

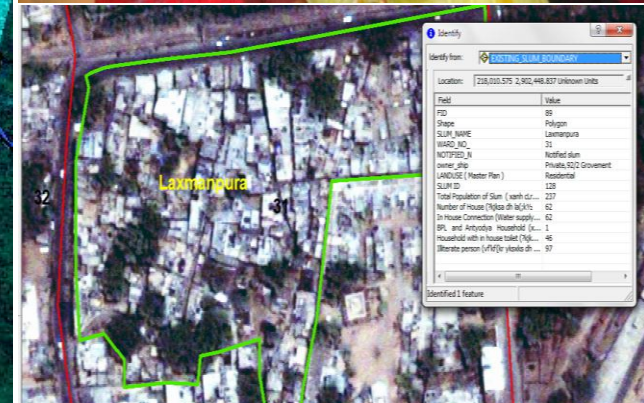
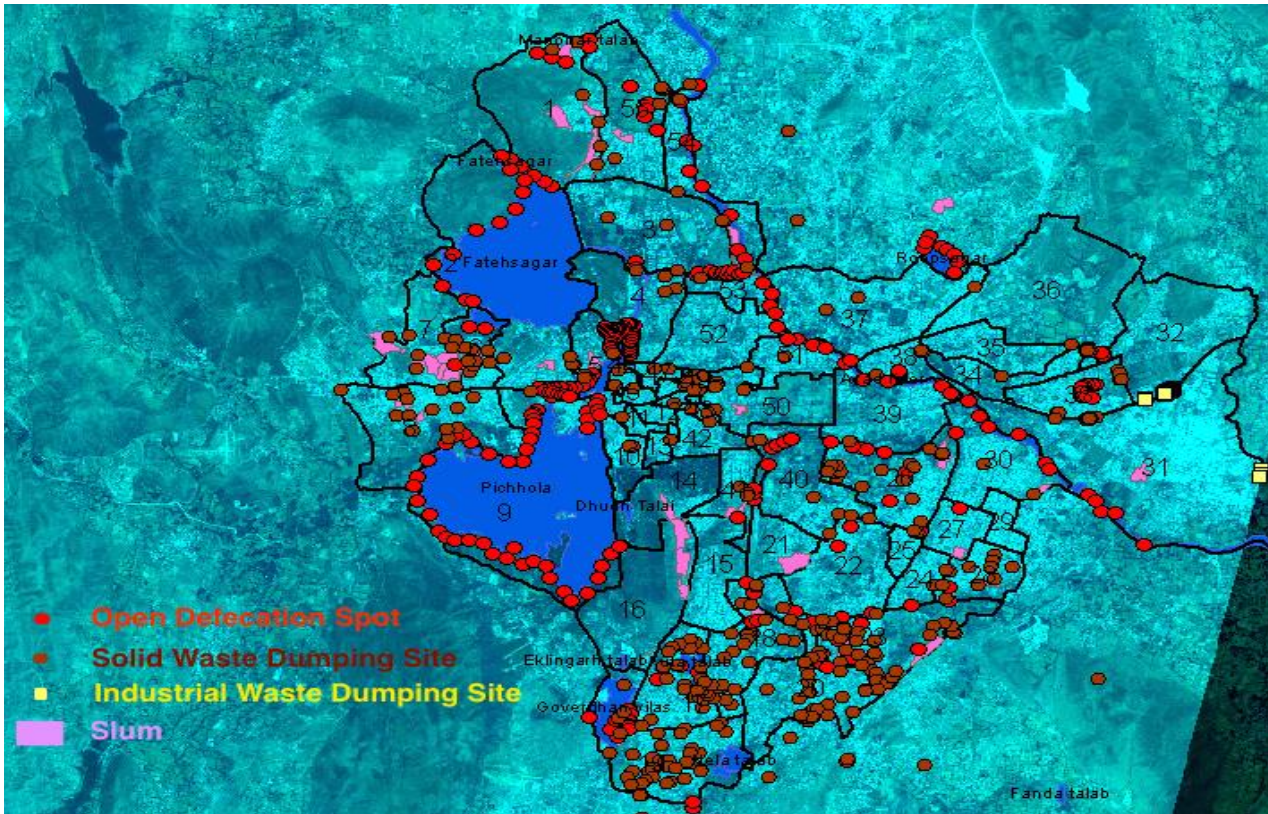


Supported by

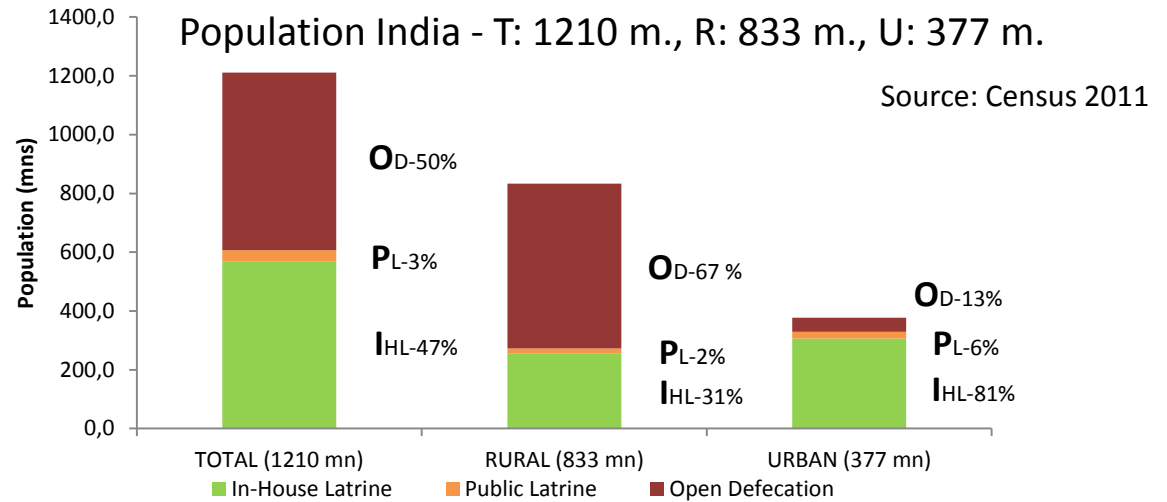
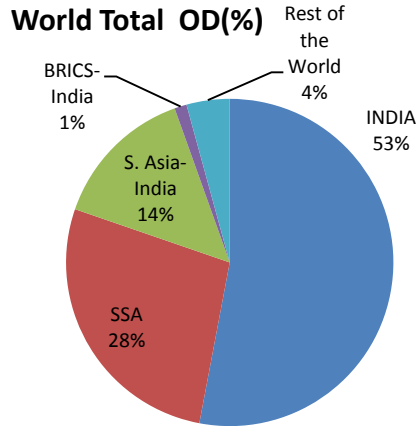


# Evolution of Sanitation Policies and Programs in India: Getting Scale Right!

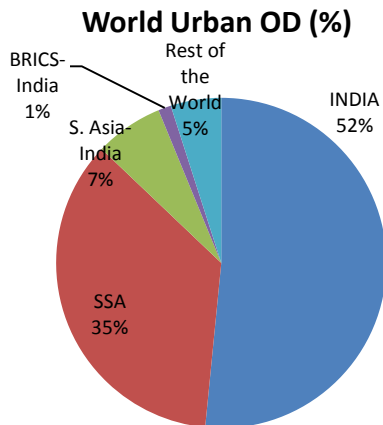
Shubhagato Dasgupta, Centre for Policy Research



# Scale of challenges : India



Source: WHO-UNICEF JMP Report 2014



| MDG Goal/<br>Target/ Indicator | India's<br>Baseline -<br>1990 | India's<br>Target for<br>2015 | India's<br>achievement<br>in 2012 |
|--------------------------------|-------------------------------|-------------------------------|-----------------------------------|
| Safe drinking water (T)        | 70                            | 85                            | 93                                |
| Improved Sanitation (T)        | 18                            | 59                            | 36                                |
| Improved Sanitation (U)        | 50                            | 75                            | 60                                |
| Improved Sanitation (R)        | 7                             | 71                            | 25                                |

Source: MOPSI 2013



# Recent Policy evolution : Rural Sanitation

From 1% Toilet coverage in 1981 to 40+% coverage in 2012

**CRSP 1986**

Central Rural Sanitation Programme (CRSP) was under the National Rural Drinking Water Mission under the Ministry of Rural Development. 8% improvement in rural sanitation between 1981 and 1991 was way below the target of 25%. Subsidy Rs 2000/HH to cover full costs

**Total Sanitation Campaign/ TSC 1999**

“Community led” and “people centered”, with increased awareness generation and demand generation. Nirmal Gram Puraskar 2001. Subsidy reduced to an incentive of Rs 600 – 3200, by 2007. Involvement of PRIs, NGOs. Expectations of 70+ coverage

**Nirmal Bharat Abhayan 2012**

“TSC was neither Total nor Sanitation and not even a Campaign”, greater focus on PRIs but with even larger subsidies for household toilets. States take funding and monitoring responsibility. Convergence with employment guarantee programs. Saturation of toilets.

**Swachh Bharat Abhayan 2014**

Convergence with employment guarantee programs seen as a bottleneck – increase in subsidy. Recognized need to measure use. Greater flexibility to States. CLTS recommended.



# Rural Sanitation: a wicked problem

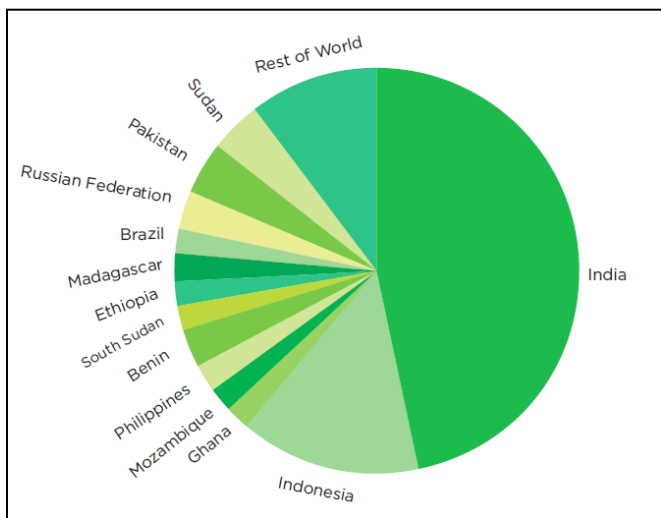
Recent evidence from the SQUAT Survey (more than 20,000 HHs):

- **A preference for open defecation:** over 40% of households with a working latrine have at least one member who defecates in the open
- Psychology of the “un-clean” – create distance, **build high capacity pits...**
- Cleaning toilets left to **particular socially marginalised sections of society**
- Many respondents say there are benefits to defecating in the open: 47% of those that defecate in the open say they do so because it is **pleasant, comfortable, or convenient**
- Rural households in India **do not build inexpensive latrines** like the ones in countries in the region or Southeast Asia, and sub-Saharan Africa
- However, **most rural households can afford to build inexpensive toilets** that can reduce open defecation and protect health
- Most people who own a **government-constructed latrine** continue to defecate in the open - this is mentioned as a choice
- **Community toilets are not preferred in rural areas** and deep caste, gender, religious, and economic inequalities make the cooperation needed to maintain community latrines incredibly complicated

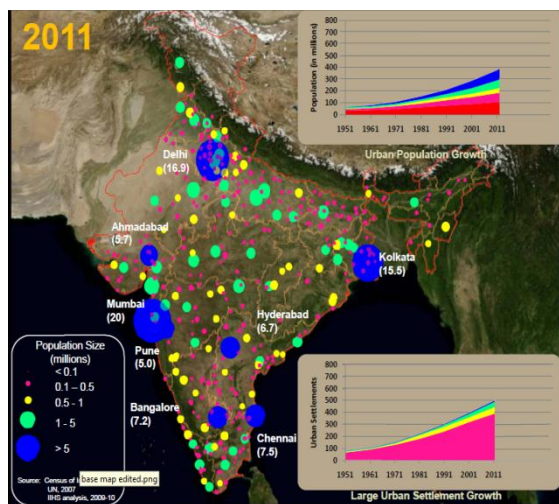
Some Outstanding Issues:

- **Slippage** including lack of toilet use even after they are constructed or a re-lapse in behaviour can easily take place without a collective community resolve
- **Missing toilets** – 3.5 crs more like 1 crs but still not adequately explained

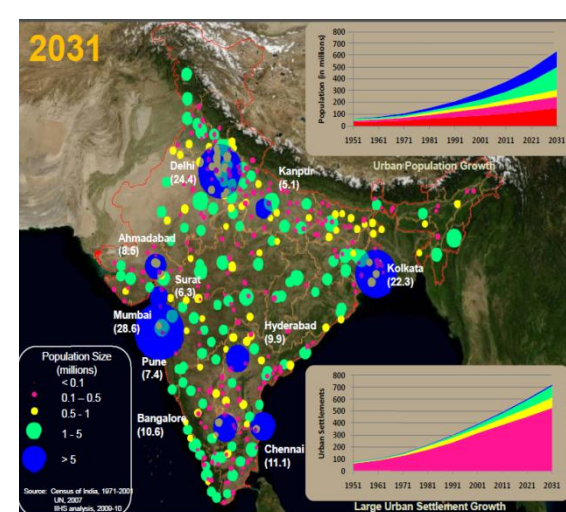
# The Scale of India's Urban sanitation crisis is now recognised as massive...



52 % of global urban OD



11% of global urban popl



60% additional urban popl  
(221 m) Indonesia/ Brazil

...there is an increased realization of the significance of this crisis :

Health Benefits; Miasma-water borne – sanitation related - stunting

Resource efficiencies

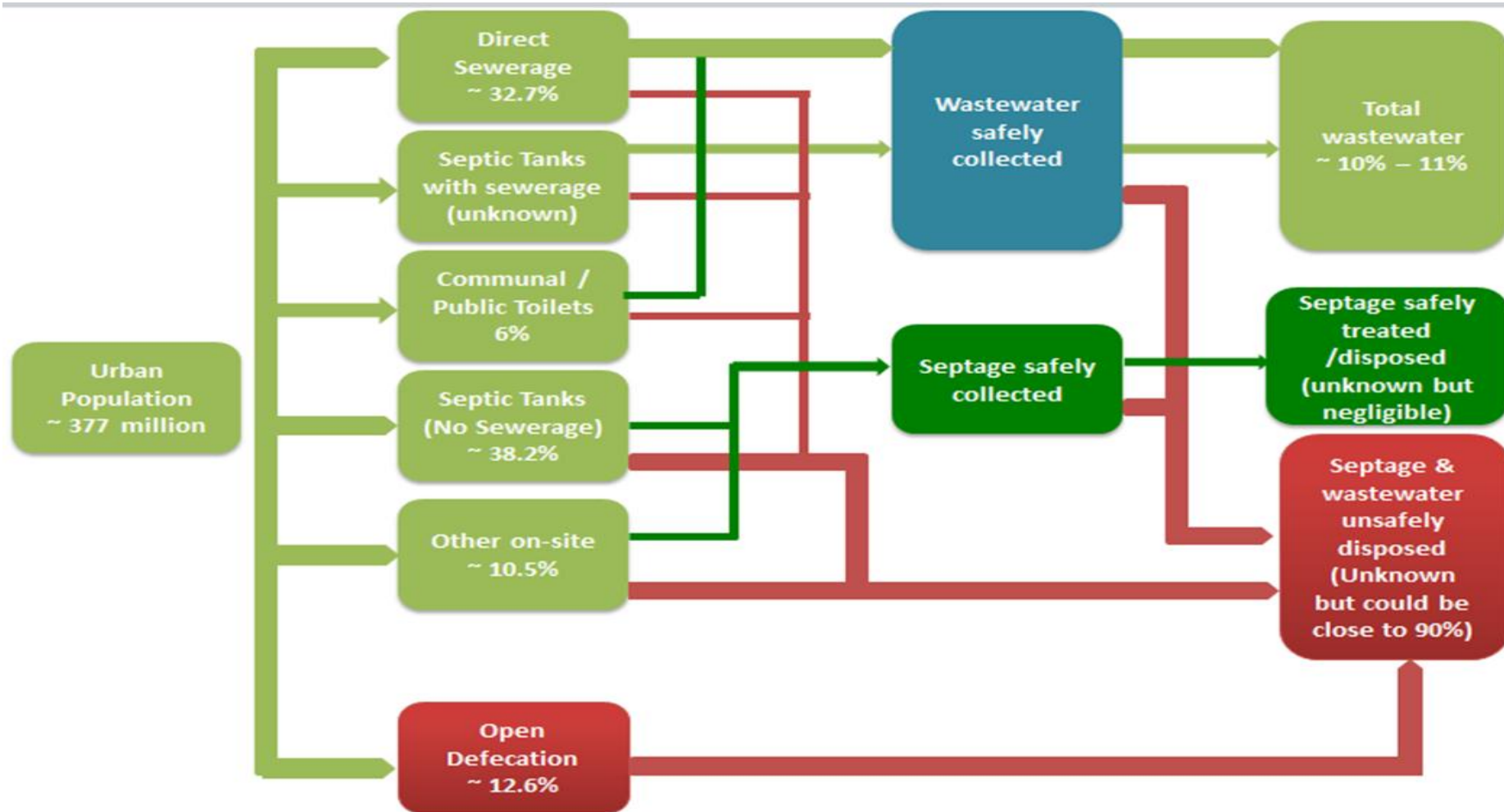
Climate Change resilience

Economic Benefits

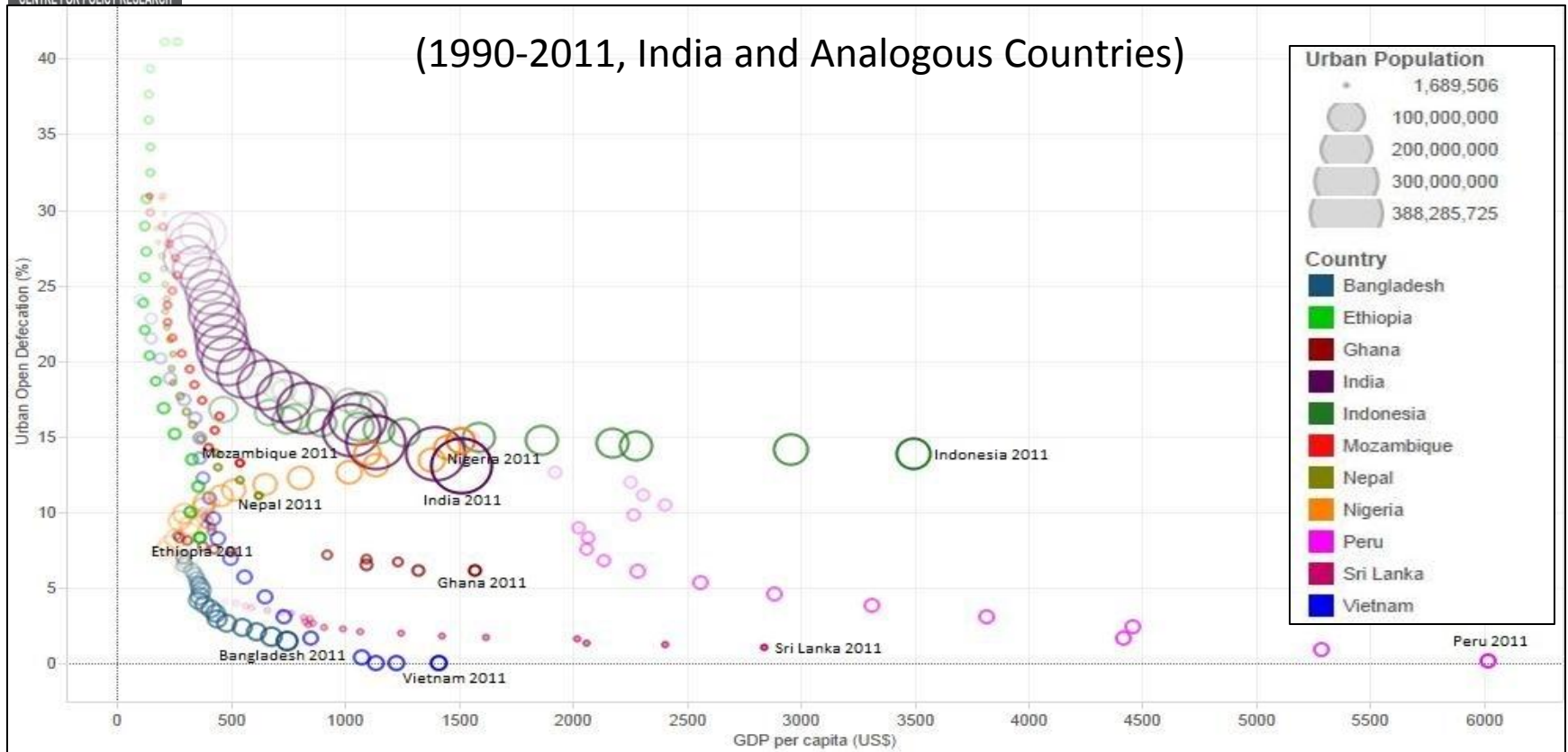
Equity and dignity – Poor, women, children, work related

# Urban Sanitation: Environmental sanitation is emerging to be the predominant challenge

## Wastewater and Septage flow



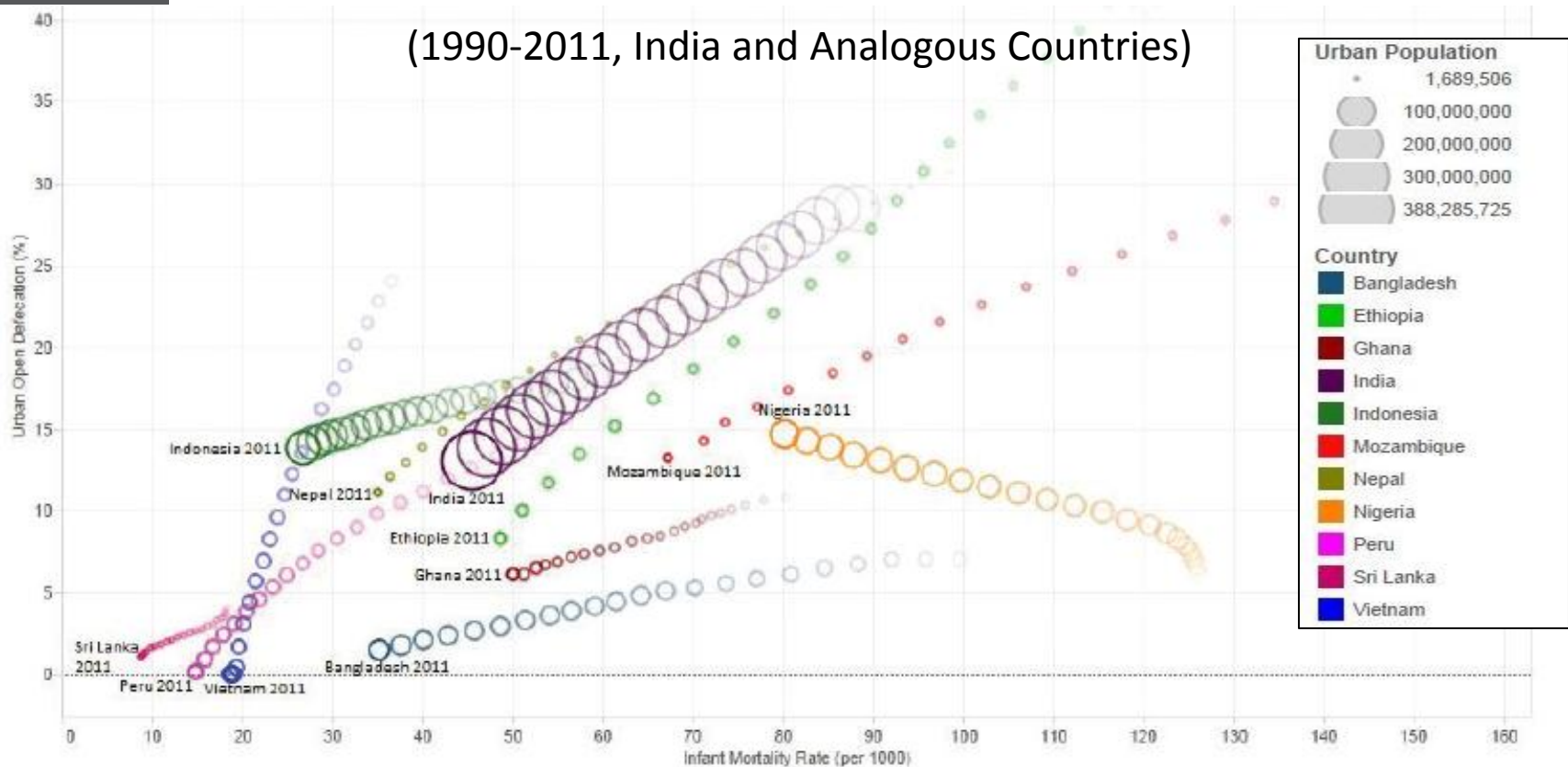
# Open Defecation in Urban Areas has been decreasing, there is a long way ahead ...



Source: World Health Organization and UNICEF (2013), World Bank (2013)

Ethiopia and Vietnam have performed well in terms of reduction of urban open defecation. Indonesia's GDP per capita has increased significantly but reported reduction of urban open defecation has been less significant. India, Nepal and Mozambique have had similar improvement in the reduction of urban open defecation, but India has seen higher growth in per capita GDP in this period.

# Open Defecation in Urban Areas and Infant Mortality rates, a long way ahead ...

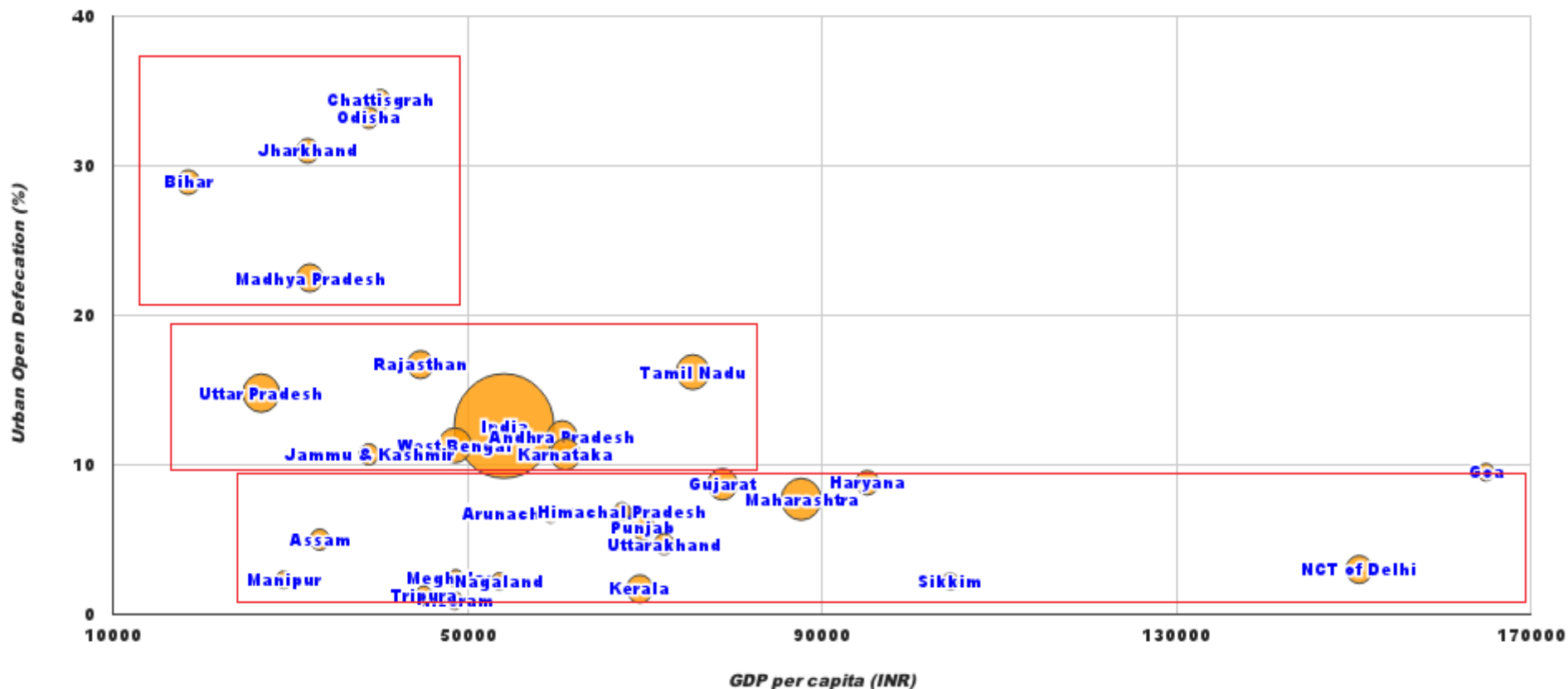


Source: World Health Organization and UNICEF (2013), World Bank (2013)

Indonesia's IMR has fallen sharply like India, but its urban OD has not fallen as sharply. Vietnam, Peru and Sri Lanka, have reduced OD significantly, with Vietnam being the weaker among the three in terms of IMR reduction. Ethiopia and Mozambique have had strong IMR reductions. Nigeria is an outlier and OD has gone up alongside decreasing IMR.



# State differences: Urban Sanitation

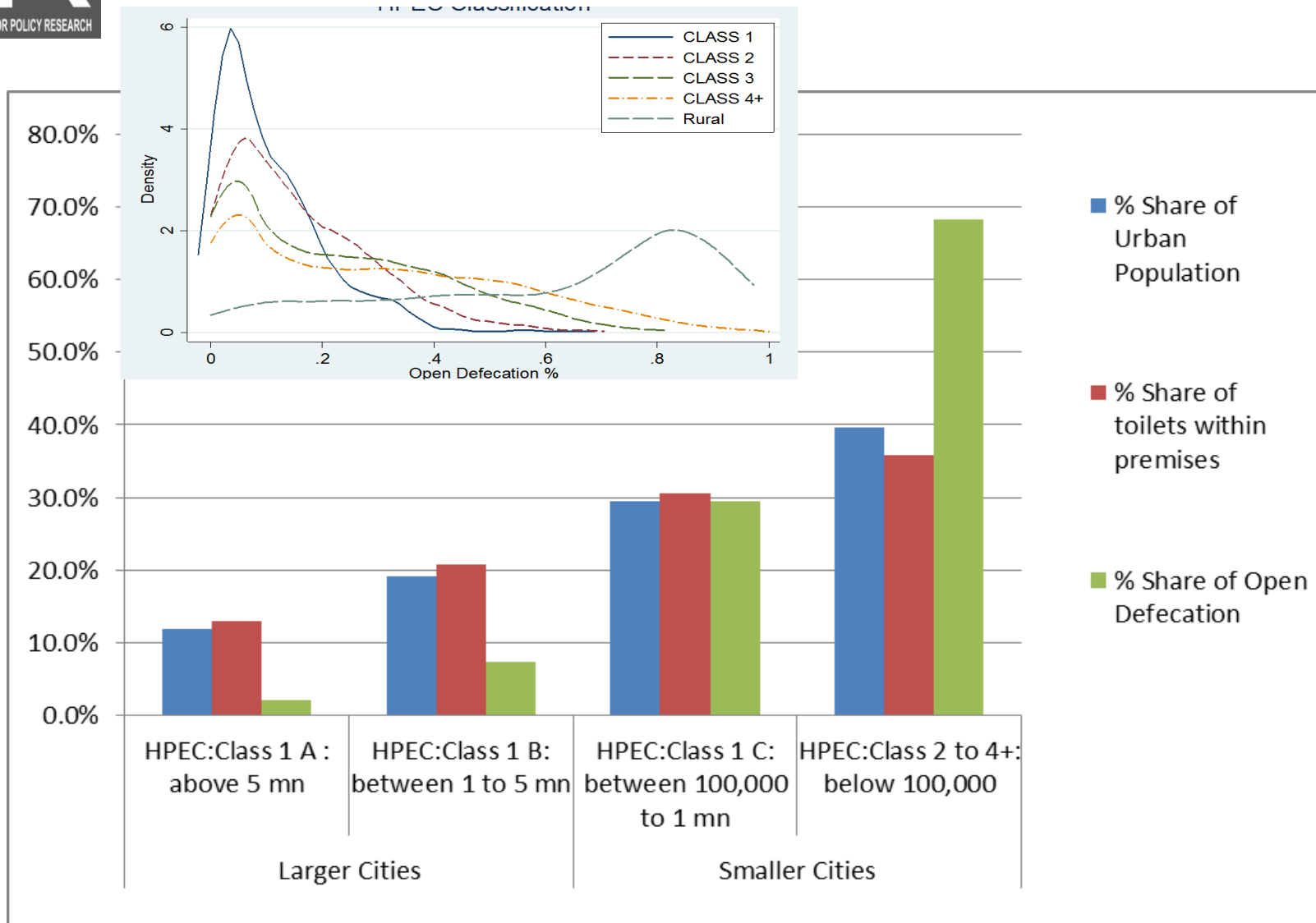


Source: Census of India (2011), Planning Commission (2012)

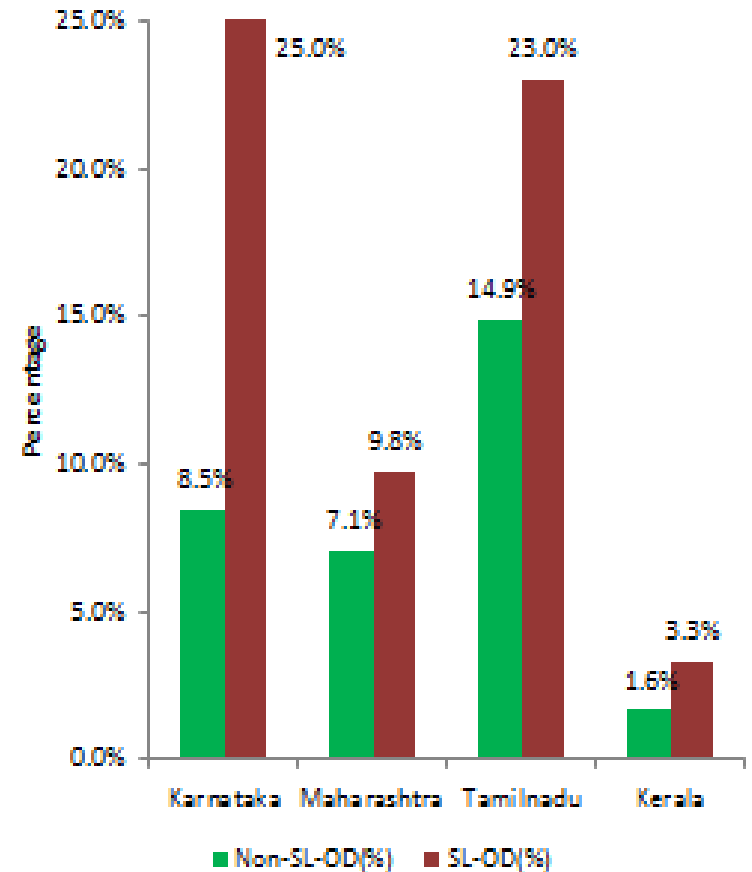
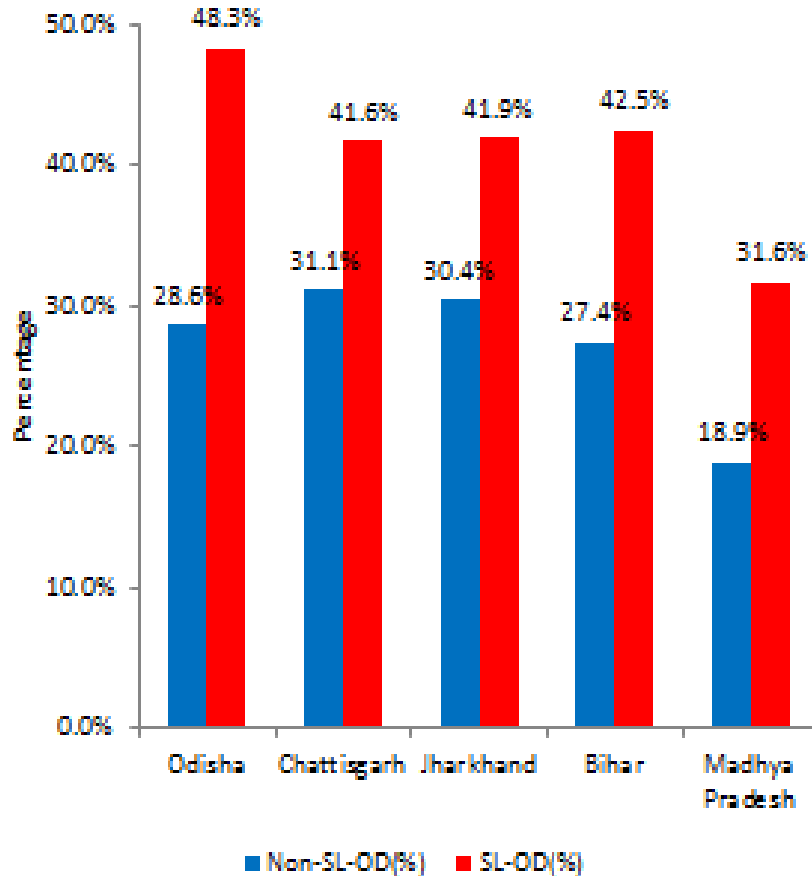
Urban Open defecation in India, as against per capita State GDP shows three clear clusters

1. Smaller, higher income states, have lower OD;
2. Large sized states have OD similar to India's average ;
3. Medium sized lower urbanized states have higher OD

# Sanitation Situation across city size: 2011



# OD not restricted to slums alone, higher slum and non slum OD in lesser urbanized states



# Financing basic services - National Efforts

| SNo. | Five Year Plan | Year (s)  | Name of the Scheme   |
|------|----------------|-----------|--|
| 1    | II             | 1956-61   | Urban Community Development (UCD)  |
| 2    | III            | 1961-66   | Sites and Services   |
| 3    | IV             | 1969-74   | Environmental Improvement of Urban Slums (EIUS), Accelerated Rural Water Supply Programme (ARWSP)  |
| 4    | V              | 1974-79   | Urban Land (Ceiling & Regulation) Act, Minimum Needs Program (MNP), Integrated Development of Small & Medium Towns (IDSMT)                   |
| 5    | VI             | 1980-85   | Urban Basic Services Programme, Integrated Low Cost Sanitation Scheme (ILCS)   |
| 6    | VII            | 1985-90   | Urban Basic Services for the Poor (UBSP), Central Rural Sanitation Program (CRSP), Nehru Rozgar Yojana (NRY). Ganga Action Plan              |
| 7    | VIII           | 1992-97   | Accelerated Urban Water Supply Programme (AUWSP), Mega-City Scheme, National Slum Development Programme. National River Conservation Program |
| 8    | IX             | 1997-2002 | Valmiki Ambedkar Awas Yojana (VAMBAY), Total Sanitation Campaign (TSC)   |
| 9    | X              | 2002-2007 | Nirmal Gram Puraskar (NGP) - 2003  |
| 10   | X+XI           | 2004-14   | CCF, URIF, Jawaharlal Nehru National Urban Renewal Mission (JNNURM), National Urban Sanitation Policy (NUSP)                                 |
| 11   | XI             | 2009-14   | Rajiv Awas Yojana (RAY), National Urban Livelihoods Mission (NULM),  |

**1<sup>st</sup> Period 1950 to the 74 CAA**

**2<sup>nd</sup> Period 1992 to the JNNURM**

**3<sup>rd</sup> Period JNNURM onwards**



# Past National Programs : Steady progression

|                           | EIUS<br>1989 | ILCS<br>1980 | CRSP | UBSP<br>1990 | NRCP          | NSDP<br>1996 | TSC            | VAMBAY<br>2001 | JnNURM<br>2005   | AHIP<br>2009 | ISHUP<br>2009 |
|---------------------------|--------------|--------------|------|--------------|---------------|--------------|----------------|----------------|------------------|--------------|---------------|
| ~Size USD Mil             | 150          | 75<br>(470)  | 140  | 30           | 250<br>(1000) | 775          | 1000<br>(4500) | 200            | 13,333<br>(5350) | 1100         | 132           |
| Shelter                   |              |              |      |              |               | ✓            |                | ✓              | ✓                | ✓            | ✓             |
| Urban Basic Services      | ✓            | ✓            |      | ✓            | ✓             | ✓            |                | ✓              | ✓                |              |               |
| Community Infra           | ✓            |              |      | ✓            | ✓             | ✓            | ✓              | ✓              | ✓                | ✓            |               |
| Livelihood                |              |              |      | ✓            |               |              |                |                |                  |              |               |
| Land & Tenure             |              |              |      | ✓            |               |              |                |                | ✓                |              |               |
| Policy Changes            |              |              |      |              |               |              |                |                | ✓                |              |               |
| Access to credit          |              |              |      |              |               |              |                | ✓              |                  |              | ✓             |
| Individual Toilet Funding |              | ✓            | ✓    | ✓            |               | ✓            | ✓              | ✓              |                  | ✓            | ✓             |
| PPP                       |              |              |      |              |               |              |                |                | ✓                | ✓            |               |
| Scale of the programme    |              |              |      |              |               |              |                |                |                  |              |               |

In JNNURM a program for urban infrastructure improvement 40% of the resources have been allocated for slum upgrading and housing

# Basic services - Institutional evolution over the years

1950s till 74th Amendment → 74th CAA till JnNURM → JnNURM onwards

|                    | Funds           |                   | Functions       |                   | Functionaries   |                   |
|--------------------|-----------------|-------------------|-----------------|-------------------|-----------------|-------------------|
|                    | WS and Sewerage | SWM + Com Toilets | WS and Sewerage | SWM + Com Toilets | WS and Sewerage | SWM + Com Toilets |
| Central Government |                 |                   |                 |                   |                 |                   |
| State Government   |                 |                   |                 |                   |                 |                   |
| Local Government   |                 |                   |                 |                   |                 |                   |

# Stylised facts for the three periods

## 1950-1992 (74<sup>th</sup> CAA)

- Low scale funding from GoI – Limited fiscal strength
- Employee/Public Housing
- Donor driven pilots
- Move from Provider to facilitator
- Urban Community Development – Self help pilots
- HUDCO / Housing Boards
- World Bank Sites and Services projects (1970-80s)
- UBSP/ Slum Upgrading / World Bank Slum Sanitation Program

## 1992-2005 (JNNURM)

- Large funding deficits in Urban Infrastructure and Basic services
- Increased central funding not viable
- GoI recovering from financial crisis
- Facilitator working with NGOs, Bi-Multilaterals on making markets work including for the poor
- First rounds of PPPs
- Focus on encouraging debt markets
- Credit rating of ULBs
- Pooled funding/Credit enhancement for infrastructure finance

## 2005 – 2014 (SBM)

- Move to reform based grant funding for core urban infrastructure
- As urban seen key to economic growth
- Fiscal robustness
- **Key challenge shifts from quantity to quality of funding**
- Funding at scale
- More than 200 sewerage and WWT projects ~ Rs 18000 crs.
- Sewerage projects only after Water supply, ahead of bridges/flyovers/roads, urban transport, Storm water SWM etc.

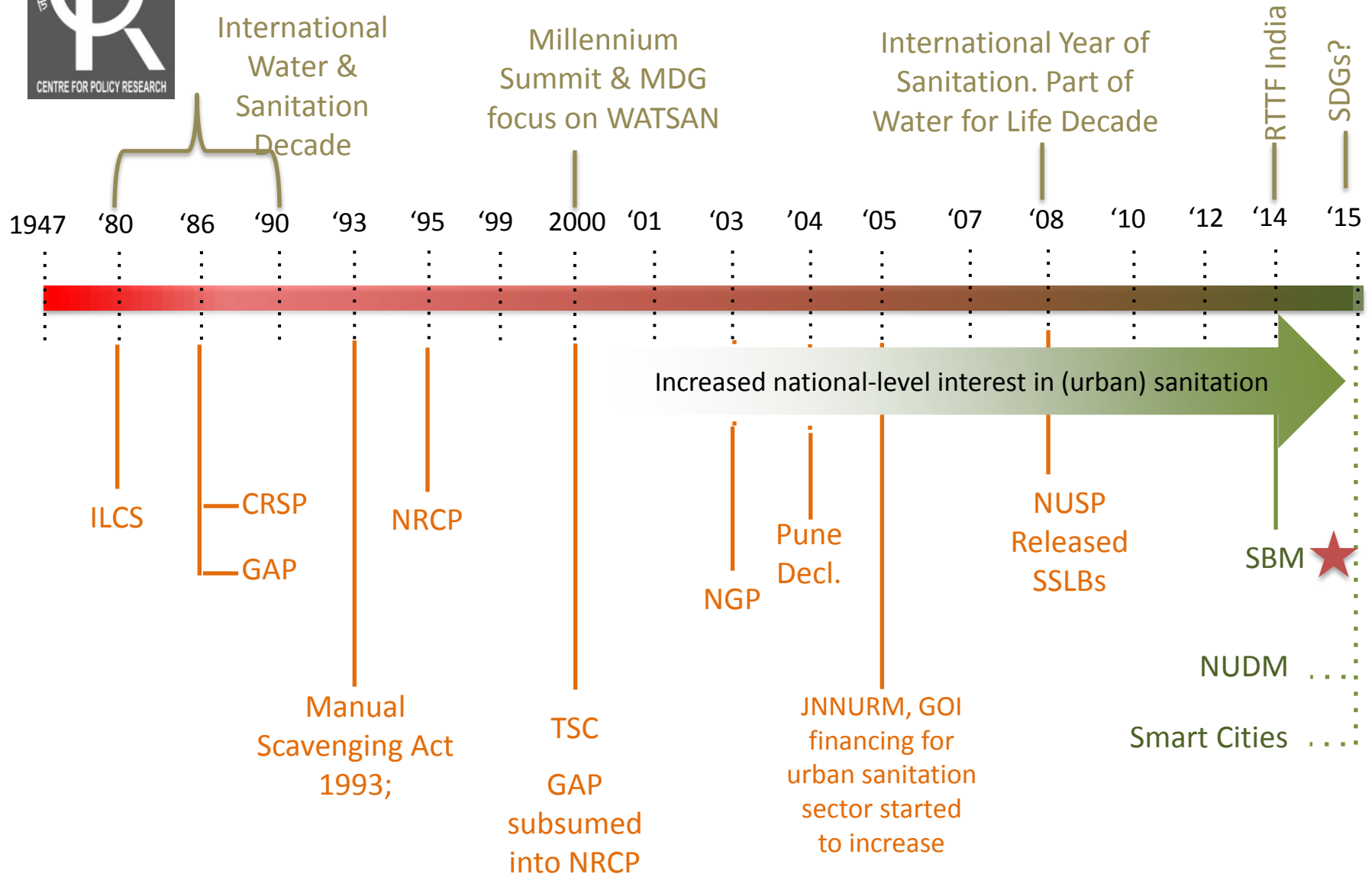
## Lessons in program design – SBM, NUDM, Smart Cities

- Scale of funding important
- However, larger amount of top down central funds intrinsically provides biases which need to be corrected through program design which include
  - Reducing incentives to leverage debt
  - Incentivising larger projects/costlier infrastructure
  - Stronger requirements to Micro manage project design and implementation
  - Reduces incentives to innovate at the local/state level
- Predetermined Project funding structure is a big negative form the project finance and risk structuring perspective
- Smoother processing of Tranche based funding mechanism is required to reduce project implementation delays
- Smarter resolution of cost escalations and cost sharing required
- Unfinished / delayed projects lead to challenges at all levels
- Capacities at all levels and stakeholders need enhancement – local, state, national, private sector, consultants, NGOs
- Reform diagnosis totally absent at the city and state level
- Assumption that same 23 reforms are as impactful in all cities/states is flawed
- No requirement / chance / mechanism to renegotiate tripartite MoU due to changing understanding or context
- Result is that Reforms strengthened in stronger states
- Measures of outcomes/impacts not clear
- Same treatment for better and weaker performers (capping)





# History of Sanitation Policy and Programme Development, close link with sector developments internationally



ILCS- Integrated Low-cost Sanitation, CRSP- Central Rural Sanitation Programme, GAP- Ganga Action Plan, NRCP- National River Conservation Programme, TSC- Total Sanitation Campaign, NGP- Nirmal Gram Puraskar, JNNURM- Jawaharlal Nehru National Urban Renewal Mission, NUSP- National Urban Sanitation Policy, SBM – Swachh Bharat Mission, NUDM – National Urban Development Mission; Source : SCI-FI Analysis



# Recent Policy evolution : Urban Sanitation

**Pune Declaration 2004**

Past some central and a number of EAP sanitation projects. Innovations in Tamil Nadu and Maharashtra. MoUD Workshop lead to a declaration on Open Defecation Cities, which was followed with a Task Force to study and recommend a draft Policy

**JnNURM 2005 - 15**

First National Flagship Urban Scheme. Reform based project funding grants with state shares. WatSan ~ 70% funding and sanitation, only underground sewerage and WWTPs, no toilets, no innovations

**National Urban Sanitation Policy 2008; SSLB, CSanR**

Open-defecation free cities  
Integrated city-wide approach to sanitation  
Awareness generation  
State Sanitation Strategies, City Sanitation Plans

**Swachh Bharat Mission (Urban) 2014**

SBM (Urban) is one of a set of urban schemes. Not reform linked. First UD scheme targeting HHs as beneficiaries. IHL Gol subsidy of Rs 4000/- ; Community toilets 40% as Viability Gap; Public toilets – no central grant funding (private/CSR support), Swachh Bharat Kosh (Private contributions)



## ***Shri Narendra Modi, Hon'ble Prime Minister of India, Various Speeches 2014***

***“...We are launching Swachh Bharat Mission, a massive mass movement that seeks to create a Clean India. Cleanliness was very close to Mahatma Gandhi's heart. A clean India is the best tribute we can pay to Bapu when we celebrate his 150th birth anniversary in 2019...”***

***“If we collectively make it a people’s movement then I don’t see any reason why we will not be counted among the clean cities and nations of the world”***

***“... the work of cleaning India cannot be done by one person, or by Government functionaries alone – it has to be done by 125 crore people....”***

***“I urge every one of you to devote at least hundred hours every year, that is two hours every week towards cleanliness”***

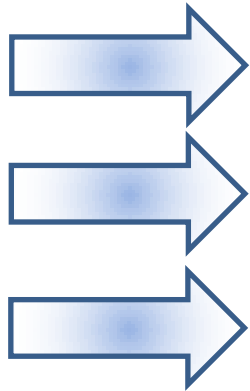


# Significant Change in Strategy

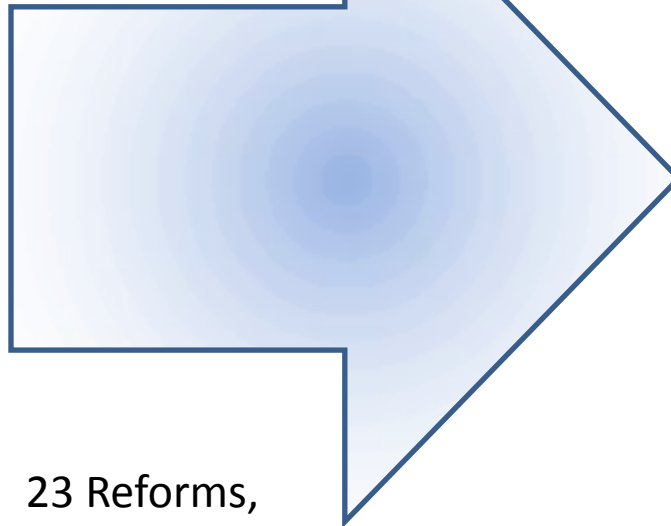
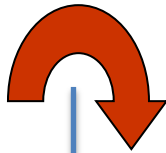
74 CAA –  
JNNURM  
(1992-  
2005)

JNNURM  
(2005-  
2015)

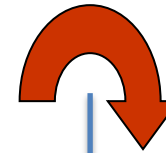
Current  
Urban  
Strategy



Entitlement  
based, city  
size and  
sector based  
programs



23 Reforms,  
Large city  
focus, large  
grant  
funding



Competition

100  
SMART  
Cities

500 NUDM  
Cities

Reforms

4041 SBM Cities

Basic Sanitation is delinked from reforms; Individual responsibility stressed on, FSM funded in larger cities (60% of urban population)



Supported by



**India potentially has more than a billion people or 40% of the OSS users who potentially need FSM services.**

**THANK YOU**