




STATUS OF WATSAN SERVICES IN THE SLUMS OF GUJARAT

MAJOR FINDINGS- SETTLEMENT ACCESSMENT CONDUCTED IN SLUMS OF GUJARAT
(2010-11)

STRUCTURE OF PRESENTATION

- ❑ Context
- ❑ Defining slums
- ❑ Settlement level assessment- Methodology
- ❑ Services at a glance
- ❑ Major findings:
 - Percentage slum population
 - Water supply services
 - Sanitation services
 - Solid waste management services
- ❑ Overall performance of urban local bodies
- ❑ Concluding remarks

CONTEXT

- **Slums** - an integral part of urbanized areas- **25% of urban population in India** (Census, 2011) and **20% of urban population in Gujarat** (Slum Statistics, MoHUPA) resides in slums
- Devoid of infrastructure service networks like water supply, sanitation, transportation, etc.
-  Performance Assessment System (PAS) – aims to assess aspects of access and coverage, service level and quality, costs and affordability, complaint redressal and health using a set of indicators.
- **Need for settlement level assessment-** PAS uses equity indicators derived out of information obtained from the urban local bodies (ULBs).
- Hence, a need was felt to assess water and sanitation infrastructure services in slum settlements by visual inspection/observation and discussions with the slum dwellers.

DEFINING SLUMS- NATIONAL PERSPECTIVE

NSSO Definition

“A slum is a compact settlement of at least 20 households with a collection of poorly built tenements, mostly of temporary nature, crowded together usually with inadequate sanitary and drinking water facilities in unhygienic conditions”

Census 2011 Definition

“A compact area of at least 300 population or about 60-70 households of poorly built congested tenements, in unhygienic environment usually with inadequate infrastructure and lacking in proper sanitary and drinking water facilities.”

MoHUPA Committee for Census 2011

“A compact settlement of at least 20 households with a collection of poorly built tenements, mostly of temporary nature, crowded together usually with inadequate sanitary and drinking water facilities in unhygienic conditions”

In addition, it also lists the following as slum-like characteristics:

- Predominant roof material: any material other than concrete (RBC/ RCC)
- Availability of drinking water source: not within premises of the census house
- Availability of latrine: not within premises of the census house
- Drainage facility: no drainage or open drainage.

DEFINING SLUMS- GUJARAT PERSPECTIVE

The Gujarat Slum Areas (Improvement, Clearance and Redevelopment) Act,1973- Section 3

Chapter 2- Declaration of slum areas

- (a) That any area is a **source of danger to the health,, insanitary, squalid, overcrowded, or otherwise; or**
- (b) That the buildings in any area, used or intended to be used for human habitation are
 - (i) in any respect , **unfit for human habitation, or**
 - (ii) by reason of **dilapidation, overcrowding, faulty arrangement and design of such buildings, narrowness or faulty arrangement of streets, lack of ventilation, light or sanitation facilities** or any combination of these factors, detrimental to safety, health or morals,

In determining whether a building is unfit for human habitation, for the purposes of this Act, regard shall be had to its condition in respect of the following:

Repair (ii) stability (iii) freedom from damp (iv) natural light and air (v) **water-supply** (vi) **drainage and sanitary conveniences** (vii) facilities for storage, preparation and cooking of food and for **disposal of waste water**

Also referred to in the 'Regulation for Rehabilitation and Redevelopment of Slums, 2010'

For the purpose of this assessment, the areas listed as slums by the ULBs have been considered

ASSESSMENT METHODOLOGY

- ✘ Conducted in 2010-11 by Urban Management Centre
- ✘ **Objective-** Rapid assessment of provision of water supply and sanitation services in slum settlements located in 157 municipalities in the state of Gujarat.
- ✘ **Methodology-**

Preliminary meetings with CEO & Community Organizer

Visit to all the slum settlements in the city, collection of data using checklist

Collation and analysis of the data on the basis of identified indicators



SERVICES IN SLUMS AT A GLANCE



61%

HHs have individual connections

39%

HHs do not have individual connections



45%

HHs have individual toilets

55%

HHs do not have individual toilets



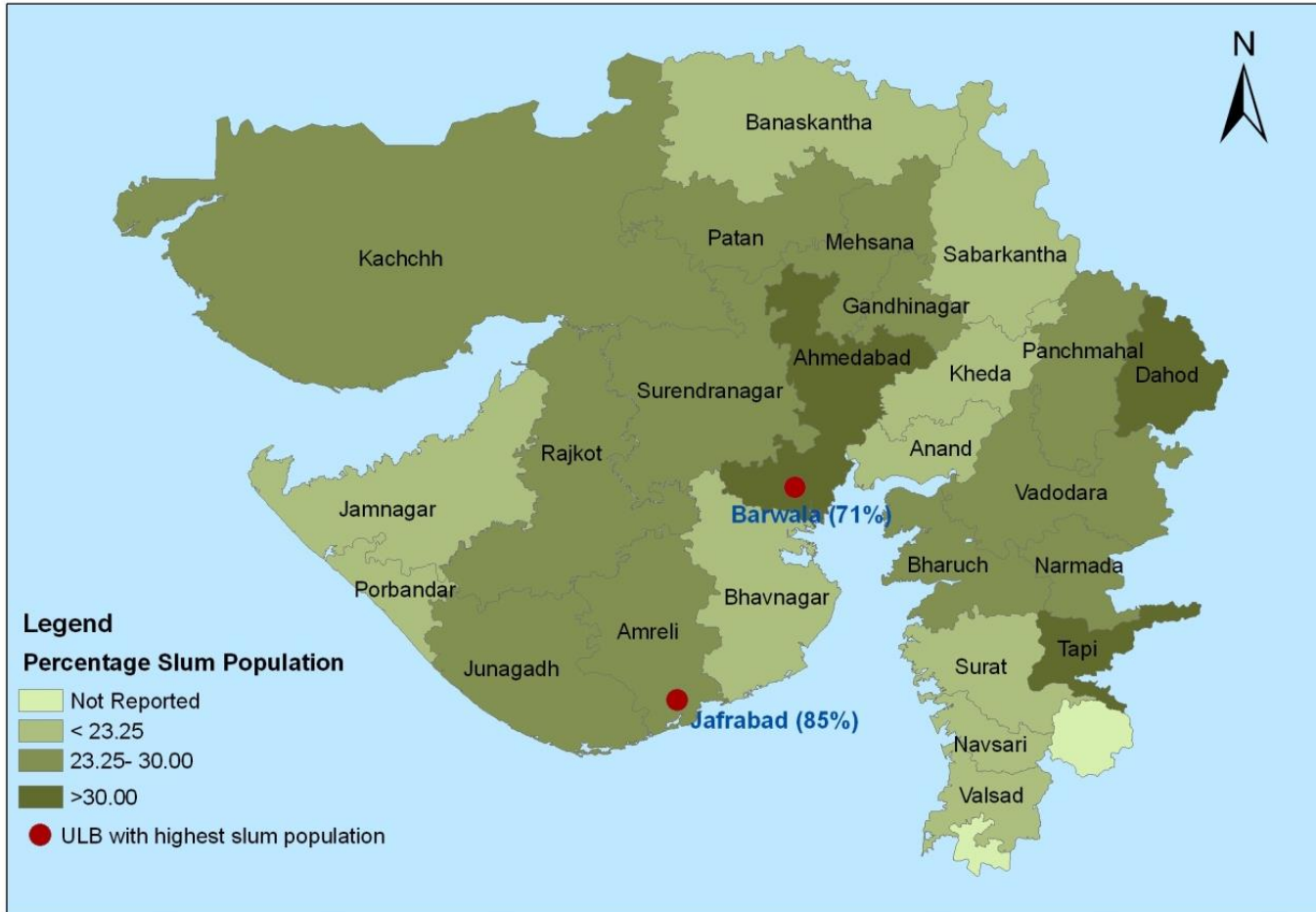
49%

HHs have access to door-to-door waste collection

51%

HHs do not have access to door-to-door waste collection

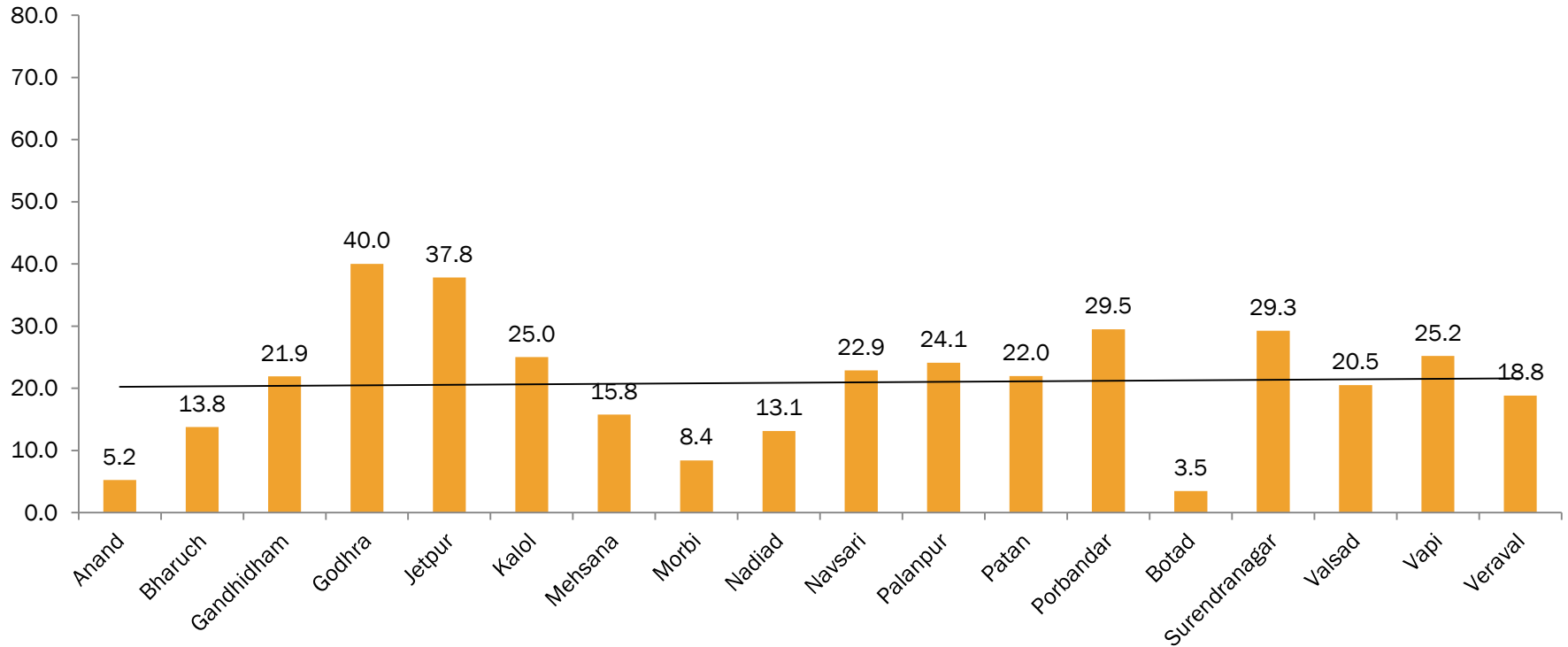
SLUM POPULATION- GUJARAT



Cities	% Slum Population
Class A	21
Class B	20
Class C	26
Class D	26
Average	23.25

- Total urban population of Gujarat- 43%
- Out of 43%, 20% live in slums

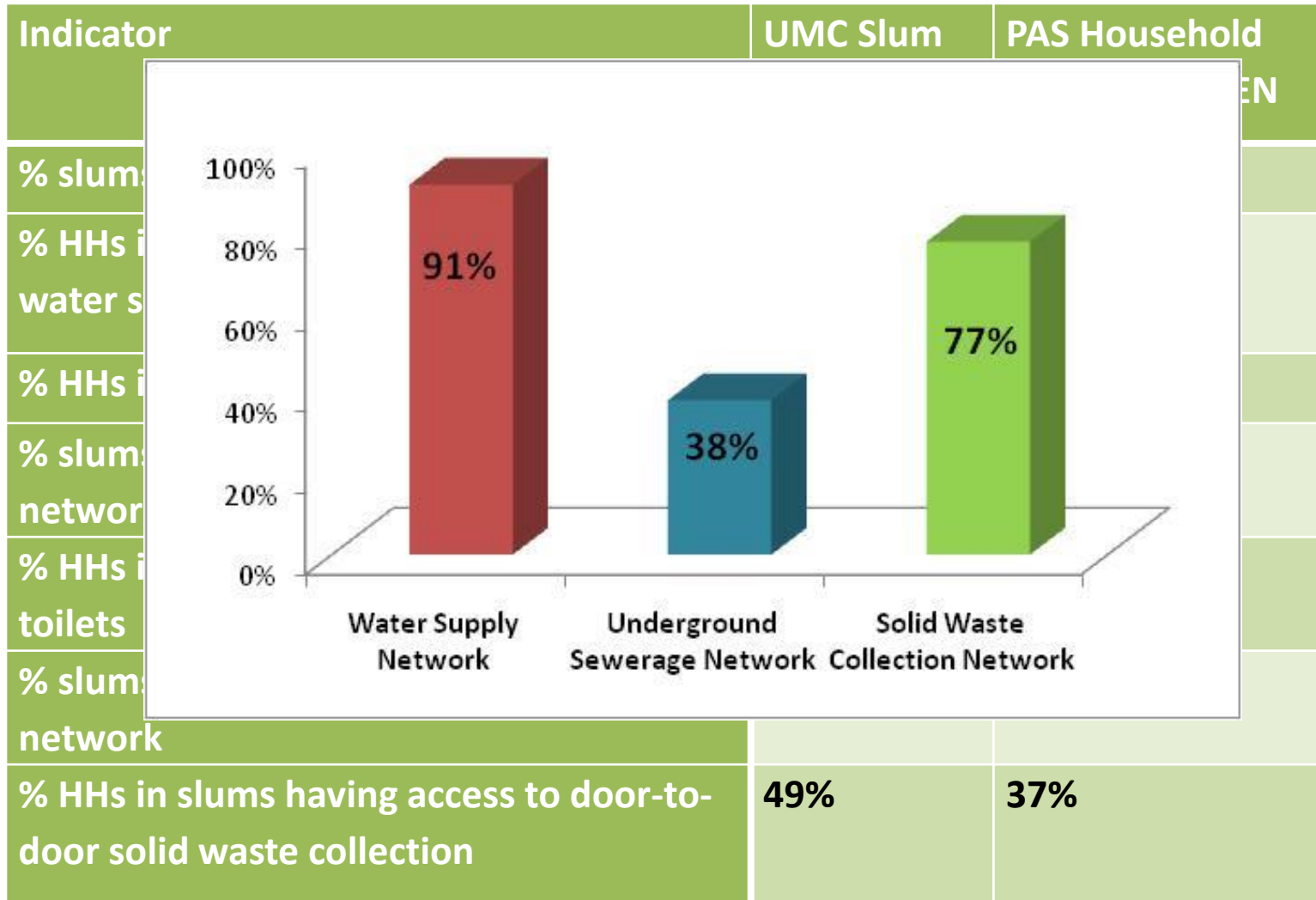
SLUM POPULATION- CLASS A ULBS



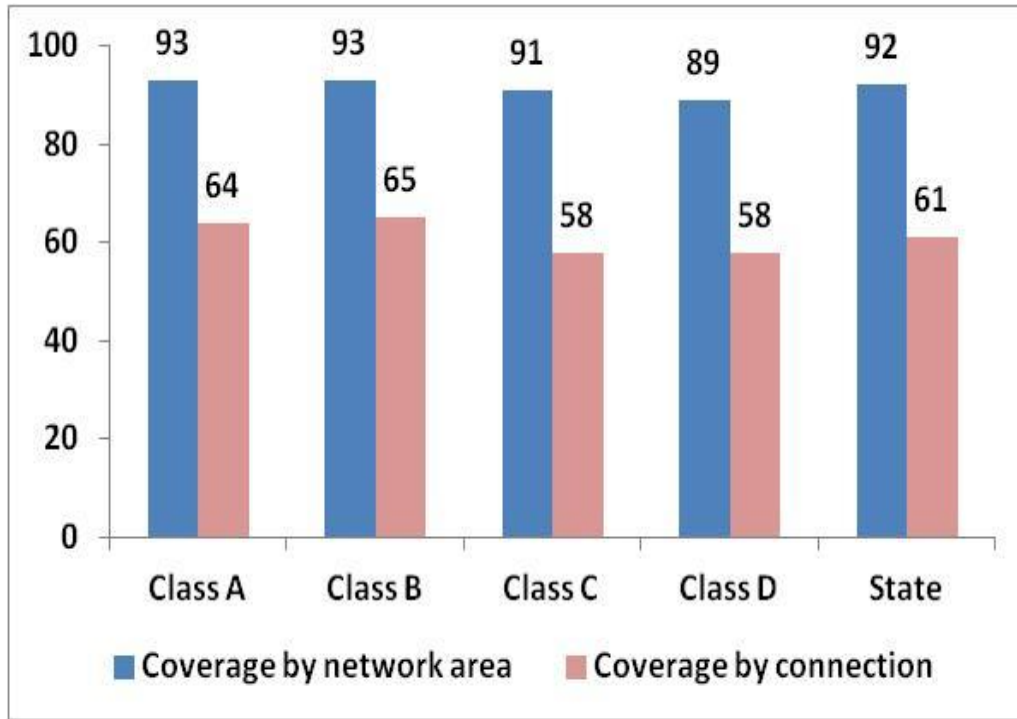
Botad, Anand and Morbi -low percentage slum population at 3.5%, 5.2% and 8.4% respectively.

Godhra with 40% and Jetpur with 37.8% have high percentage of slum population

SERVICES IN SLUMS AT A GLANCE



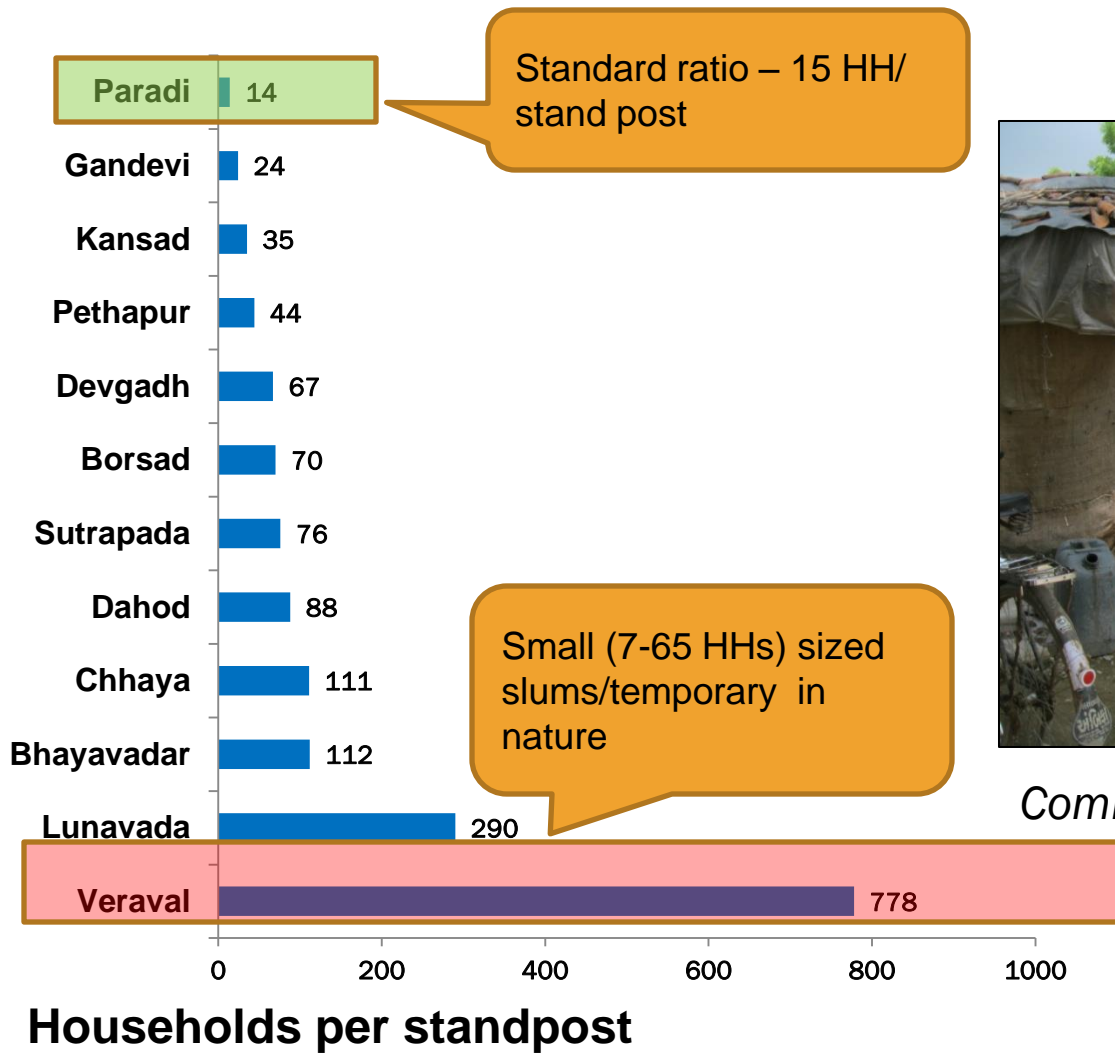
WATER SUPPLY SERVICES IN SLUMS



Water supply, Vallabhipur

- **91% of slums have water network coverage while 61% individual water supply coverage**
- **91 out of the 157 ULBs have 100% water supply network coverage in its slum settlements. The state-wide urban coverage -75%, (Census 2011)**
- **0% HH coverage- Sutrapada, Chhaya**
- **High coverage but intermittent supply- Surendranagar (4 days/month), Vadhvan (5-6 days/month),**

WATER SUPPLY IN SLUMS- HH/STAND POST RATIO




Community stand post in Mansa

WATER SUPPLY IN SLUMS- CHALLENGES

- Good network coverage, lack of individual connections
- High HH/stand post ratio
- Intermittent/irregular supply
- High connection costs
- Requirement of ownership/property tax documentation to obtain connection
- Extremely small and remote areas identified as slums-extension of services difficult

Interventions

 <p>નગરપાલિકા બારડોલી મુ. પો. બારડોલી - ૩૯૪૬૦૧ જિ. સુરત NAGAR PALIKA BARDOLI At. Po. Tal. Bardoli-394 601, Dist. Surat.</p>		
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બારડોલી નગરપાલિકાની તા. ૨૫/૦૧/૨૦૧૦ નાં રોજની "સામાન્ય" સભાનાં ઠરાવ નંબર :૨૮૨ ની અસલ પરથી ખરી નકલ :-

ઠરાવ નંબર:૨૮૨ : અમલા આકારણી અંગે ચર્ચા કરી નિર્ણય કરવા બાબત.

અમલા આકારણી અંગે સભા રૂબરૂ ચર્ચા કરવામાં આવી. જે અંગે હાજર રહેલ સભ્યો તરફથી અમલા આકારણી કરવા બાબતે રજૂઆત કરવામાં આવી, જે અંગે પ્રમુખશ્રી એ ચીફ ઓફીસરનો અભિપ્રાય માંગતા ચીફ ઓફીસરશ્રીએ જણાવ્યું કે, સરકારી જગ્યાઓ પર કરવામાં આવેલ બાંધકામને દબાણ ગણવામાં આવે છે. જેથી તેવા બાંધકામની આકારણી કરી વેરો લઈ શકાય નહીં. પરંતુ તેવા બાંધકામોમાં આવશ્યક સેવાઓ જેવી કે, પાણી સુવિધા, ડ્રેનેજની સુવિધા વિગેરે આપી શકાય. અને વિજળી માટે સરકારશ્રીની ઝુંપડા વિજળીકરણ યોજનાનો લાભ આપી શકાય. જે અંગે હાજર રહેલ તમામ સભ્યો સંમત થતાં અમલા આકારણી નહીં કરવાનું અને નિયમોને આધિન રહી આવશ્યક સેવાઓ આપવાનું સર્વાનુમતે ઠરાવવામાં આવે છે.

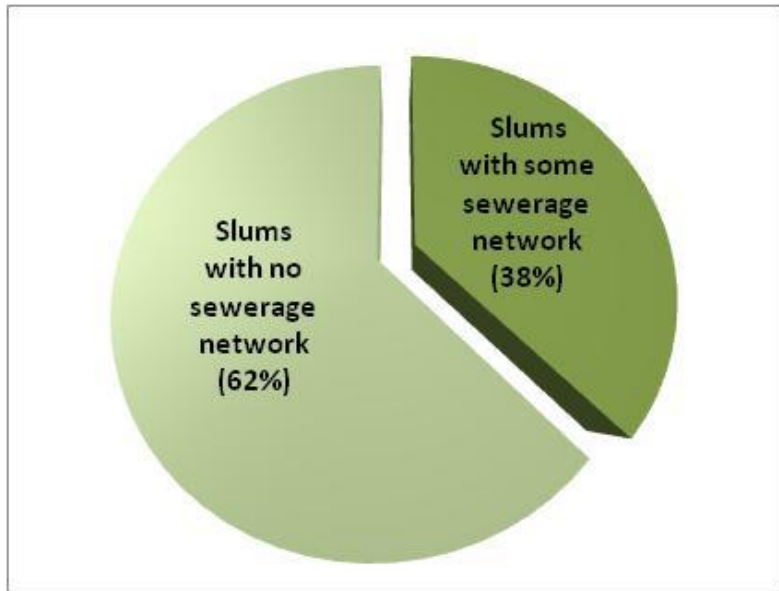
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General resolution by Bardoli Nagar Palika

The 500 NOC Scheme, Ahmedabad

aims at providing slum residents with a 'No Objection Certificate' (NOC) that enables them to apply for legal individual sewerage and water connections for their dwellings. '

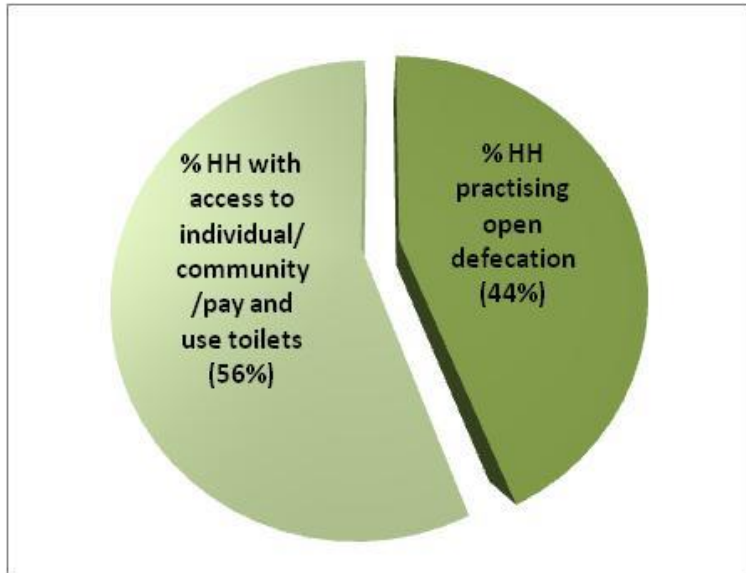
SANITATION- SEWERAGE NETWORK



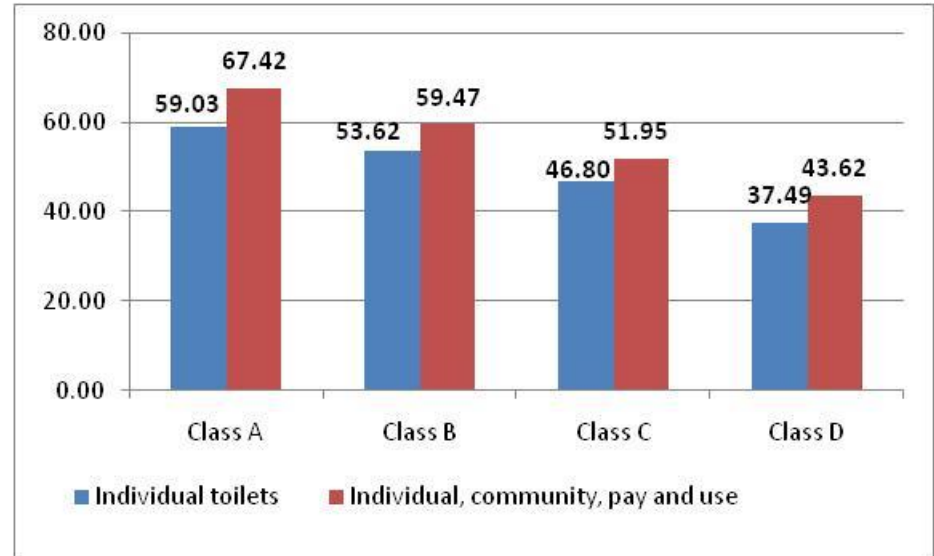
Open drain in Mansa

- 3 out of 157 ULBs have 100% sewerage network in slum settlements- Bacchau, Gadhada and V.V. Nagar (All C Class towns)
- 60% (37 Nos.) Class C ULBs have 0% sewerage network in its slums

SANITATION- COVERAGE OF TOILETS

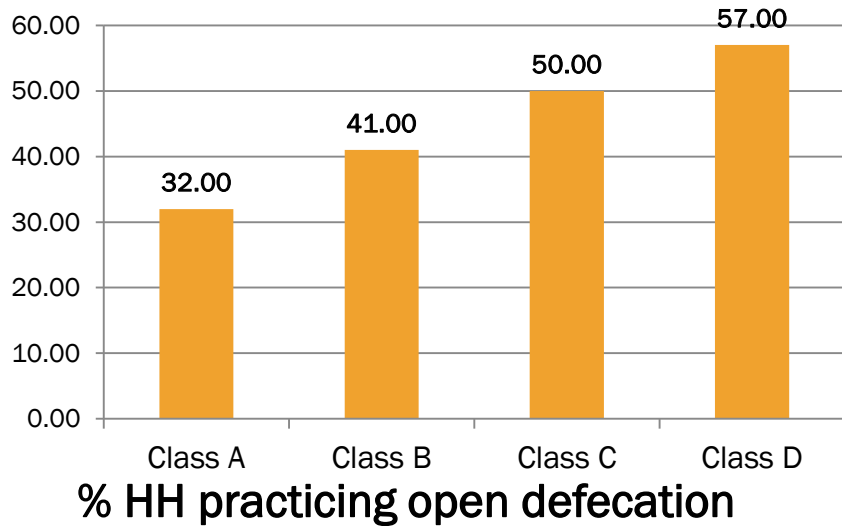


- 49% HHs have individual toilets in their premises (NIELSON- 60%)
- State wide urban coverage (slum + non-slum)- 88% (Census, 2011)
- 7% only use community/pay and use toilets



- SurenDRanagar (Class A)- lowest coverage among other Class A cities (37%), high OD rate of 63%, Sanitation ranking 407th out of 423
- Porbandar , Kalol (Class A)- highest coverage among other Class A cities (90%, 81%), low OD rate (10%, 19%), Sanitation ranking for Porbandar is 145th and Kalol is 242nd

SANITATION- OPEN DEFECCATION & HH TO TOILET SEAT RATIO



Open defecation in Bhabar

ULB	OD	toilet covg.	HH/toilet seat ratio
Sanand (C)	99	22	0
Borsad (B)	90	10	0
Karamsad (C)	86	14	0
Rapar (D)	80	20	0
Halol (C)	98	9	0
Chaya (C)	85	7	0
Prantij (D)	86	14	0
Savali (D)	87	13	0
Petnapur (D)	97	5	1
Bantwa (D)	90	10	1.2
Umreth (C)	87	13	1.8
Ranavav (C)	89	46	2.5
Radhapur (C)	87	13	7.5

Cities exhibiting high OD rate, low toilet access and complete absence of pay and use or community toilets

SANITATION- FUNCTIONALITY OF TOILETS



Locked community toilets observed in Harij, Jafrabad, Mansa, Talaja

Locked pay and use toilet in Borsad

Lack of maintenance observed in most of the community toilets

Functionality-

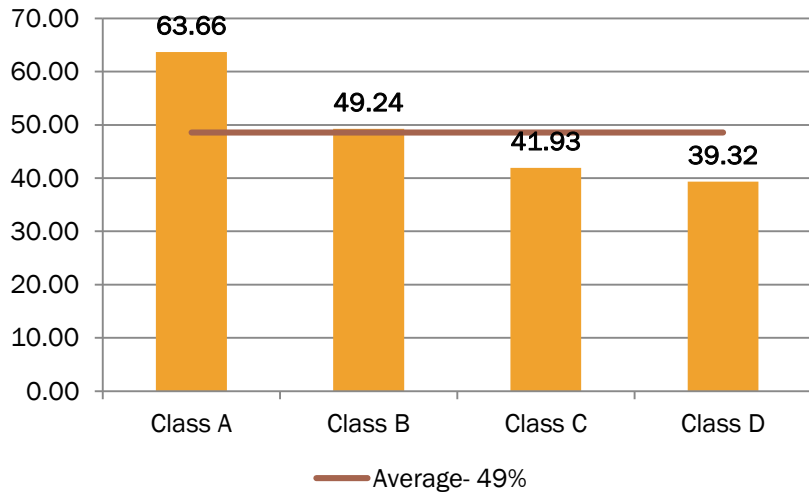
Functionality of pay-and-use toilets is much more than that of community toilets

Functionality of > 70%- 22% ULBs (community toilets) and 45% ULBs (pay-and use toilets)



Lack of maintenance evident in pay-and-use toilet in Gadhada

SOLID WASTE MANAGEMENT



Findings

Average Coverage- 49%, 37% (NIELSON)

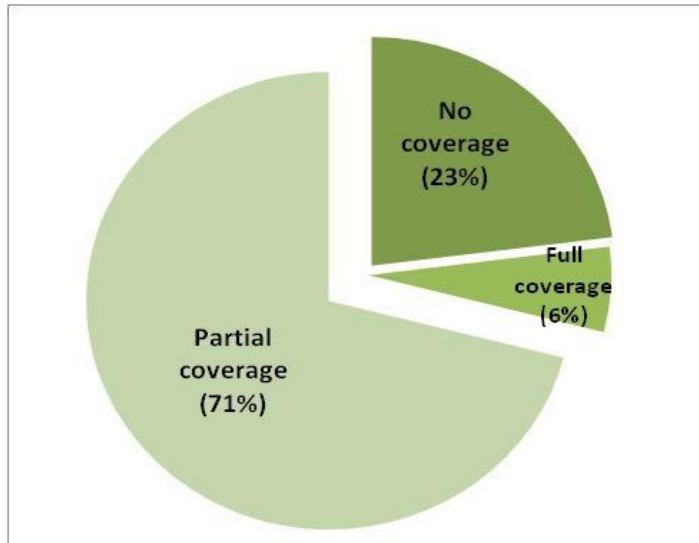
Frequency of collection- very low i.e. once in two weeks, (NIELSON- 14% slums are covered by daily SW collection)

23% ULBs have no SW collection



Jafrabad garbage dumping site

SOLID WASTE MANAGEMENT- SERVICE PROVIDER



Service Provider

ULBs- 96% cities

Private- Kheda (29%), Chanasma (17%),
Talod (67%), Kansad (50%)

Residents- Rapar (14%), Vijapur (63%)

Bavla- Private (78%)+ Residents (22%)



Waste collection in Borsad

OVERALL PERFORMANCE

Class	HH Water Supply Connections	HH Access to Toilets	HH Covered by Solid Waste Services
A	Kalol, Patan, Surendranagar (85%)	Porbandar (90%), Kalol (81%), Anand, Valsad (82%)	Valsad, Gandhidham (100%), Patan (96%), Vapi (95%)
	Veraval (22%), Vapi (32%)	Surendranagar (37%)	Morbi, Surendranagar, Veraval (0%), Porbandar (24%)
B	Vadhvan (94%), Gondal (87%), Bhuj (85%)	Okha (88%), Dolka, Kadi (85%)	Dholka (99%), Bhuj (97%), Siddhpur (95%)
	Dahod (14%), Borsad (17%),	Borsad (10%), Palitana (22%), Gondal (38%)	Dhangadha, Borsad, Palitana, Vadhvan, Viramgam (0%), Mahua (2%), Amreli (6%)
C	Karjan (96%), Bavla (93%), Kodinar (92%)	Bhachau (84%), Kodinar (94%), V.V. Nagar (100%)	Kodinar (70%), Padra (89%), Mansa (88%)
	Chaya (0%), Lunavada (13%), Paradi (22%)	Chaya (7%), Halol (8%), Umreth (13%), Karamsad (14%)	Chaya (0%), Halol (11%), Jambusar (22%), Talaja (17%)
D	Chanasma (97%), Boriavi (96%), Tharasdi (94%)	Mandvi K (100%), Vijapur (85%)	Oad (98%), Harij (89%), Dharampur (83.3), Talod (84%) and Mahudha (91.2%)
	Sutrapada (0%), Kansad (7%), Pethapur (9%)	Pethapur (5%), Bantwa (10%), Savali (13%)	Pethapur (0%), Kanjari (10%), Sojitra (20%),

Surendranagar, Borsad, Palitana, Chaya, Halol, Pethapur need to draw urgent attention to services in its slum settlements

SOME OBSERVATIONS/SUGGESTIONS

- Supply side- general lack of interest and motivation to improve access to WATSAN services in slums, apprehension about the capacity of slum dwellers to pay, ULBs staff constrained, non-slum issues gain precedence
- Demand side- lack of demand for improved services, economic stability, a priority over basic services
- Slum dwellers expect 'free of cost' basic services, no willingness to pay for improved services
- Presence of schemes, ineffective implementation, need to design innovative/practical implementation mechanisms (stricter monitoring of contractors constructing toilet blocks, maintenance norms, creation of community groups)
- Community organizer often unaware, need to strengthen the position and capacities of the community organizer