

# Presentation from the 2011 World Water Week in Stockholm

**WORLD**  
in Stockholm,  
August 21–27, 2011 **WATER**  
**WEEK**

[www.worldwaterweek.org](http://www.worldwaterweek.org)

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[www.siwi.org](http://www.siwi.org) 



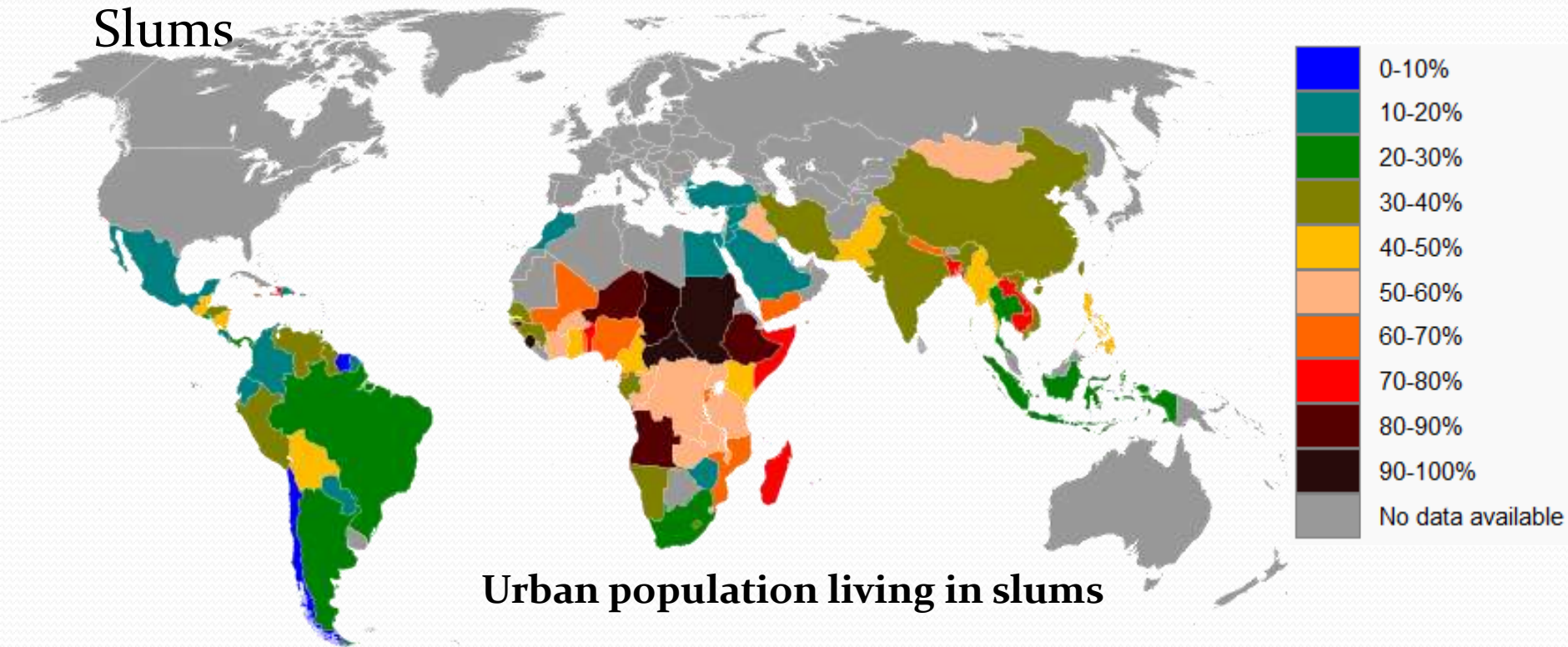
# REACHING THE POOR SLUM NETWORKING PROJECT AHMEDABAD, INDIA

CEPT UNIVERSITY  
AHMEDABAD, INDIA



# PREVALENCE OF SLUMS AROUND THE WORLD

- More than a billion people live in Slums in cities
- World's urban slums population, projected to increase from **33%** in 2003 to **45%** in 2025.
- Cities like Bombay has 55% of its population living in Slums



# water and sanitation in slums-what do we know?

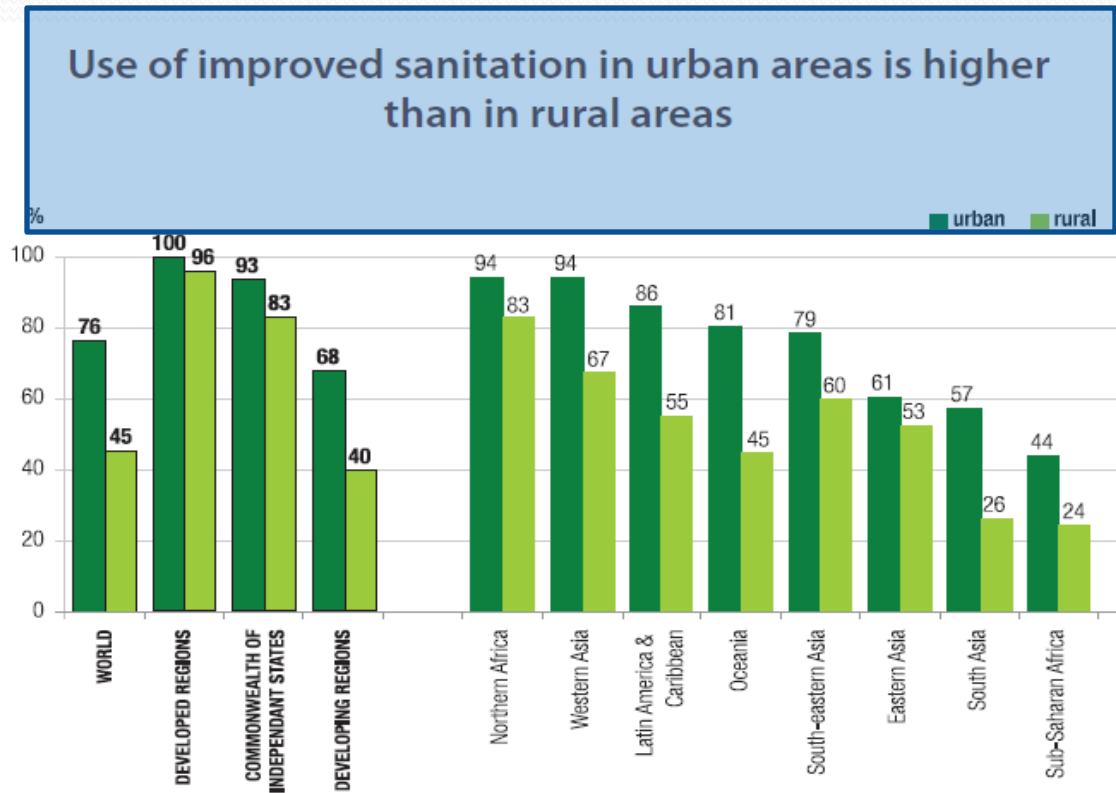


Figure 13 Urban-rural use of improved sanitation, in MDG Regions, 2008

- Urban poor often worse off than rural population
- In many urban areas slum dwellers are denied access to basic services



# WATER IN CITIES





# SHARED SANITATION



296 (such) seats in community toilets

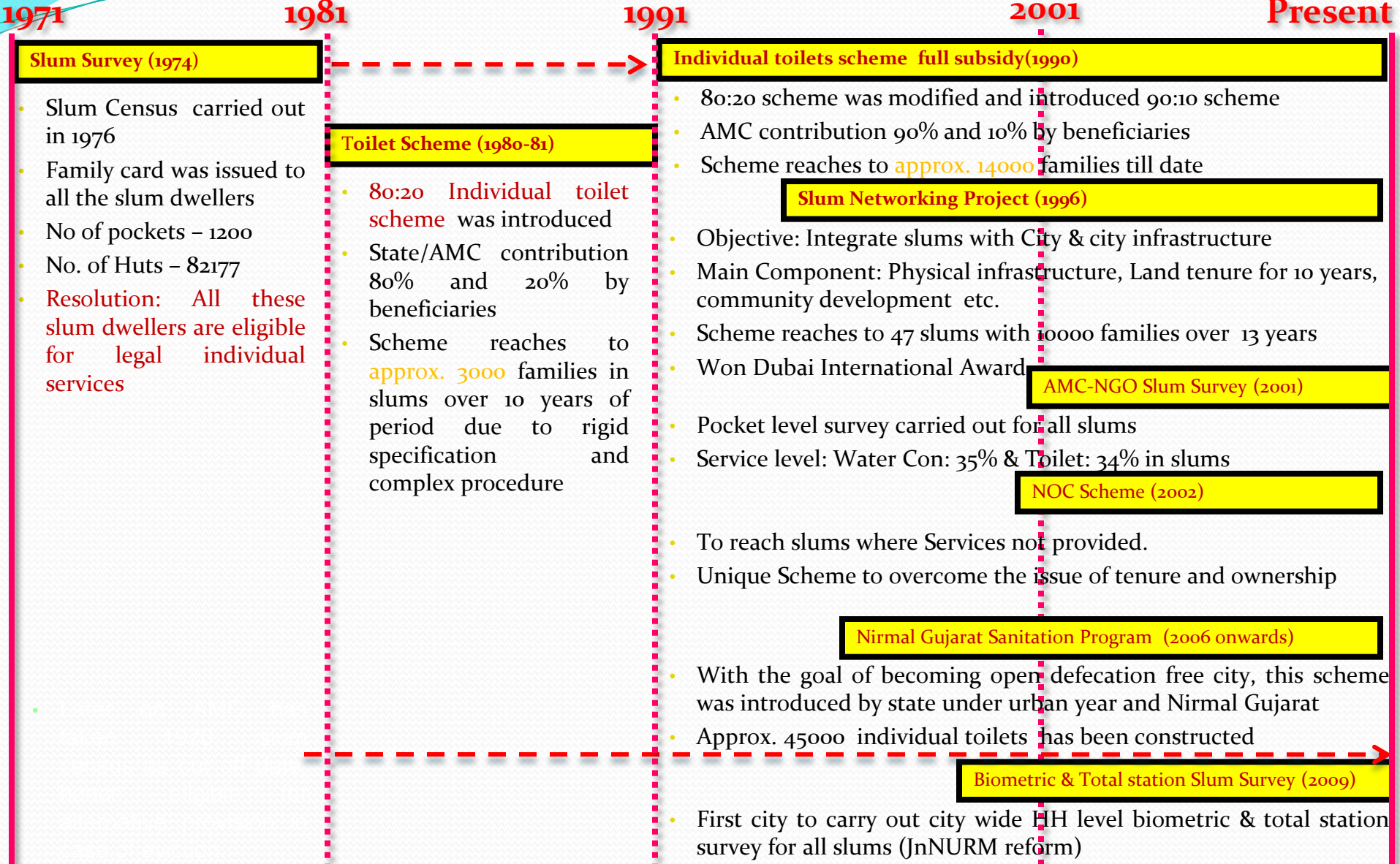


# Ahmedabad: A City Wide Pro-Poor Water and Sanitation Programme

- Seventh largest city in India
- located in Western India in Gujarat State
- Population – 5.5 Million
- 30% live in Slums
- City government's efforts to provide universal access to water and sanitation through Slum Networking Programme



# Pro-poor policies of Ahmedabad Municipal Corporation





# SLUM NETWORKING PROGRAMME

“To integrate the slums into the main stream of the city through a citywide approach – connecting them to the main networks – and through active partnership of the Slum Dwellers, private sector, NGOs and City Government”

# Overall Partnership

## Slum Development

Financial Contribution &  
Physical Efforts

Ahmedabad  
Municipal  
Corporation  
(AMC)

Private Sector  
Institutions

Non  
Government  
Organization  
(NGO)

Community  
Groups and  
Slum  
Household  
Contribution

Component	Household (Per Household)	NGO	Industry	AMC	Total
Physical Development	2000		2000	2000	6000
Community Development		300		700	1000
External Linkage with City Infrastructure				3000	3000
Individual Toilet Cost				5800	5800
<b>TOTAL</b>	<b>2000</b>	<b>300</b>	<b>2000</b>	<b>11500</b>	<b>15800</b>

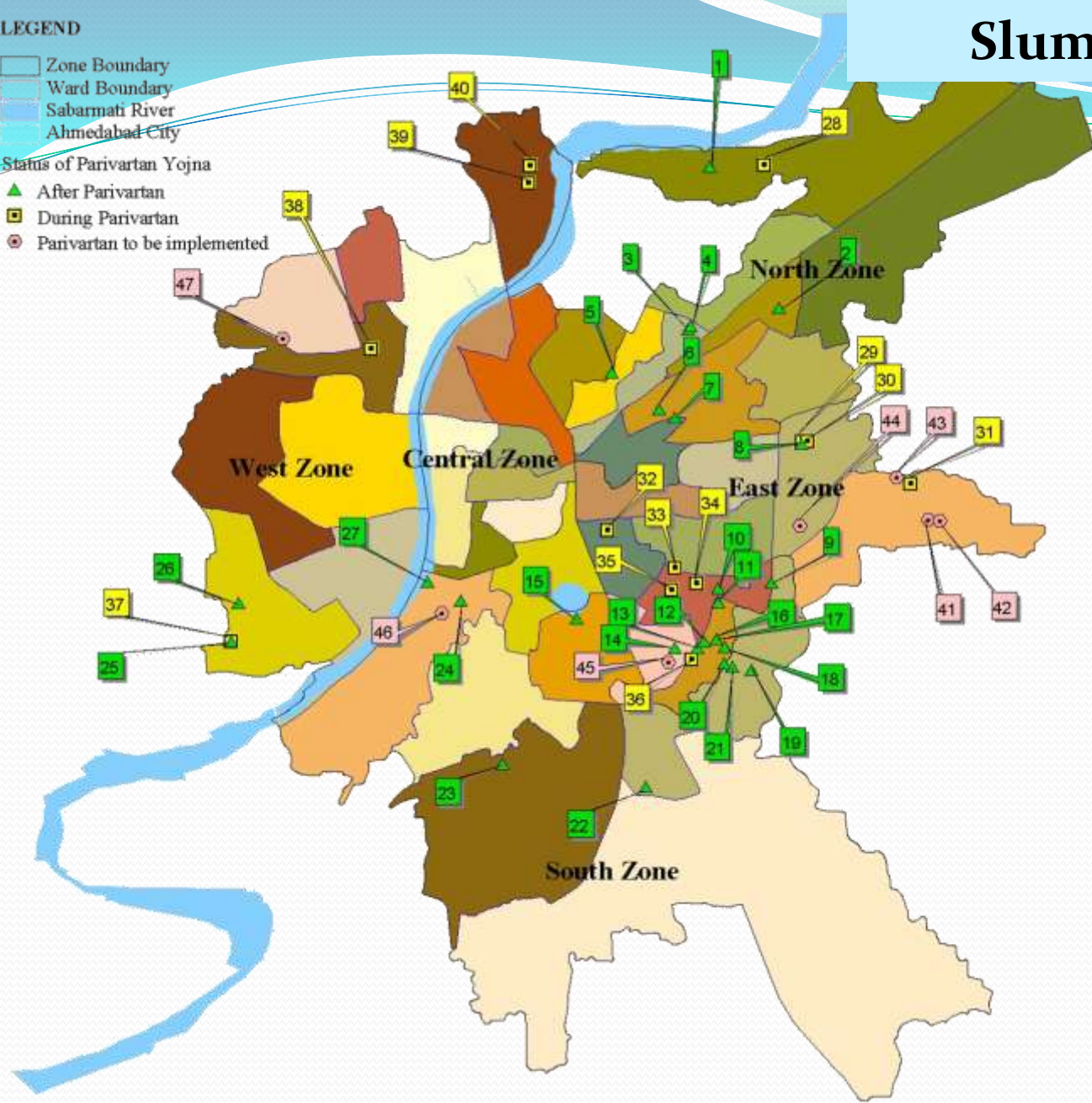
**Present cost is approximate Rs.28,000/-per household**

# Slum Networking Sites

## LEGEND

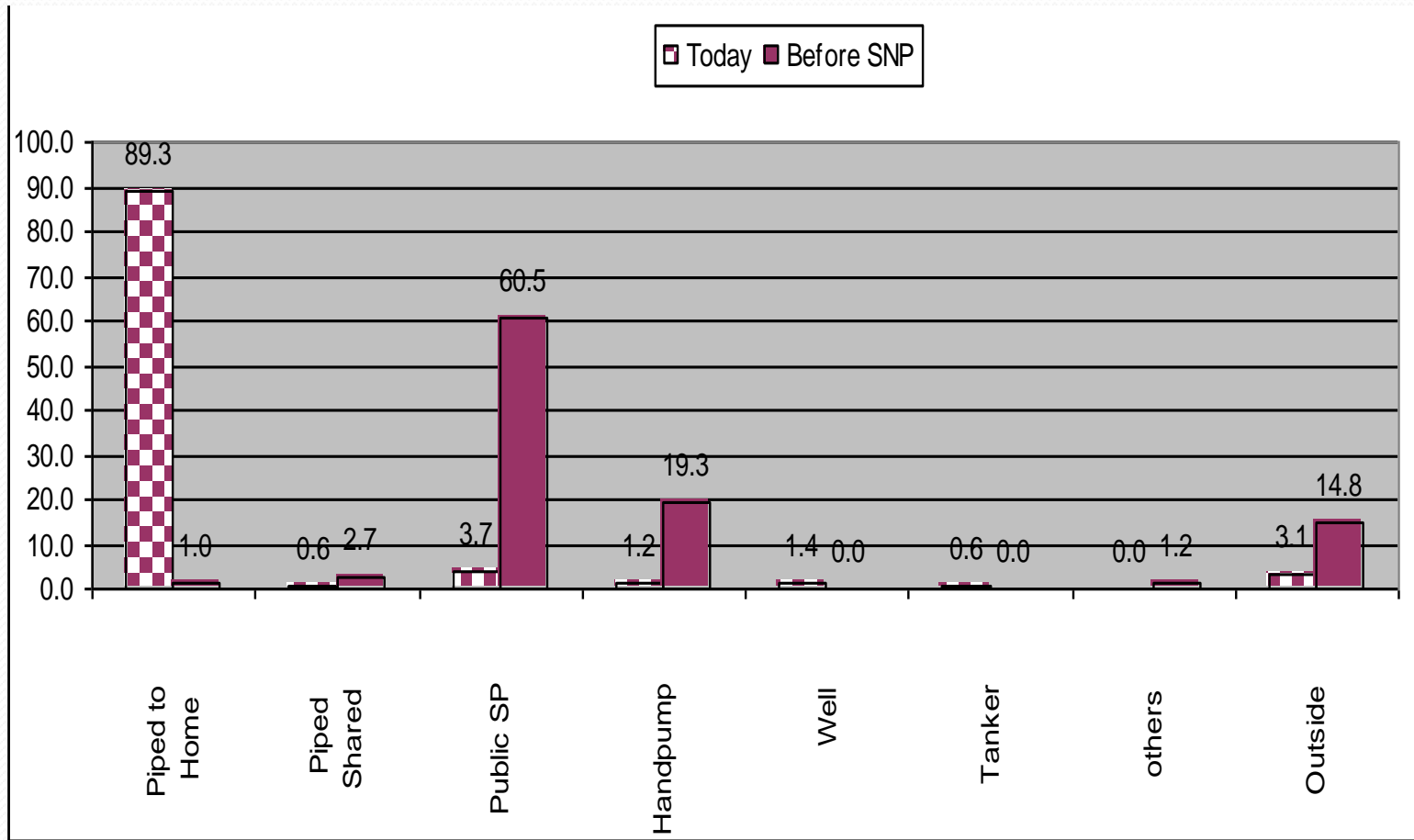
- Zone Boundary
- Ward Boundary
- Sabarmati River
- Ahmedabad City

- Status of Parivartan Yojna
- After Parivartan
  - During Parivartan
  - Parivartan to be implemented





# ACCESS TO DRINKING WATER



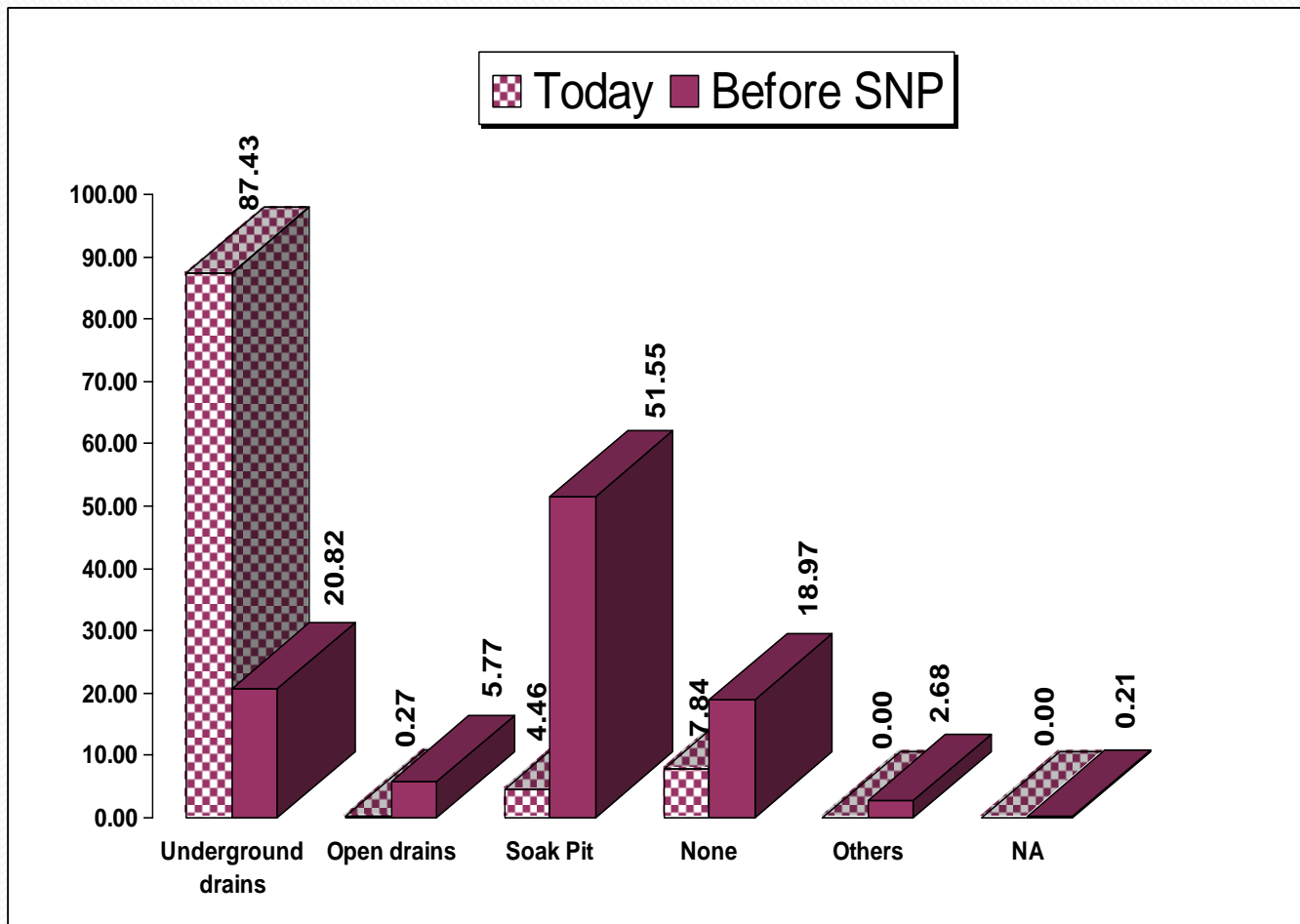
- **Shift from Shared services to premise level piped supply**



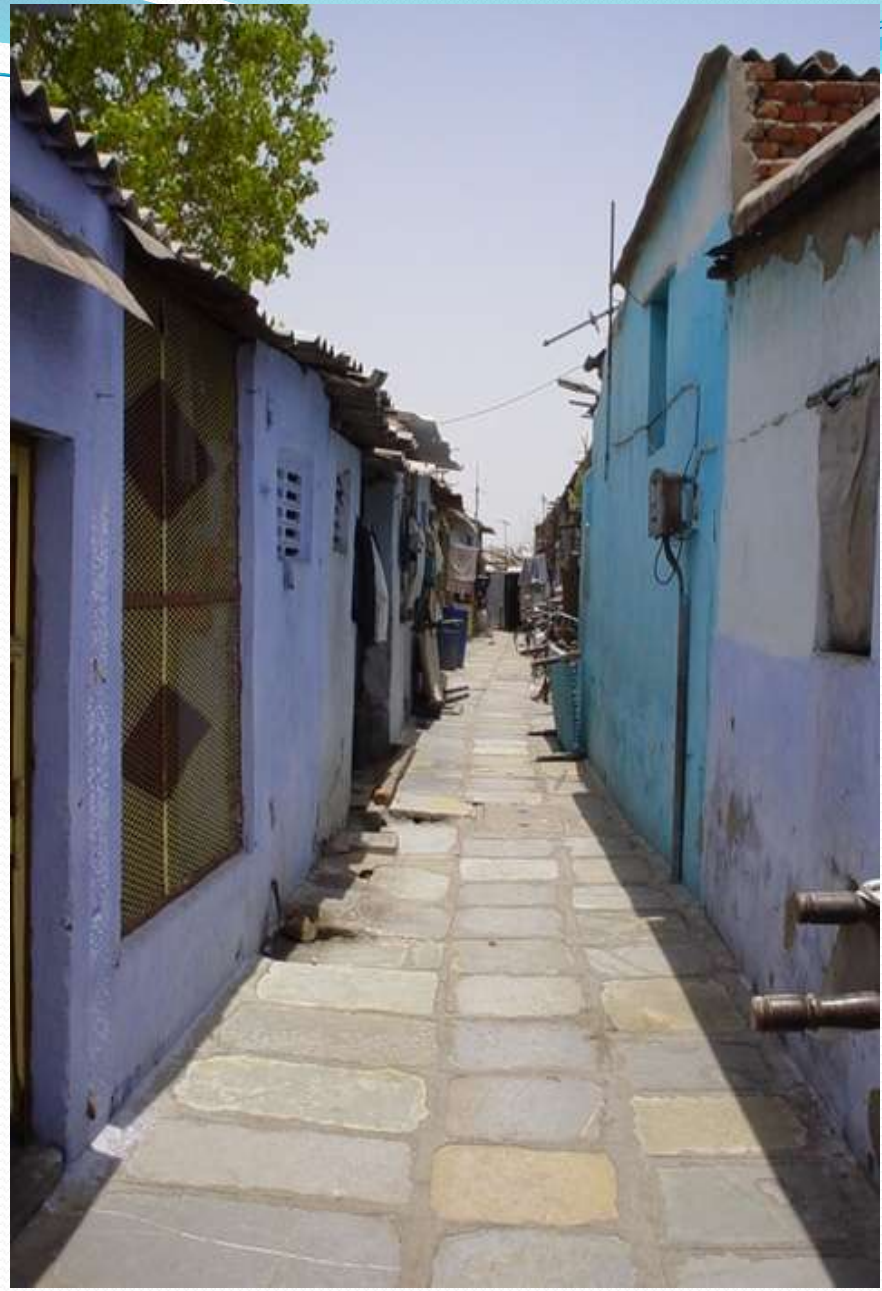
School of Planning, Centre for Environmental  
Planning Technology, Ahmedabad

# ACCESS TO DRAINAGE

## Type of facilities: SNP Slums





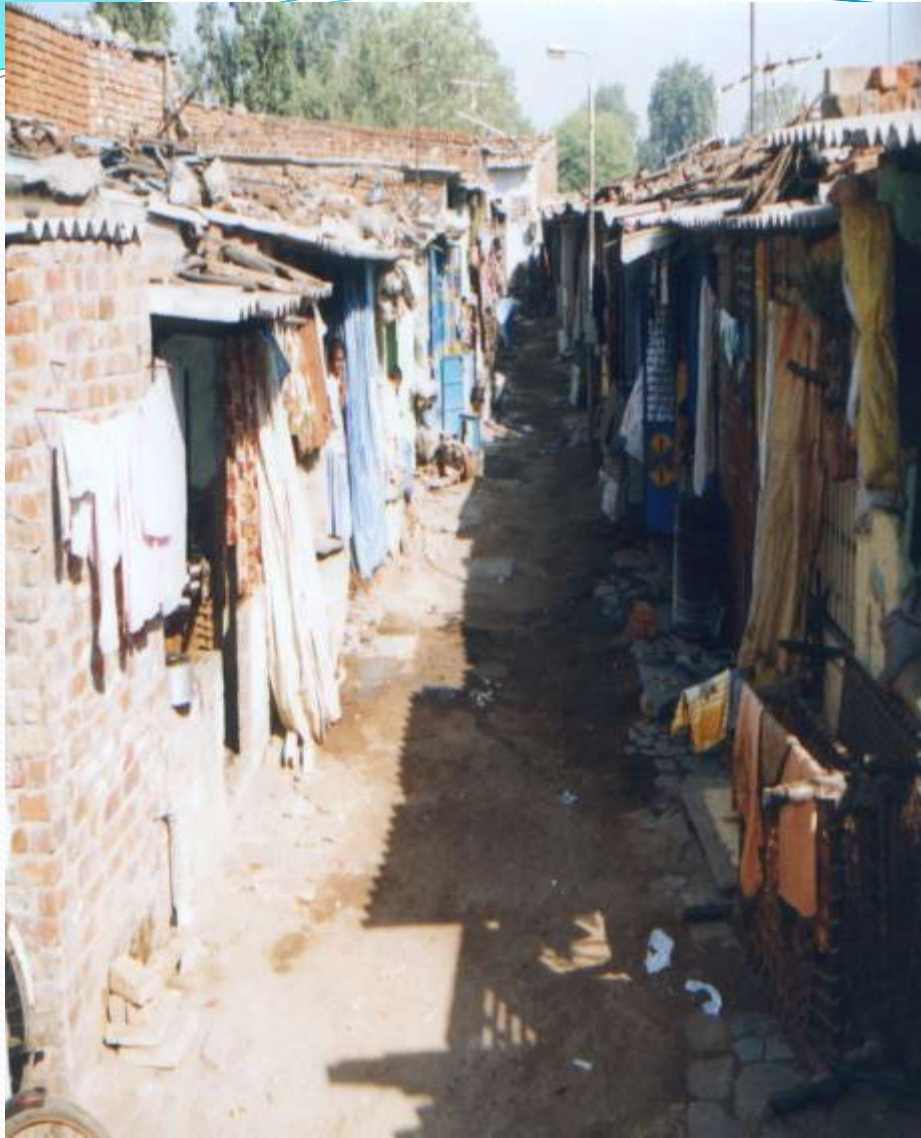


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# MELADI NAGAR



**Before**



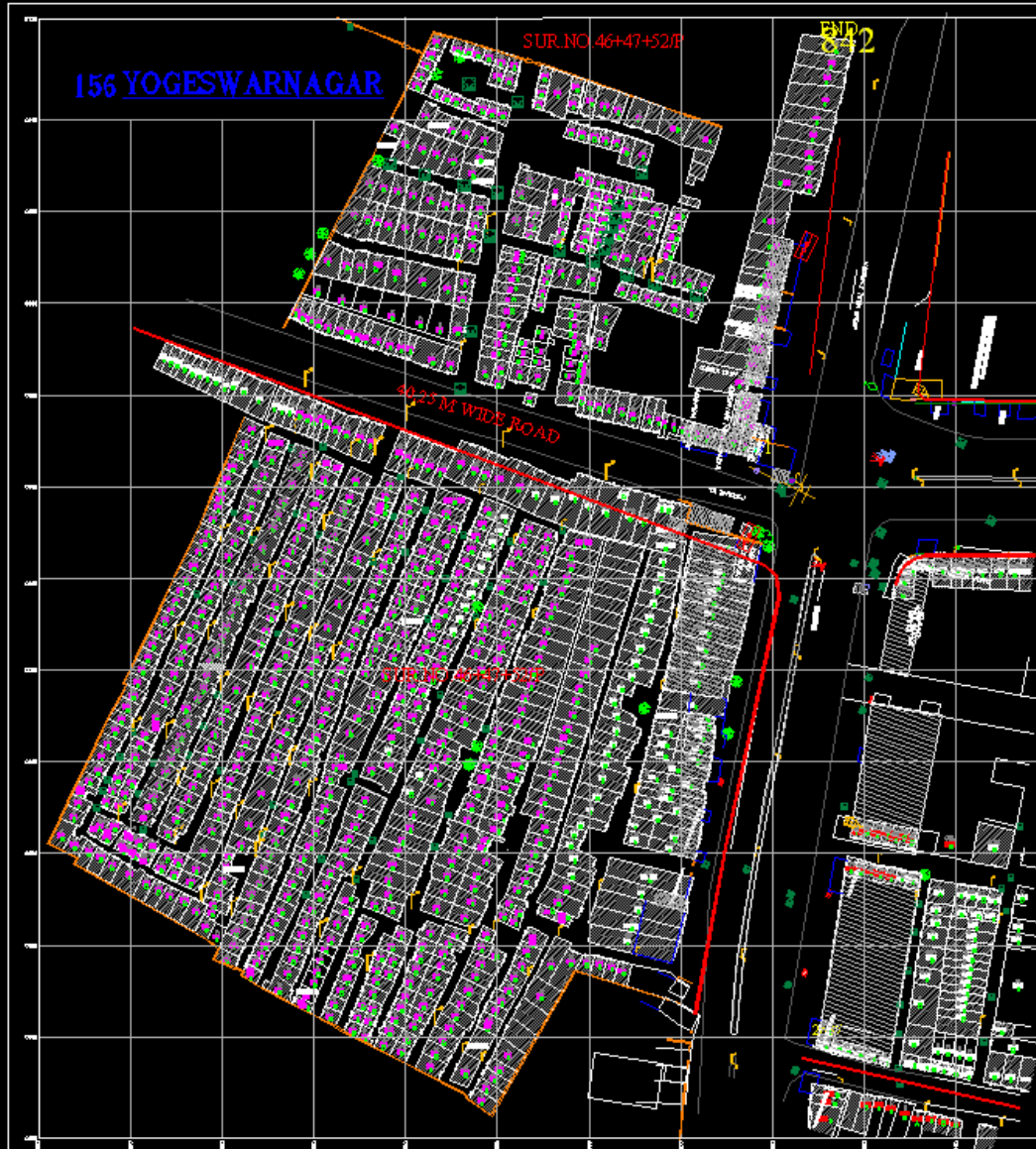
**After**



# Slum Information System

- In 2008, city government embarked on a city wide strategy
- CEPT University and City Government
  - Survey of all Slum households – socio-economic, biometric
  - Total Station Survey with infrastructure mapping
  - GIS based slum information
- Based on this, a detailed programme for house level water and sanitation infrastructure in all slums will be carried out

# Total Station Survey of all Slums



## NOTES:-

- 01. ALL DIM & R. LIN. METER.
- 02. T.B.M. TAKEN ON MAIN ROAD I.S.R.L. 100.00 M

## LEGEND AS PER TOTAL STATION SURVEY

	BUILDING		ELECTRIC POST
	MAN HOLE		LAMP POST
	WATERKUNDI/WATER TANK		HAND PUMP
	ELECTRIC BOX		TREE
	TELEPHONE BOX		TELEPHONE POST
	STONE		TUBE WELL
	WATER TAP		ROW STONE
	TEMPLE		HIGH TENSION TOWER

## AREA :-

ASPER SITE  
 TOTAL PLOT AREA.....  
 BUILTUP AREA..... 37,448.00 SQ.MT

## LEGEND

1000	BUILDING NO
A	PURCA BUILDING
B	KUCHA BUILDING
C	HUTE
G+1	FLOOR HIGHT
R	BUILDING USE
PUB	PUBLIC USE
COM	COMM./SHOPS

## AREA TABLE:-

SR. NO.	P.P. NO./ B.M. NO.	FINAL PLOT AREA	BUILD. CO. LTR.	HOUSE NO. LR.
1	46	37,448.00 SQ.MT	199	842
2				

## CLIENT:-

AHMEDABAD MUNICIPAL CORPORATION,  
 AHMEDABAD

## DATE:-

NOVE-08

## TITLE:-

**SURVEY PLAN**  
**R.S. NO. 46, 47, 52 T.P.S. NO. 20**

## PROJECT:-

**SLUM NETWORKING PROJECT**

## CHECKED:-

MOHAM. BHA

## SURVEY & PREPARED BY:-

**RAJ SURVEY CONSULTANT,**  
 98251-26660, 98250-13668 AHMEDABAD.

## APPROVED:-

## DRG SHEET NO:-

156 YOGESWARNAGAR/WEST/VASNA

## SCALE:-

1CM = 2.0 MT

# Demonstration: Web Enabled GIS Based MIS for Slums

Name of Zone  
WEST

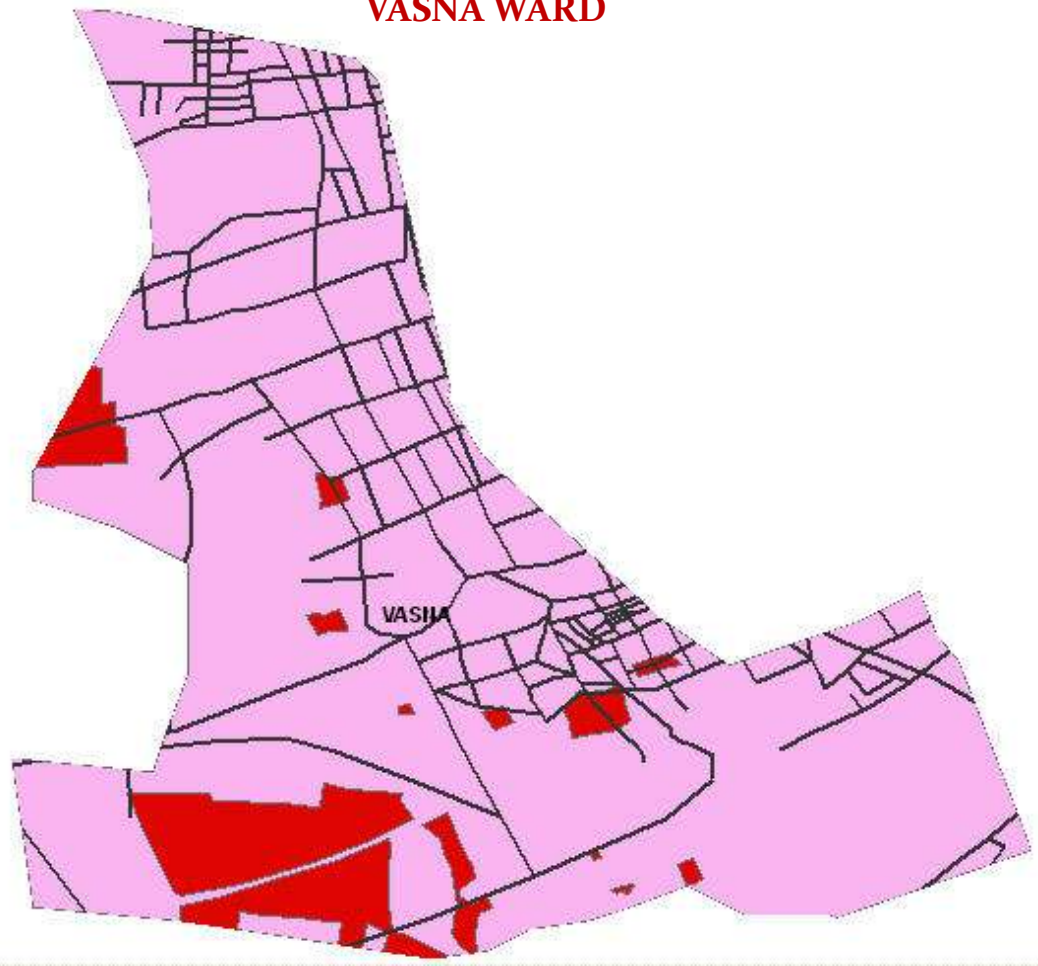
Name of Wards  
VASNA

Name of Slums

No. of Slums : 16



## VASNA WARD





# Demonstration: GIS Based MIS for Slums: Jadiba Nagar

AHMEDABAD MUNICIPAL CORPORATION



Map Browser Analysis About Us Exit



Name of Zone  
WEST

Name of Wards  
VASNA

Name of Slums  
JADIBA NAGAR

SLUM : JADIBA NAGAR

Huts having Individual Toilet Facility

No. of Huts : 146



Web enabled GIS based module linked with intranet

Source: Preliminary Survey Result of Biometric & Total Station Survey, AMC, 2010

# Lessons Operational and Policy Issues

- City wide approach for water and sanitation provision is necessary, scale is important – move away from pilot projects
- “*de facto*” land tenure provides adequate security and comfort to slum dwellers
- Delink tenure from provision of services
- Simplify procedures for slum dwellers to get water and sewerage connection
- Provision of individual facilities proved to be better (and cost-effective in the long-term) than shared facilities

# Lessons -general

- Leadership – political will and ‘ownership’ by and local leaders essential
- Commitments – sufficient funds from local budget allocated for the cause
- Partnership – private sector, NGOs and community partnerships possible at a scale only due to local government commitments
- Monitoring at local level –pro poor benchmarking essential





# Thank You

Websites;

[www.pas.org.in](http://www.pas.org.in)

[spcept.ac.in/pas](http://spcept.ac.in/pas)

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