proposals for the construction of 2800 ILCS with a unit cost of Rs. 10000, in which Central Government share will be 75%, 10% loan and 15% beneficiary contribution. Rajiv Awas Yojana (RAY) is exclusively for the slum development, grants for ISLs are given under this program by the Ministry of Urban development.

There is lot of scope for the Pay & Use Community toilets in the municipality; bidder is being paid maintenance cost. Sulabh international has taken up five pay & use toilets. Underground drainage not feasible in Bhimavaram due to water logging and there are plans to take up on pilot basis, cement rings used for the toilets in the slums and there are complaints that the pits are filled. Subsidy was provided for the construction of ISLs under the Safai Karmachari rehabilitation scheme during 2002. There is no construction of ISLs after 2007 (Phase-3). Beneficiary contribution couldn't be raised in the construction of the ILCS.

In 2007, Bhimavaram municipality spent a sum of Rs.80 lakhs and bought 14 acres of land to have a regular dumping yard. It could not materialize however as the sellers went to the court. As a result, the municipality has no formal dumping yard, going as far as 20 kms to dump the waste. The authorities are at their wits' end how to deal with this problem as the town generates nearly 18 tonnes of waste every day.

Taking up SaniShop model through the SHGs, women's groups is good business proposal but may not be feasible here, because people in Bhimavaram may not come forward to sell toilet units; however wives of the masons may be involved in the program. Women could also be involved in the production and sales of toilet cleaners.

When municipality conducted training programs, there were few takers for the fitter; mason and plumber trainings which are having good demand in the market, every one want to be trained in the computers.

TPRO, Bhimavaram

Infrastructure roads, open drains, drinking water and streetlights are being provided in the notified slums, houses are constructed under IAY. Relocation of slums is being taken up in the municipality, DPRs submitted for the Narasapuram and Eluru municipalities, ward No.29 is the poor pocket slum, situated along the irrigation drain, Sanjiva nagar and Prakash nagar are part of it. ISLs were constructed before five years for the households having house tax receipt, ration card and electricity bill. Still 32% of the households don't have toilets. Proposals were sent for toilet construction with a unit cost of Rs.10000, in which 70% share was to be borne by the Central government, 20% by the state Government, and 10% by the beneficiary.

Majority of the toilets are of single pit, not connected to the underground drainage . Filled up pits are cleaned with gulpers and dumped in the compost yard. There is no specific dumping yard for Bhimavaram, hence complaints are there from the surrounding villages. There is a non notified area along the Gollavani Thippa road, 7th ward is notified, and there are 7 slums- Nehru nagar, Gandhi nagar, Leprosy colony, Kamjuvaripalem, Mallethota, Rajakulapeta, ST colony etc..

Ten slums will be demolished in Bhimavaram, by a demolition squad. There are two pay and use toilets near the bus stand which were built in 2005, maintained by the Sulabh International. Engineering section in the Municipality will prepare maps and responsible for supervising the construction of the public toilets. There are 5 community organizers serving under the MEPMA, responsible for formation of SHGs, SLFs and TLFs for the women from the Households with the ration cards. House hold tap connections will be given on payment of Rs.200 and possessing white ration card.

Community Organisers' Salary was Rs.6000 and is enhanced to Rs.9000 per month from January, which includes conveyance, appointment of the Cos is done through the placement agency, and salaries of the MEPMA staff are being paid from the 5% of the SJSRY funds.

Mrs. Mary Jasmine, Project Resource person (PRP), MEPMA

Town planning section will provide profile of the slums, ILCS project proposal could be provided by the engineering section, along with slum maps.

SHGs will be members in the slum level federations. Engineering section identified 3118 households without toilets through the MEPMA, after doing all the survey by the MEPMA, toilets construction is being done by the Municipality through the contractors; instead the program could be implemented through the Slum Level Federations and/or Town Level Federations. Underground drainage system existing in the Bollavaram area, started initially on the pilot basis, if there is 20-30 houses in one area that is called poor pocket slum.

Totally three to ten lakhs could be given under the schemes, a matching grant of five lakhs also could be added, monthly repayments towards the cost of Toilets may not be possible, and Rs.1000 could be paid as advance.

Each SHG could be given 10 lakhs under the UWSP, for taking up SaniShop model; trainings, sources of raw material to be informed along with marketing support, trainings in the maintenance of books of accounts is needed. Senior groups will be having one lakh savings, additional investment also could be raised from the SLF/ TLF also. Banks also could be approached for raising additional funds and MEPMA will endorse for that. 30% subsidy also could be raised under UWSP/USEP.

SaniShop model could be taken up in the Modempalli shop; Municipal commissioner could take a decision regarding the purchase of toilet units from SHGs manufacturing/selling under the SaniShop model, commissioner can recommend on the basis of the opinion of PRP in the towns /TPROs in the district head quarters / PDs in the Municipal Corporations.

Eight ration shops are being run by the SHGs in the Proddutur municipality, in the event of mismanagement by the erstwhile dealers, RDO allotted ration shops to the SHGs and SLF has provided investment to the SHGs and person running the shop will be giving Rs.500 per month to the SHG.

Nagamani, Anganwadi teacher, Gandhi Nagar, Visakhapatnam

There are no toilets in the Anganwadi centres. Sanitation is a problem and children are affected with motions and fever.

Table 21 Distribution of households with ration card for subsidised food grains

Slum	Households with a ration card		Total	Type of Ration Card		
	Yes	No	Total	White	Pink	Total
GHMC Ambedkar	90	23	113	85	5	90
Colony	79.6%	20.4%	100.0%	94.4%	5.6%	9.1%
GHMC Ambedkar	78	16	94	76	2	78
nagar (RC Puram)	83.0%	17.0%	100.0%	97.4%	2.6%	7.9%
GHMC	66	36	102	63	3	66
Fatullaguda	64.7%	35.3%	100.0%	95.5%	4.5%	6.7%
GVMC	100	15	115	98	2	100
Gandhinagar	87.0%	13.0%	100.0%	98.0%	2.0%	10.2%
GVMC	104	10	114	102	2	104
Kobbarithota	91.2%	8.8%	100.0%	98.1%	1.9%	10.6%
Kadapa	95	8	103	95	0	95
Modempalli	92.2%	7.8%	100.0%	100.0%	0.0%	9.6%
GHMC NTR	101	16	117	99	2	101
Nagar	86.3%	13.7%	100.0%	98.0%	2.0%	10.3%
Kadapa Swaraj	104	1	105	104	0	104
Nagar	99.0%	1.0%	100.0%	100.0%	0.0%	10.6%
Bhimavaram Ward	118	7	125	116	2	118
27	94.4%	5.6%	100.0%	98.3%	1.7%	12.0%
Bhimavaram Ward	129	3	132	127	2	129
7	97.7%	2.3%	100.0%	98.4%	1.6%	13.1%
Total	985	135	1,120	965	20	985
	87.9%	12.1%	100.0%	98.0%	2.0%	100.0%

Table 22 Distribution of households by septic tank and underground drainage toilets in slums

	Type of toilet					
Slum	No toilet	Septic tank	Flush Latrine	Others/ connected to drainage		
GHMC Ambedkar Colony	8	94	1	10		
Grivic Allibedial Colony	7.1%	83.2%	0.9%	8.8%		
GHMC Ambedkar Nagar	51	22	1	20		
Offivic Affideukar Nagar	54.3%	23.4%	1.1%	21.3%		
CIMC E-t11 d-	50	51	1	0		
GHMC Fatullaguda	49.0%	50.0%	1.0%	0.0%		
CURACIO III.	48	57	1	9		
GVMC Gandhinagar	41.7%	49.6%	0.9%	7.8%		
CURACH II 34	69	14	3	28		
GVMC Kobbarithota	60.5%	12.3%	2.6%	24.6%		
77 1 NA 1 11'	80	19	0	4		
Kadapa Modempalli	77.7%	18.4%	0.0%	3.9%		
CUMC NED N	9	29	3	76		
GHMC NTR Nagar	7.7%	24.8%	2.6%	65.0%		
V-4 C: N	67	34	1	3		
Kadapa Swaraj Nagar	63.8%	32.4%	1.0%	2.9%		
D1' 107	39	83	0	3		
Bhimavaram ward 27	31.2%	66.4%	0.0%	2.4%		
DI. 17	87	41	0	4		
Bhimavaram ward 7	65.9%	31.1%	0.0%	3.0%		
T 1	508	444	11	157		
Total	45.4%	39.6%	1.0%	14.0%		

Table 23 Distribution of households by monthly expenditure on toilet maintenance

	Cost of cleaning the toilets						
Slum	Nil	Rs Up to 30	Rs 31-60	Rs 61- 100	Rs 101- 150	Rs >150	Total
GHMC	14	10	40	36	4	1	105
Ambedkar Colony	13.3%	9.5%	38.1%	34.3%	3.8%	1.0%	100.0%
GHMC	3	8	13	16	2	1	43
Ambedkar Nagar	7.0%	18.6%	30.2%	37.2%	4.7%	2.3%	100.0%
GHMC	4	10	24	13	0	1	52
Fatullaguda	7.7%	19.2%	46.2%	25.0%	0.0%	1.9%	100.0%
GVMC	9	24	21	13	0	0	67
Gandhinagar	13.4%	35.8%	31.3%	19.4%	0.0%	0.0%	100.0%
GVMC	5	8	20	12	0	0	45
Kobbarithota	11.1%	17.8%	44.4%	26.7%	0.0%	0.0%	100.0%
Kadapa	5	9	8	1	0	0	23
Modempalli	21.7%	39.1%	34.8%	4.3%	0.0%	0.0%	100.0%
GHMC NTR	3	31	30	27	6	11	108
Nagar	2.8%	28.7%	27.8%	25.0%	5.6%	10.2%	100.0%
Kadapa Swaraj	9	12	16	0	1	0	38
Nagar	23.7%	31.6%	42.1%	0.0%	2.6%	0.0%	100.0%
Bhimavaram	26	26	25	8	1	0	86
Ward 27	30.2%	30.2%	29.1%	9.3%	1.2%	0.0%	100.0%
Bhimavaram	12	18	10	4	0	1	45
Ward 7	26.67	40	22.22	8.89	0	2.22	100.0
Total	90	156	207	130	14	15	612
Total	14.7%	25.5%	33.8%	21.2%	2.3%	2.5%	100.0%

Table 24 Distribution of households who applied for government assistance for toilets

	House	Expecting			
Slum	NA	Not applied	Applied	Total	govt support
GHMC	62	49	2	113	0
Ambedkar Colony	54.9%	43.4%	1.8%	100.0%	0.0%
GHMC	26	68	0	94	0
Ambedkar Nagar	27.7%	72.3%	0.0%	100.0%	0.0%
GHMC	30	71	1	102	1
Fatullaguda	29.4%	69.6%	1.0%	100.0%	1.0%
GVMC	30	84	1	115	0
Gandhinagar	26.1%	73.0%	0.9%	100.0%	0.0%
GVMC Kobbarithota	22	80	12	114	0
	19.3%	70.2%	10.5%	100.0%	0.0%
Kadapa Modempalli	11	92	0	103	0
	10.7%	89.3%	0.0%	100.0%	0.0%
GHMC NTR Nagar	67	49	1	117	1
	57.3%	41.9%	0.9%	100.0%	0.9%
Kadapa Swaraj Nagar	27	75	3	105	3
	25.7%	71.4%	2.9%	100.0%	2.9%
Bhimavaram Ward 27	64	58	3	125	0
	51.2%	46.4%	2.4%	100.0%	0.0%
Bhimavaram Ward 7	21	100	11	132	4
	15.9%	75.8%	8.3%	100.0%	3.0%
	360	726	34	1,120	9
Total	32.1%	64.8%	3.0%	100.0%	0.8%