


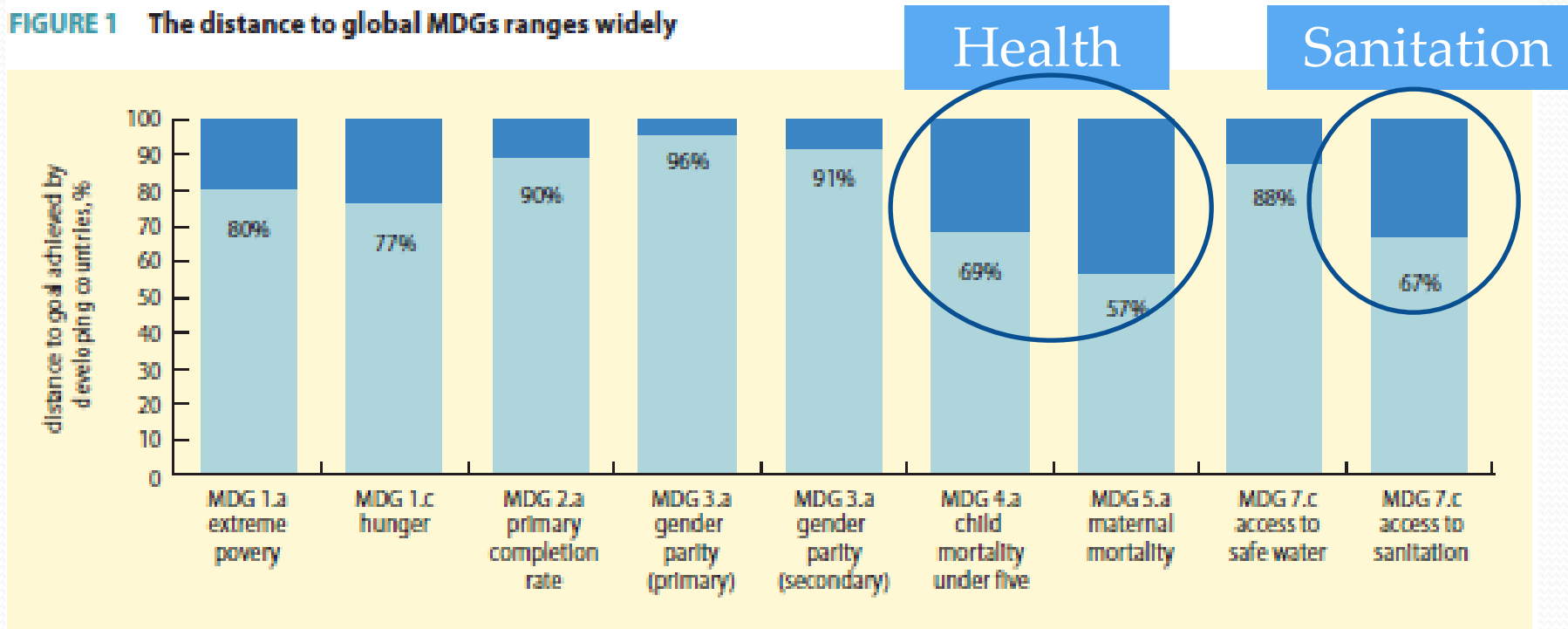
Water Supply and Sanitation Progress on MDGs and Financing Achievements and Challenges

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CEPT University
August, 2011

- 
- **Progress and challenges in meeting the MDGs**
 - Trends in financing water and sanitation sector

Progress on meeting MDG targets

FIGURE 1 The distance to global MDGs ranges widely

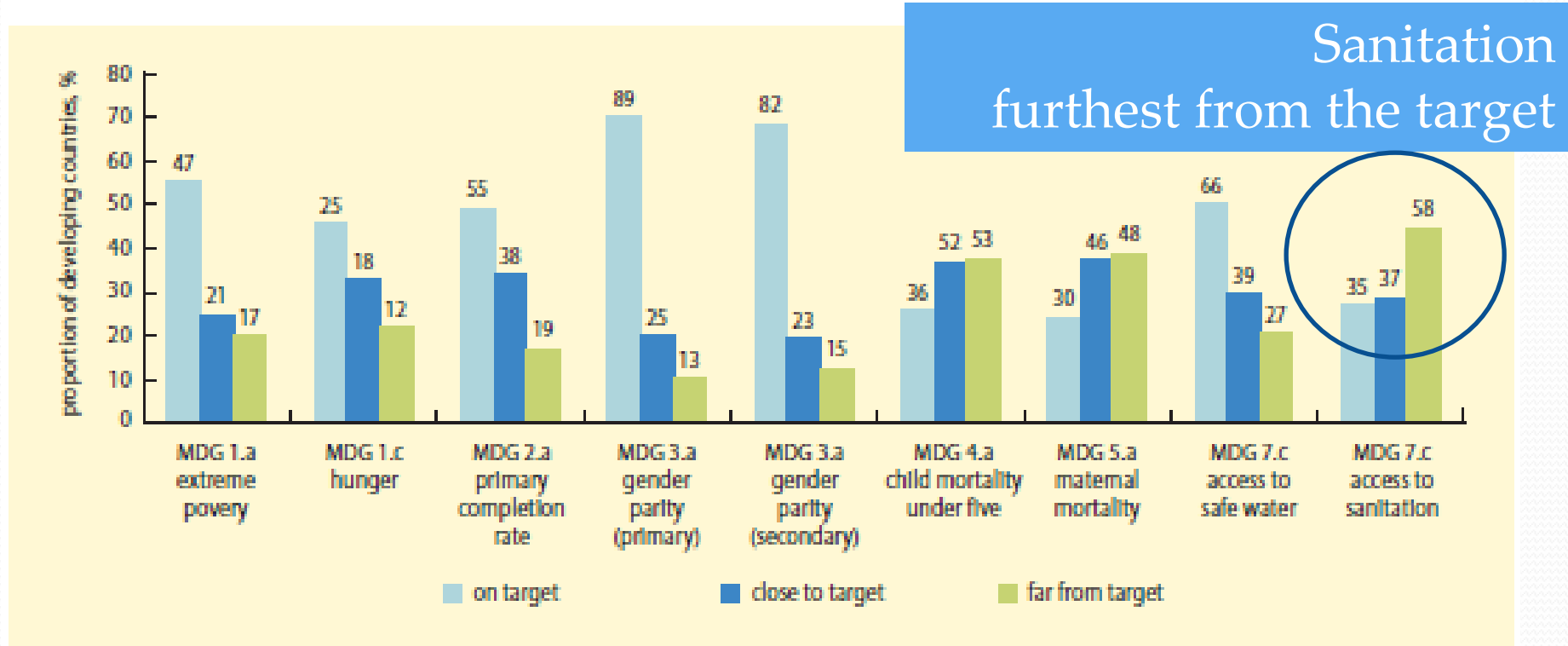


Source: World Bank staff calculations based on data from the World Development Indicators database.

Note: Distance to goal achieved in this graph is a weighted average of the latest indicators, using population weights in 2009.

Distance to MDG targets

FIGURE 2 More than two-thirds of developing countries are on track or close to being on track



Source: World Bank staff calculations based on data from the World Development Indicators database.

Note: The figure above each bar is the number of countries.

Sanitation remains a challenge in all continents

Sanitation: most countries in Sub-Saharan Africa and in Asia are not on track to meet the MDG target

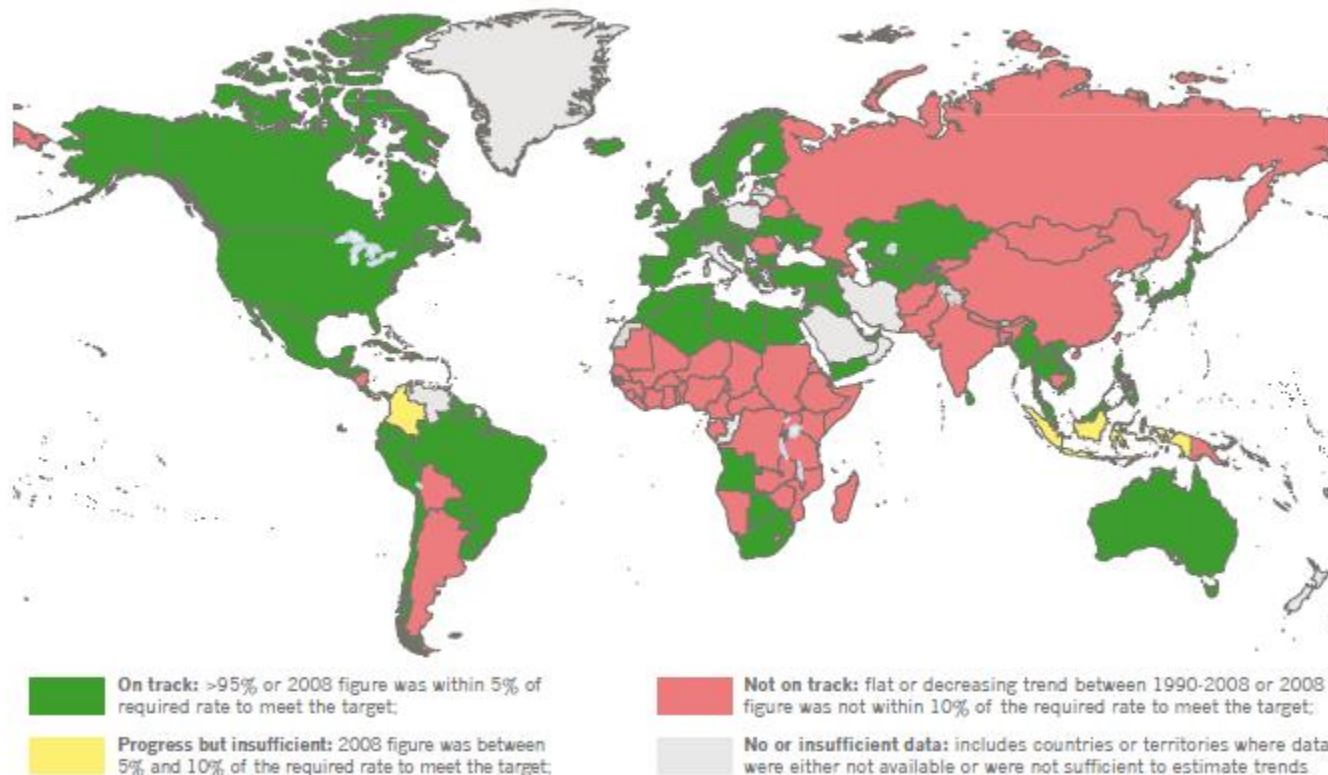


Figure 8 Sanitation: Progress towards the MDG target, 2008

Sanitation will miss the target

Sanitation will miss the target By 1 billion people

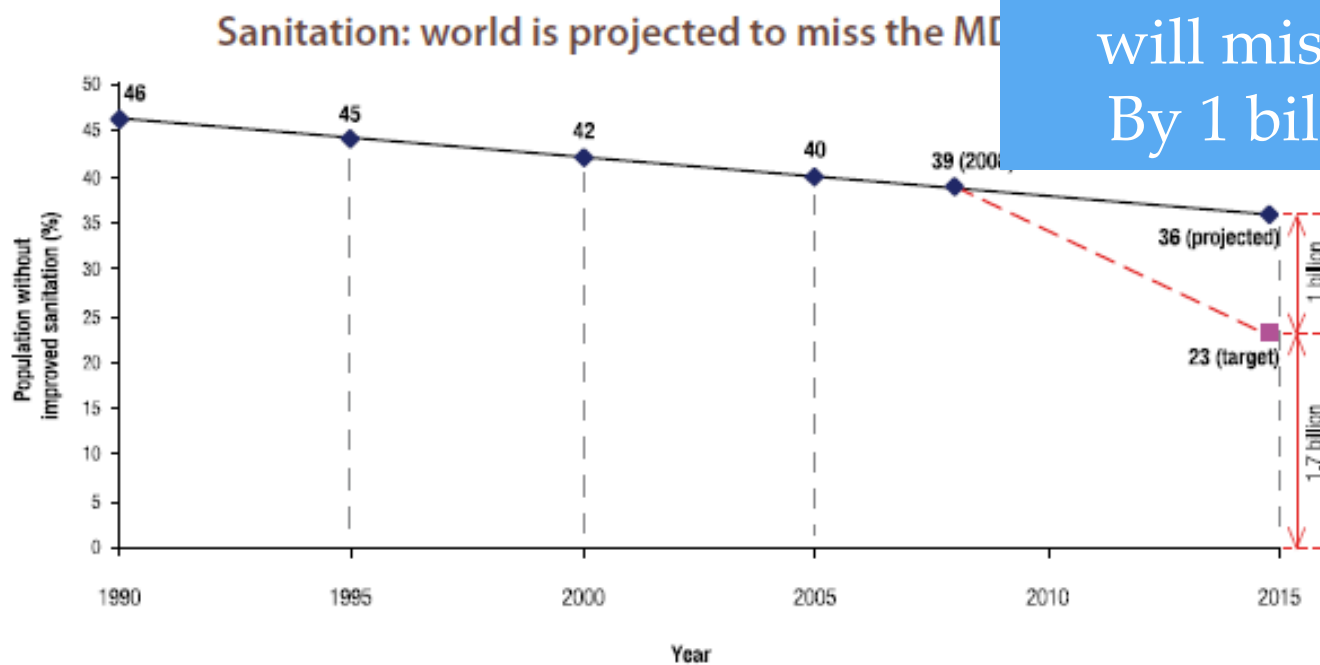


Figure 7 Global progress towards the MDG target: trend in use of improved sanitation 1990-2008, projected to 2015

The sanitation ladder

An new way to look at sanitation practices:

Readers of the *BMJ (British Medical Journal)* recently identified sanitation as “the most important medical advance since 1840.” Nevertheless, only 62 per cent of the world’s population has access to improved sanitation – that is, uses a sanitation facility that ensures hygienic separation of human excreta from human contact. A further 8 per cent shares an improved facility with one or more households, and another 12 per cent uses an unimproved sanitation facility – one that does not ensure hygienic separation of excreta from human contact. The remaining 18 per cent of the world’s population practises indiscriminate or open defecation.

In this report, sanitation coverage is presented as a four-step ladder that includes the proportion of the population:

- practising open defecation
- using an unimproved sanitation facility
- using a shared sanitation facility
- using an improved sanitation facility.

Figure 2 summarizes trends in the steps of the sanitation ladder for the various MDG regions. It shows that sanitation coverage in the developing world increased from 41 per cent in 1990 to 53 per cent in 2006. This means that an additional 1.1 billion people in developing regions are now using improved sanitation facilities. Steep coverage gains in South-eastern and Eastern Asia, which both saw 17 percentage-point increases, contributed

OPEN
DEFECATION

Open defecation: Defecation in fields, forests, bushes, bodies of water or other open spaces, or disposal of human faeces with solid waste.

UNIMPROVED

Unimproved sanitation facilities: Facilities that do not ensure hygienic separation of human excreta from human contact. Unimproved facilities include pit latrines without a slab or platform, hanging latrines and bucket latrines.

SHARED

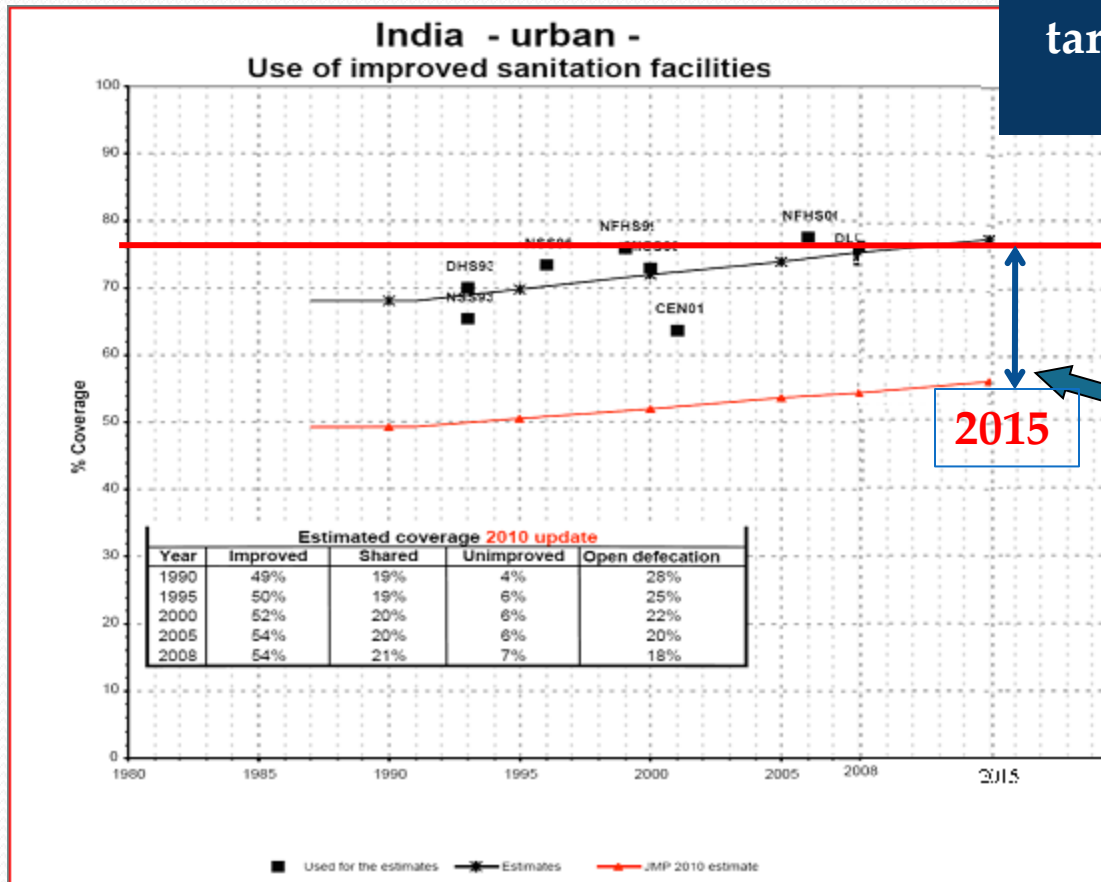
Shared sanitation facilities: Sanitation facilities of an otherwise acceptable type shared between two or more households. Shared facilities include public toilets.

IMPROVED

Improved sanitation facilities: Facilities that ensure hygienic separation of human excreta from human contact. They include:

- Flush or pour-flush toilet/latrine to:
 - piped sewer system
 - septic tank
 - pit latrine
- Ventilated improved pit (VIP) latrine
- Pit latrine with slab
- Composting toilet.

India – Progress on MDG sanitation target



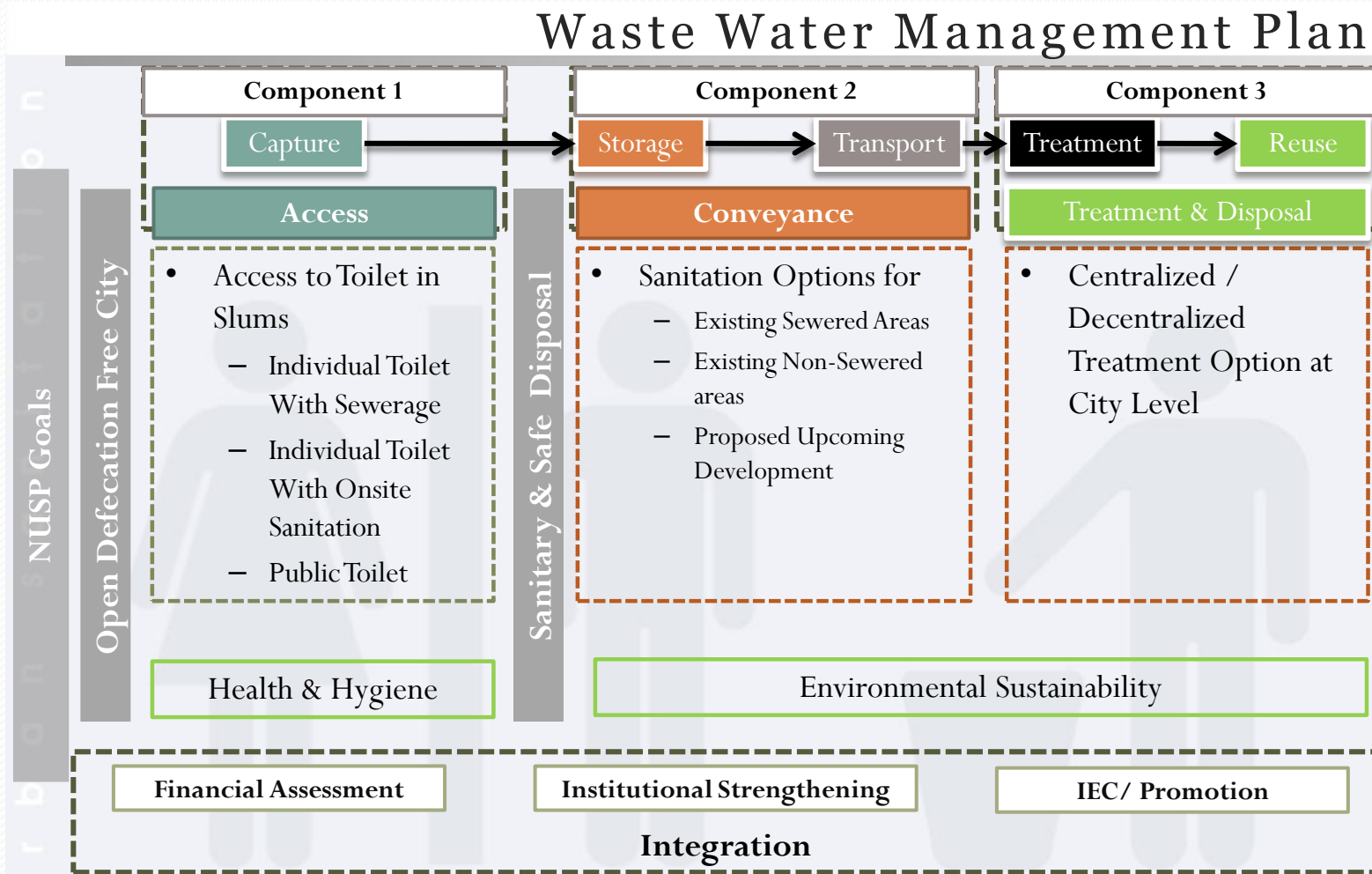
No gap in meeting the target if shared facilities are included

MDG Target – 75%

Gap in meeting the target

2015

The full value chain for sanitation



Drinking water – doing better

Drinking-water: except for Sub-Saharan Africa, most countries are on track to meet the MDG target

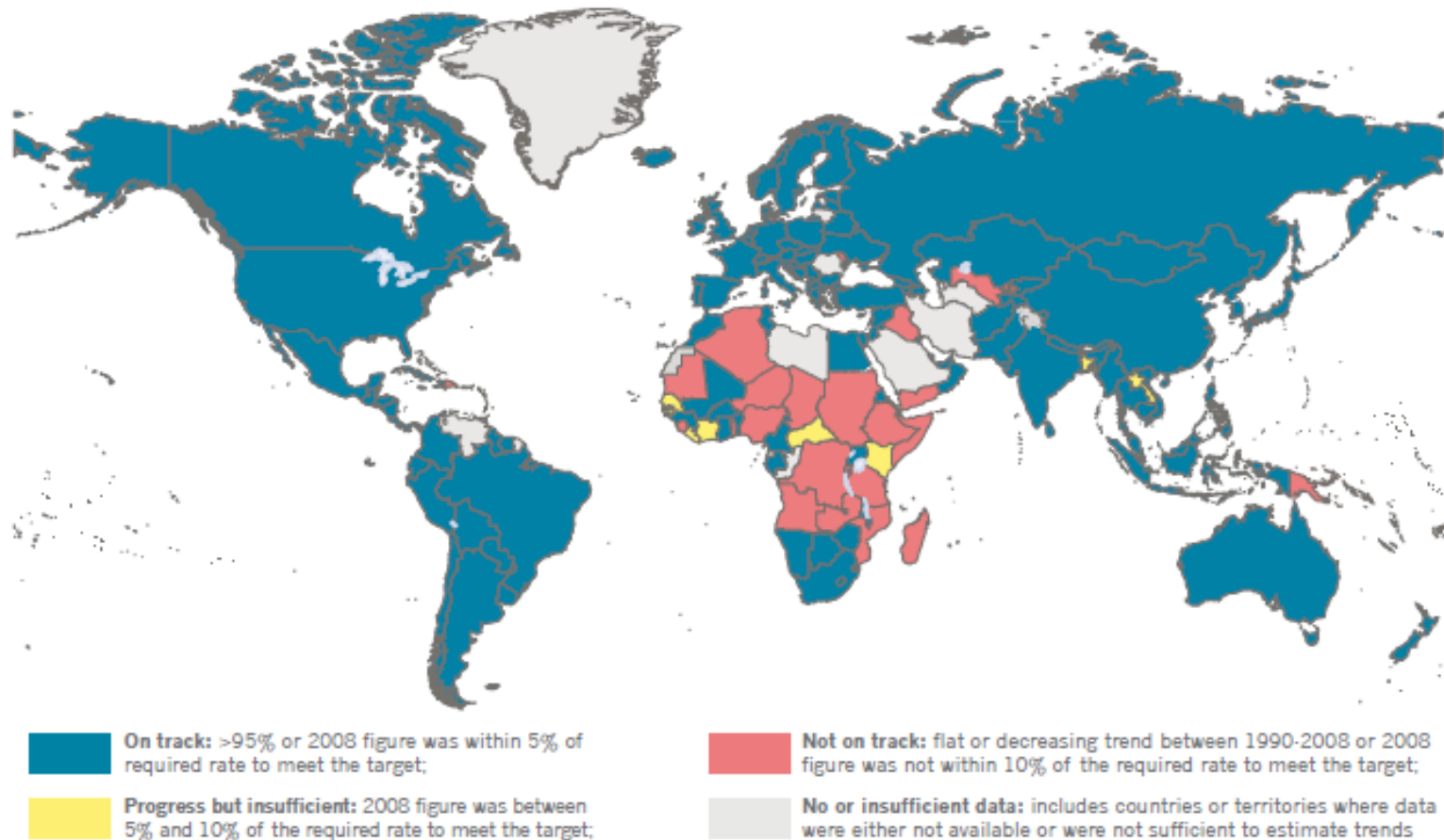
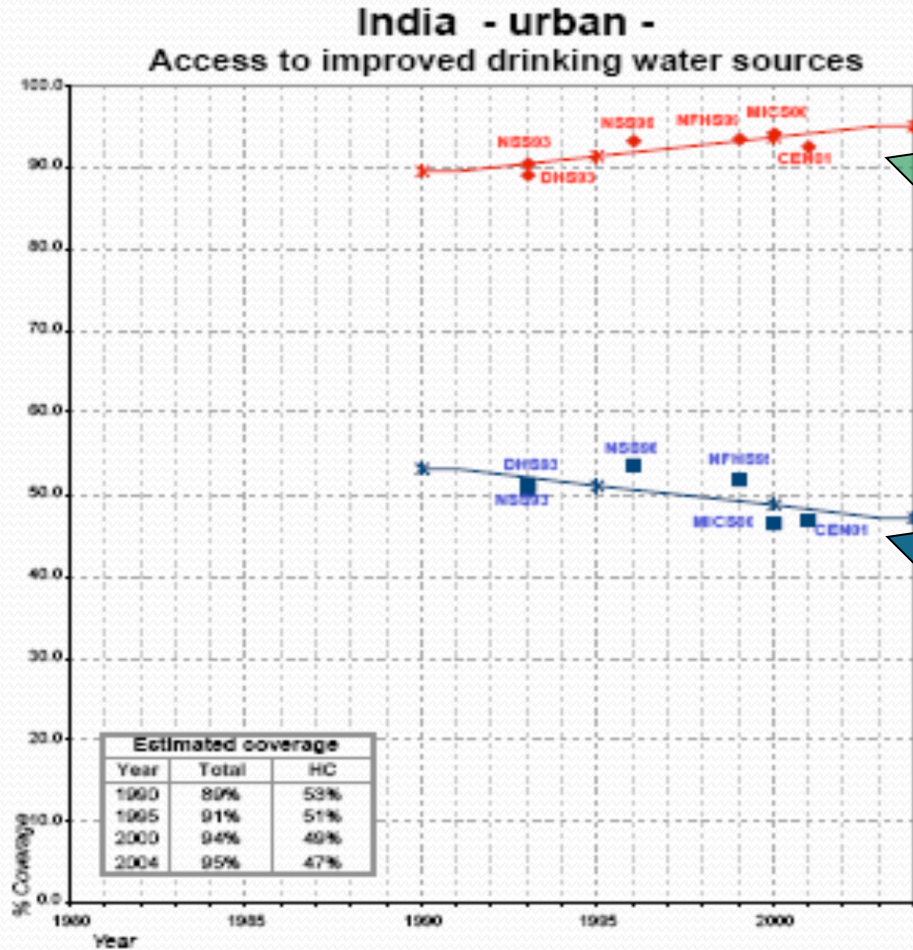


Figure 10 Drinking-water: progress towards the MDG target, 2008

Source: WHO-UNICEF Joint Monitoring Program, "Progress on Sanitation and Drinking Water, 2010 Update", 2010.

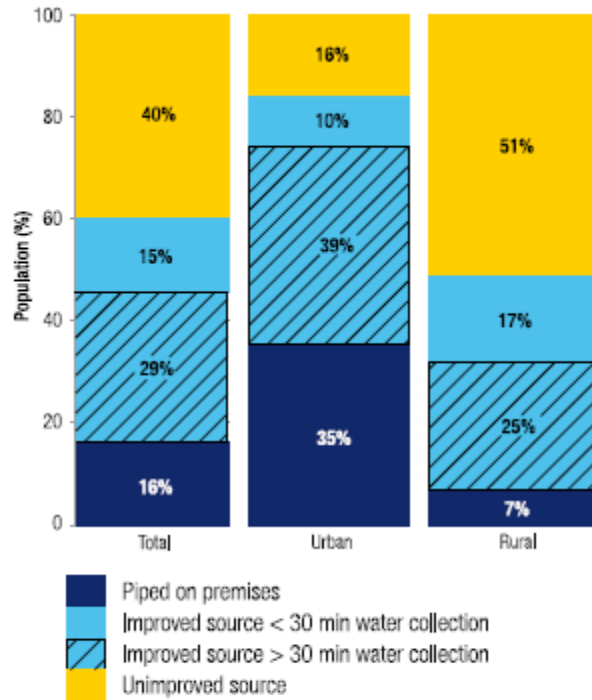
India urban water supply - improved basic access but decline in household level services



Basic access in urban India has reached nearly 95% by 2004.

% Household level connections in urban India has declined from 54% in 1990 to 47% by 2004.

Time to collect water in urban areas



In many African countries, one third of the improved drinking-water sources that are not piped on premises need a collection time of more than 30 minutes.

Figure 31 Proportion of the population spending half an hour or less, or more than half an hour, to collect water from an improved source, or using water from an unimproved source, Sub-Saharan Africa

THE 'WATER CRISIS IN CITIES' ..SUPPLY TWICE IN A MONTH

PERFORMANCE ASSESSMENT I SYSTEMS- PARINERS' MEE I 2011



THE 'WATER DAY' IN JALNA..

JALNA

NON WATER DAYS...

PERFORMANCE ASSESSMENT | SYSTEMS- PARINERS' MEE | 2011

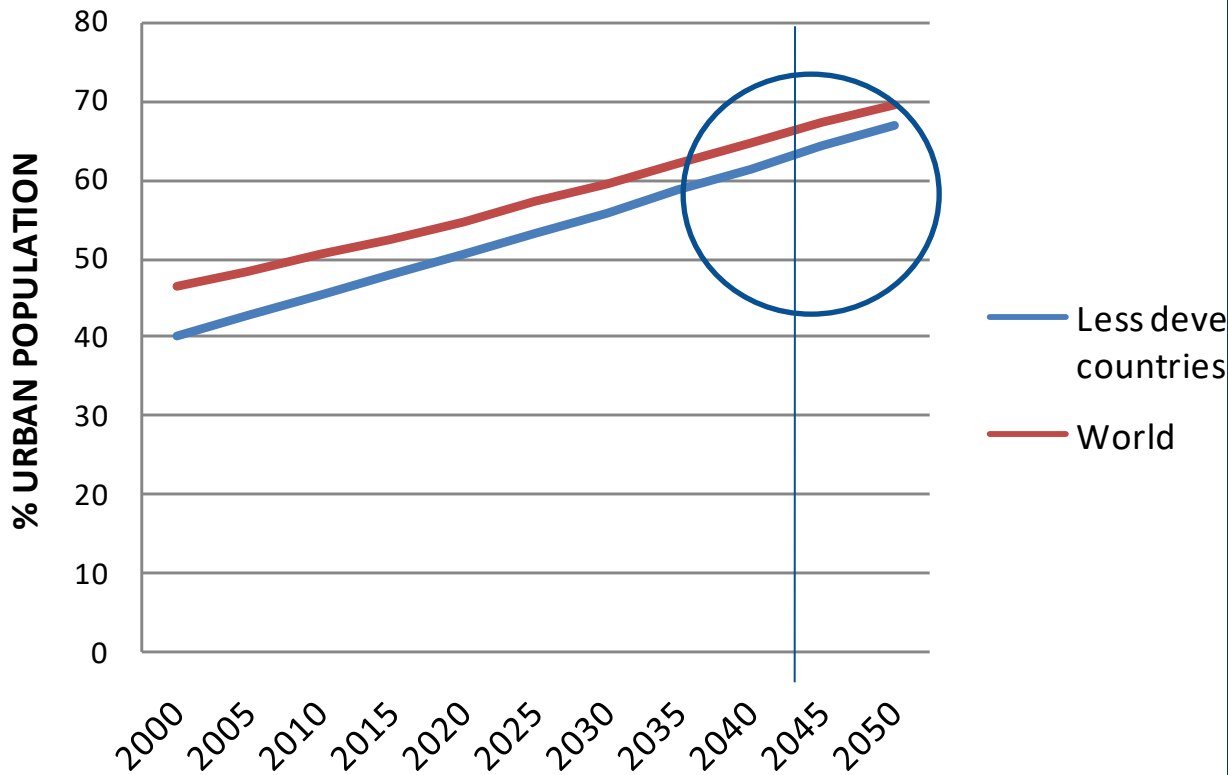


Status and Reliability - Water Supply Services

	GUJARAT		MAHARASHTRA	
	SLUM	NON SLUM	SLUM	NON SLUM
% of households with Access to water supply		98.8	97.1	98.6
% households with access to on premises water supply		85.8	41.1	88.3
% of households with Daily water supply		74.4	82.0	78.4
Hours of water supply		2.0	2.0	1.0
% of households that find water supply from underground storage tank		78.5	91.4	82.6
% of households using booster pumps		45.6	12.0	39.9
% of households that find service satisfactory				
a. Timing of water		79.4	66.8	68.8
b. Frequency of supply per week		76.2	58.3	63.2
c. Quantity of water supply		75.5	52.5	56.9
d. Quality of water (across seasons)		67.4	48.3	55.2
e. Water pressure		52.5	42.7	50.2
% of households with large water storage arrangements	9.4	47.4	17.3	53.2
% of households with favourable perception of water quality (daily water supply)	87.4	84.4	80.8	81.7
% of households that think that municipal water does not need any treatment	89.7	84.3	87.2	86.1
% of households reporting seasonal variations in water supply	33.5	27.3	45.9	34.7

When the poor have access to municipal supply, there is not much difference between slums and non-slums for level and quality of water supply services

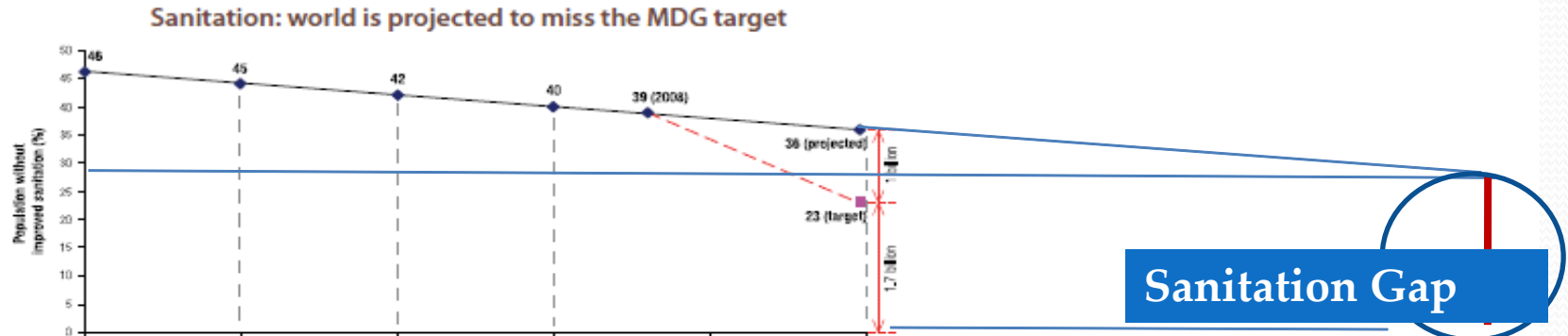
Major Change in 20 years - Urbanization



World will be
nearly 2/3rd
urban

Reduced gap
for
developing
region

Water and sanitation in 20 years



MDGs will be reset in 2015 –
Higher water services, adding sanitation value chain,
equity concerns

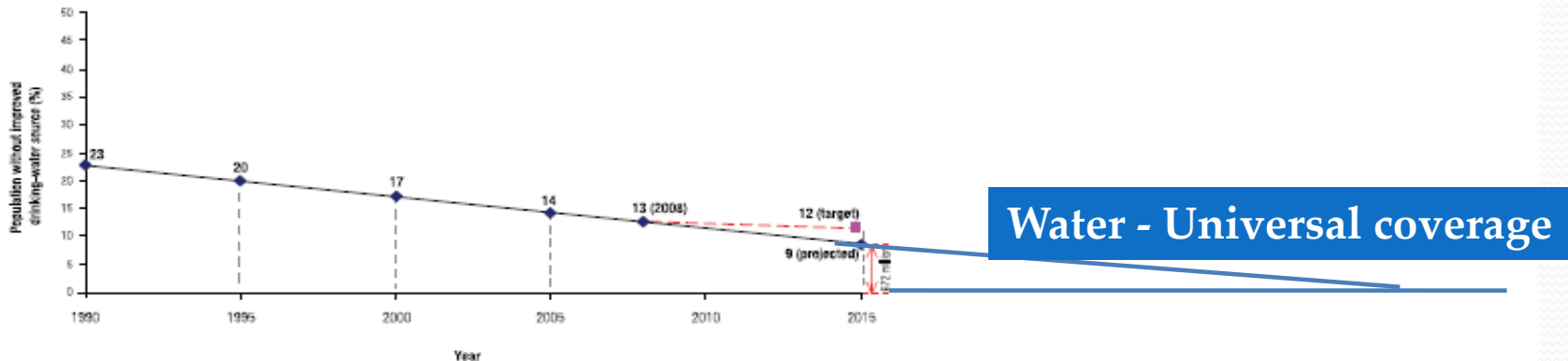


Figure 9 Global progress towards the MDG target: trend in use of improved drinking-water sources 1990-2008, projected to 2015

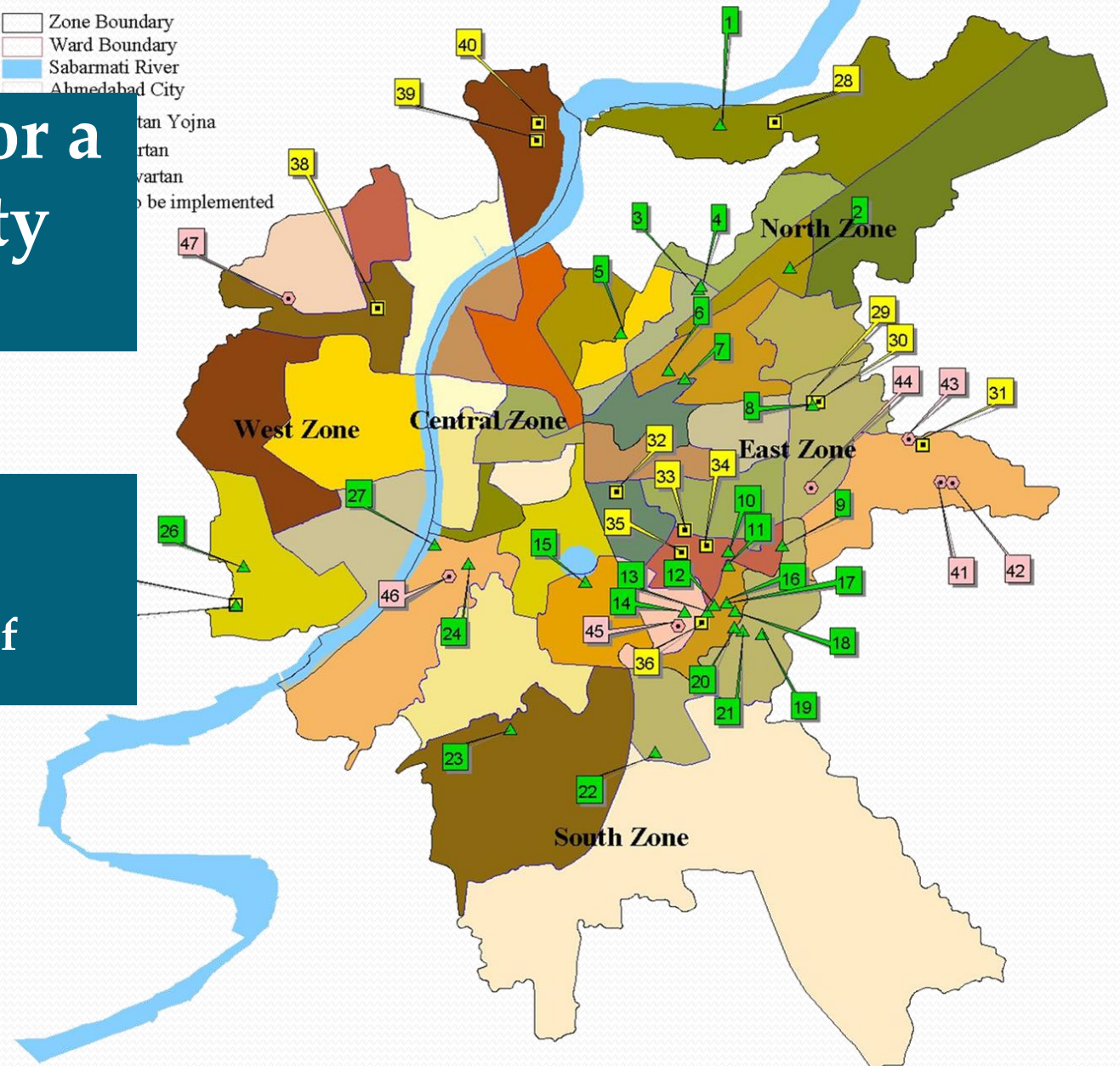
Action plan for a slum free city

Ahmedabad
Pop 5.5 million

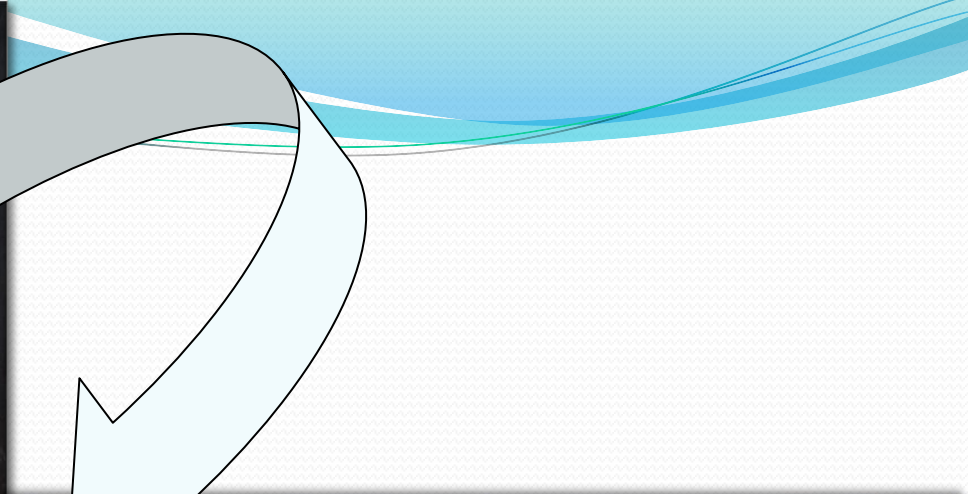
500 slums – 20% of population

LEGEND

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



Urban Yojna
Urban
Urban
to be implemented



What provision of basic services can do to housing by the poor themselves

- 
- Progress and challenges in meeting the MDGs
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1990s... the hope...

- ❑ Large infrastructure investment needs
- ❑ Limited – or even declining public resources
- ❑ Limited share of international aid

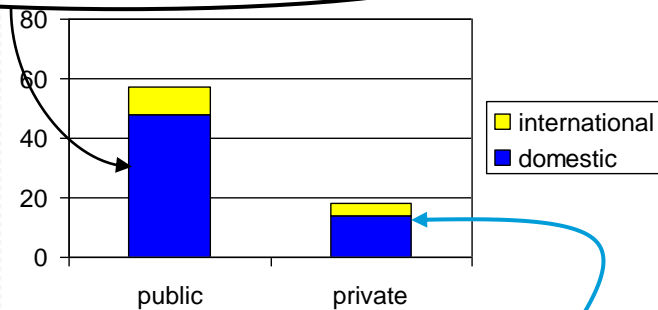
- ❑ Worldwide interest from private sector in cross border infrastructure investments

- ❑ *So... the private sector will “fill the gaps”...*

The realities...

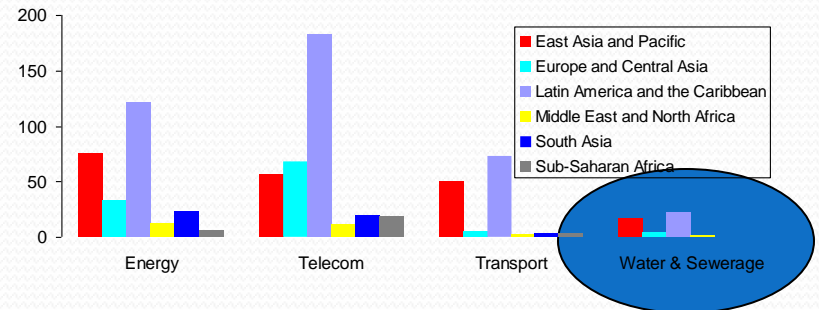
Financing flows into water in 2000

Public is dominant ~85%



Domestic is dominant ~ 85%

International) private investment in infrastructure in 1990-2002 – Very low in WSS



In the new millennium – 2000s: A plea for aid resources

□ Camdessus Panel Report

- *“There is widespread agreement that the flow of funds for water infrastructure has to roughly double...”*

□ Sachs Report - UN Millennium Project

- *“The report says the MDGs can be achieved if total annual development assistance is doubled to \$135 billion—or 0.44 percent of donors’ GNP—in 2006, and rises to 0.54 percent of donors’ GNP by 2015. “* (The Economist)*”*

TABLE 2: Adequacy of financing

	Drinking-water		Sanitation	
	Urban	Rural	Urban	Rural
Sub-Saharan Africa				
Angola	●	●	●	●
Benin	▲	▲	▲	▲
Burkina Faso	▲	▲	▲	▲
Burundi	=	=	=	=
Cameroon	=	=	=	=
Central African Republic	-	-	-	-
Chad	▼	▼	▼	▼
Côte d'Ivoire	●	●	●	●
Democratic Republic of the Congo	●	●	●	●
Ethiopia	-	-	-	-
Ghana	●	●	●	●
Kenya	▲	▲	●	●
Lesotho	▲	▲	▲	▲
Madagascar	▲	▲	▲	▲
Mali	▲	▲	▼	▼
Mauritania	▲	▼	=	=
Mozambique	●	●	●	●
Niger	=	●	-	▼
Rwanda	▲	▲	▲	▲
Senegal	=	●	▲	▲
Sierra Leone	●	●	●	●
South Africa	●	●	●	●
Sudan (south/north)	● ●	● ●	● ●	● ●
Togo	●	▼	=	=
Uganda	●	●	●	●
United Republic of Tanzania	●	●	●	●
Zimbabwe	-	●	●	●
Southern Asia, South-eastern Asia, Eastern Asia, CIS				
Bangladesh	-	▲	▲	▲
Cambodia	▲	-	▼	=
Indonesia	-	-	-	-
Kazakhstan	-	-	-	-
Lao People's Democratic Republic	=	=	=	▲
Mongolia	=	=	=	=
Nepal	▲	▲	▲	▲
Philippines	=	=	▼	▼
Thailand	=	=	=	=
Timor-Leste	=	▲	=	-
Viet Nam	▲	▲	▲	▲
Northern Africa, Western Asia				
Morocco	▲	▲	▲	-
Oman	-	-	-	-
Latin America and the Caribbean				
Honduras	=	=	=	=
Paraguay	▼	=	▼	▼
Progress score	38%	45%	26%	22%
Colour key: Are financial flows sufficient to meet the MDG?				
● More than 75% of needs				
● Between 50% and 75% of needs				
● Less than 50% of needs				
- No information				
Shape key: Over the past three years, has the amount of available funds in relation to financial needs been increasing, been decreasing or remained unchanged?				
▲ ▲ ▲ Increasing trend				
= = = No change in trend				
▼ ▼ ▼ Decreasing trend				
● ● ● No trend information				

(In)adequacy of funding

Thirty-five out of 37 countries report that financial flows are insufficient to achieve the MDG target for sanitation

Difficult to really assess adequacy of funding due to the lack of good and complete information on fund flows for water and sanitation for most countries.

Source: 2009–2010 CSO and GLAAS country survey results

Varying cost estimates to reach MDGs

Global cost estimates to reach the sanitation and drinking-water MDG target vary due to the inclusion or exclusion of different costs or assumptions and range from US\$ 6.7 billion to US\$ 75 billion per year

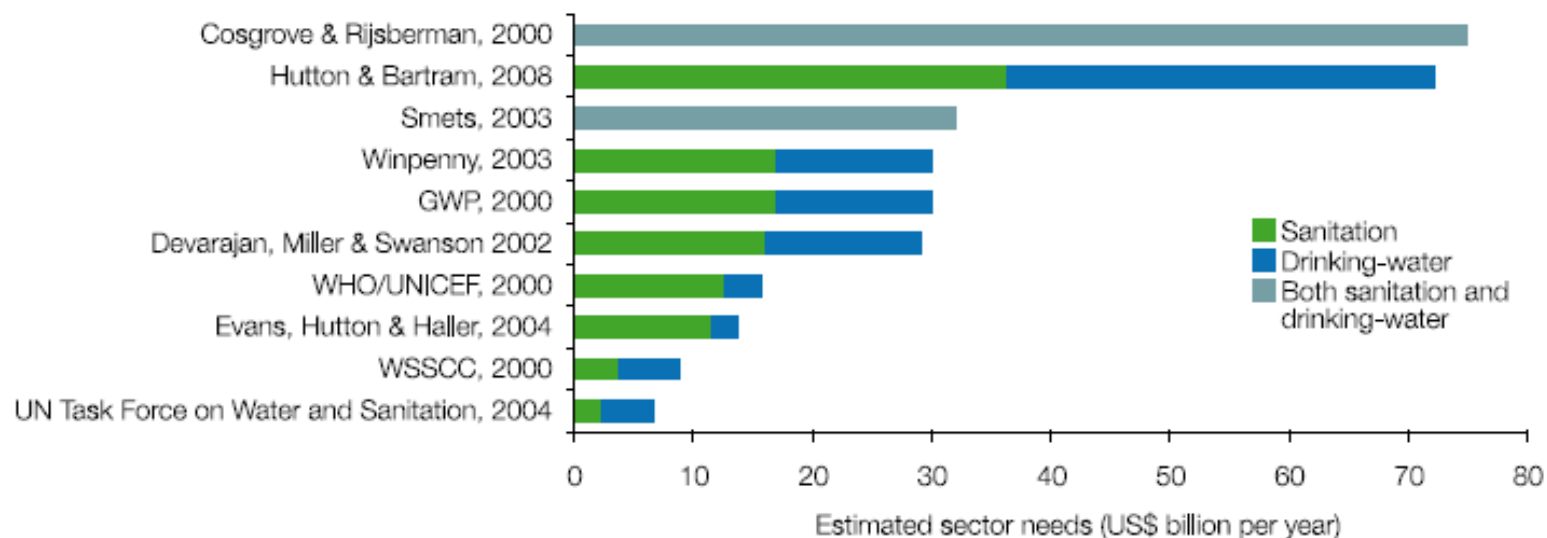


FIGURE 13: Summary of cost estimates to reach the sanitation and drinking-water MDG target

Sources: Fonseca & Cardone (2005); Hutton & Bartram (2008)

Low priority for water and sanitation

In comparison with health and education, the sanitation and drinking-water share of development aid has markedly decreased over the past decade

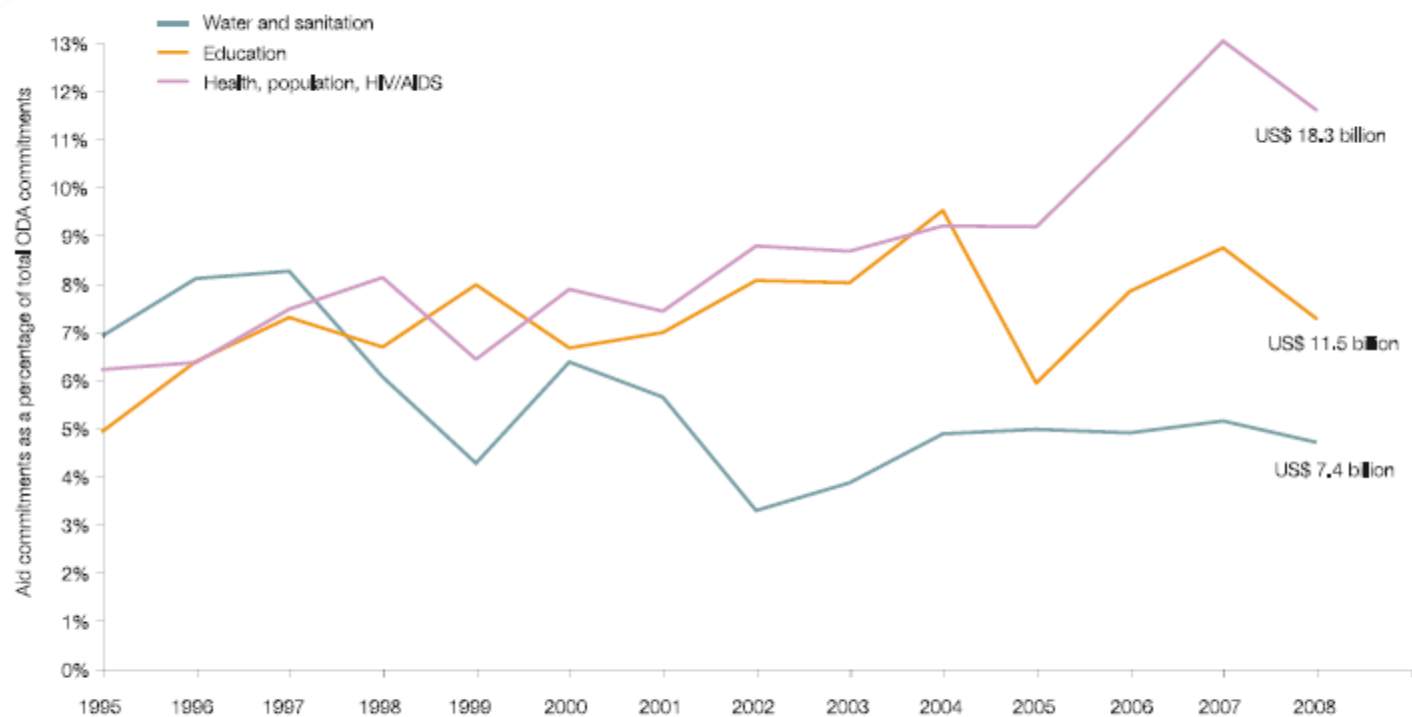


FIGURE 8: Trends in aid for water and sanitation, education, and health/population/HIV/AIDS, as a percentage of total ODA commitments, 1995–2008

Source: OECD (2010a)

Limited aid from donors to WSS

Aid commitments to water and sanitation comprised 5% (US\$ 7.4 billion) of reported development aid in 2008

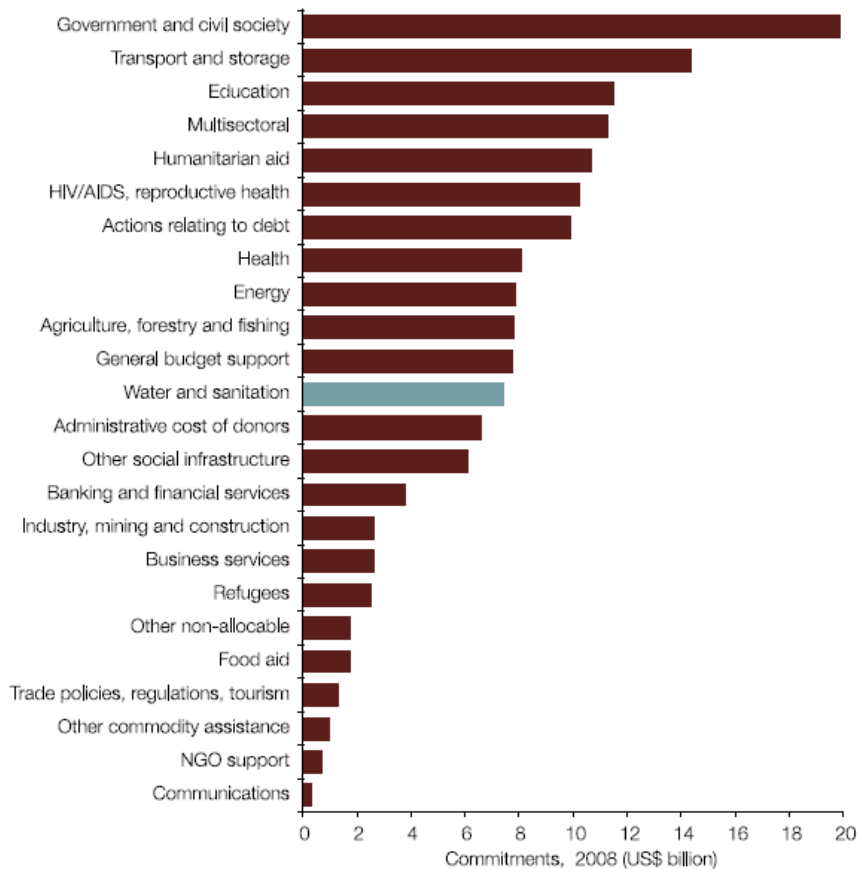


FIGURE 7: Sanitation and drinking-water aid commitments in relation to all other ODA commitments, 2008

Source: OECD (2010a)

There is some new thinking, however...
that may change the approach in 20 years...

- ❑ **Improving priority and effectiveness** in the use of public (and aid) resources in the water and sanitation sector
- ❑ **Leveraging local resources** – ‘non-public’ linked to water and sanitation service delivery

Untying aid to improve effectiveness

Substantial progress has been made in untying aid

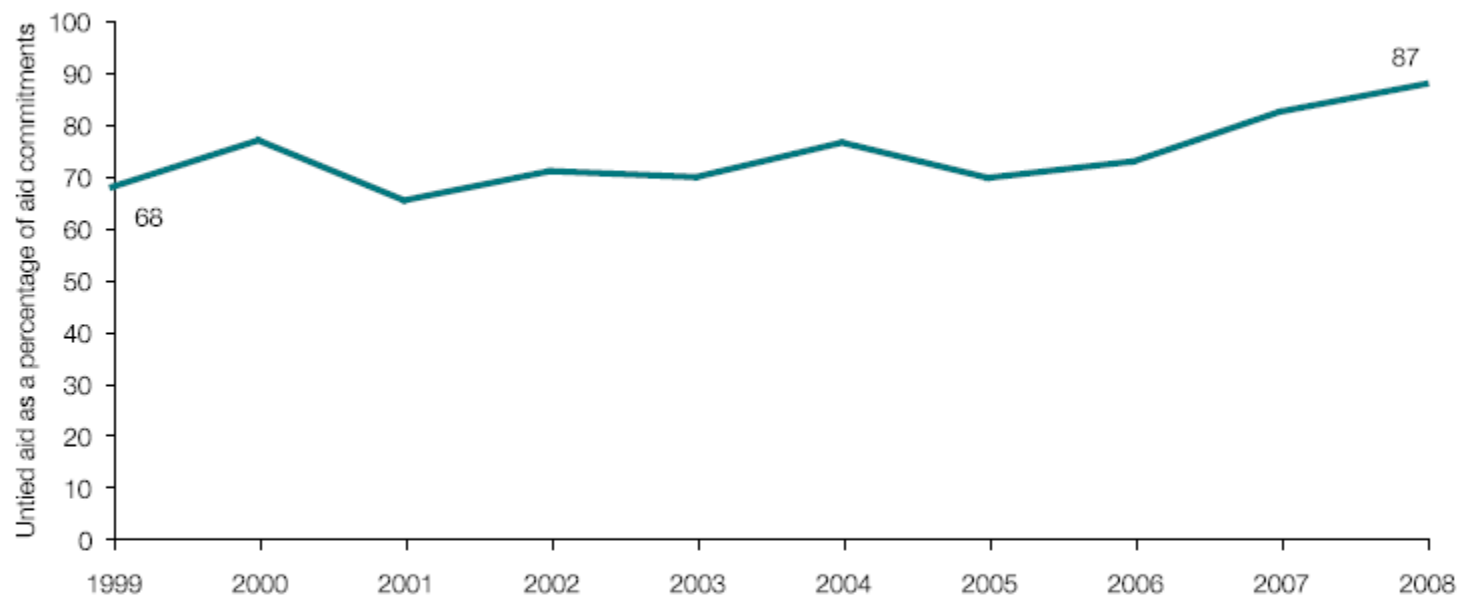
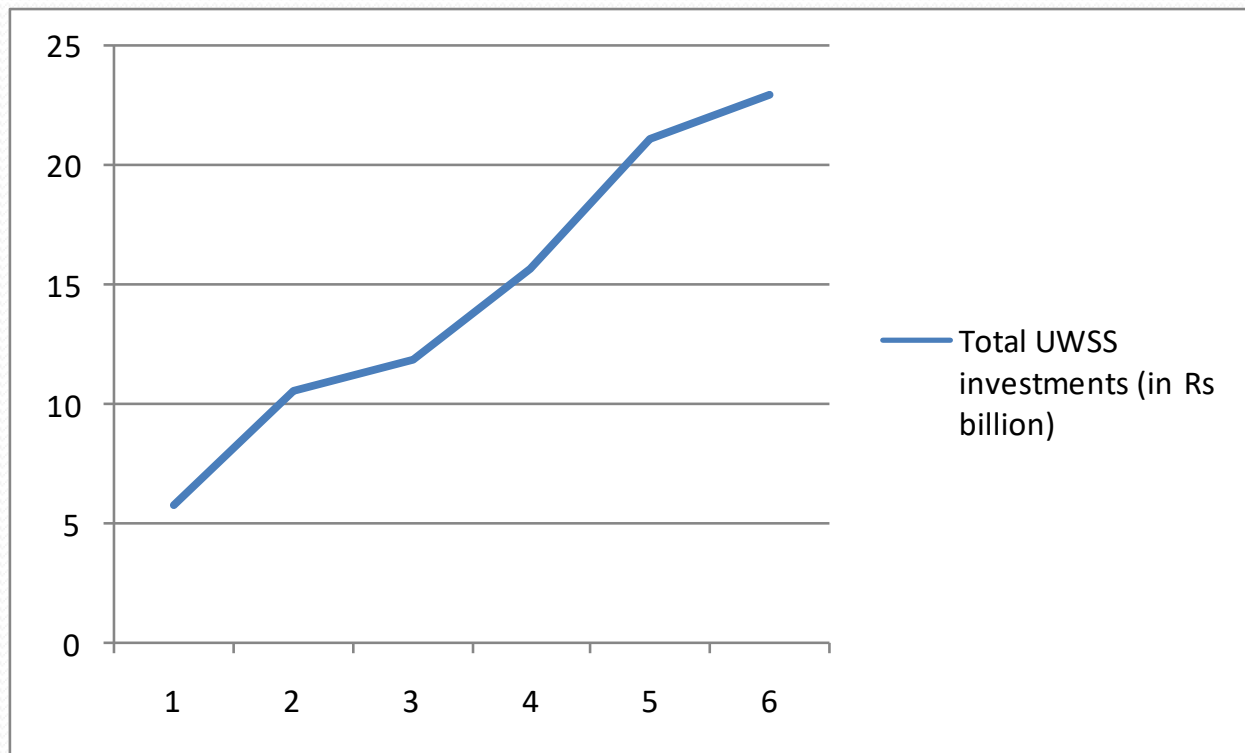


FIGURE 36: Untied aid as a percentage of sanitation and water aid commitments, all donors, 1999–2008

Source: OECD (2010a)

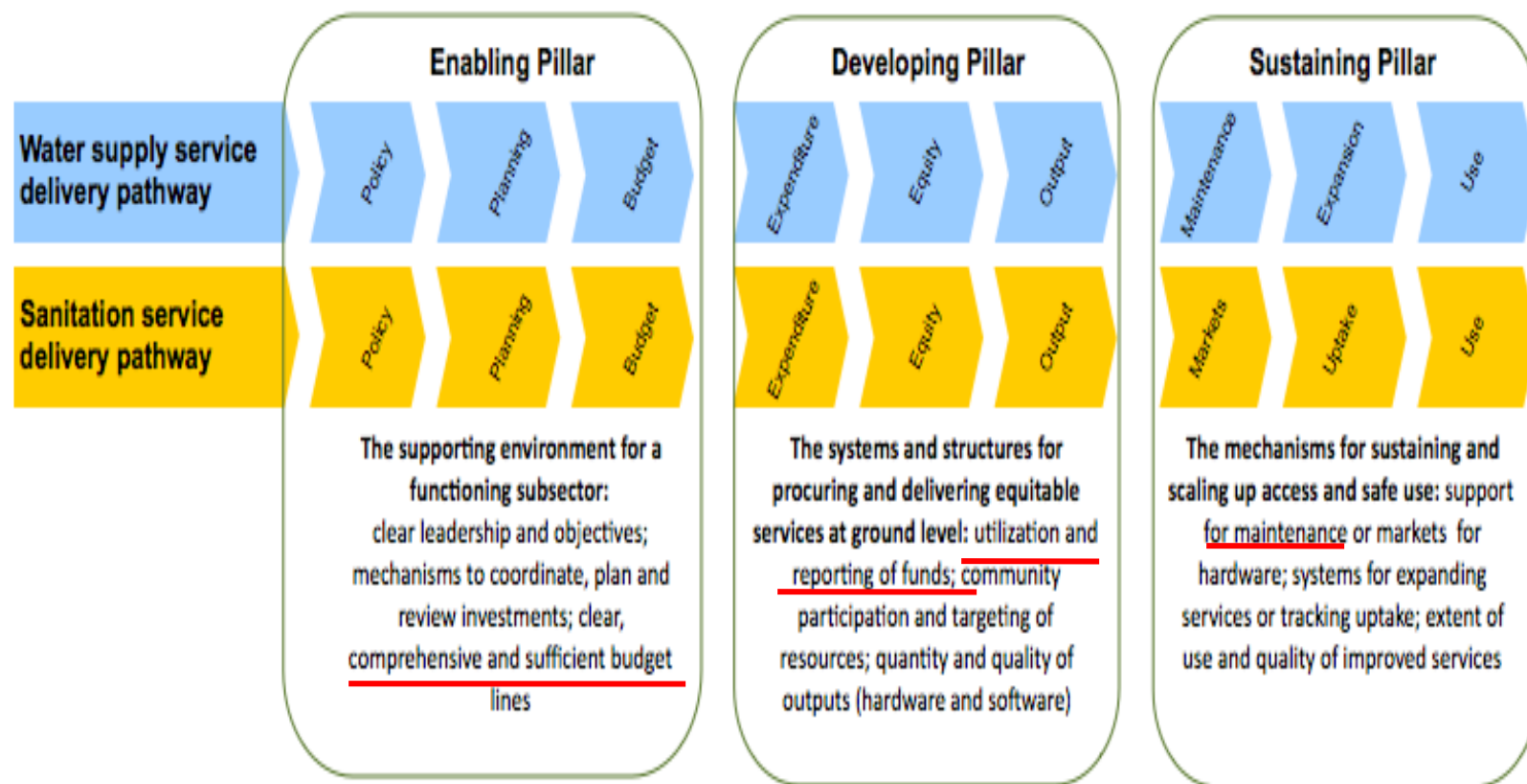
Increased government spending on UWSS with rising state income – case from Gujarat, India



UWSS
investments
increased
four fold
over past 5
years

Effectiveness of public policy /spending

- Assessing service pathways – CSOs - Africa



Experience in leveraging market-based funds for WSS

Urban Utilities	India: Municipal Bonds Sub-Saharan Africa: Preparatory work supported by WSP-Africa
Small service providers	Kenya: Community-managed projects by K-Rep Bank
Households	Vietnam: Revolving Fund and VBSP Bangladesh: Grameen and BRAC, Peru: Sanitation Marketing Project India: Gramalaya, FINISH Project

Municipal Bonds in India

- ❑ Between 1998 and 2005 – Over **10 city governments** issued municipal bonds amounting to Rs. 9.5 billion (about USD 250million).
- ❑ This averaged about **14% of city's total annual capital expenditure** – Ahmedabad it was 40%
- ❑ Most of these were **General Obligation and structured bonds** backed by general revenues with escrow account arrangements
- ❑ **Pooled finance for water and sanitation** for smaller municipalities by TNUDF and KUIDFC
- ❑ Possible **crowding out** by the Government of India's flagship program JNNURM (3bn USD/year) as no municipal bond issues since 2005.

Project-based Finance for Small Water Providers in Kenya



Public distribution points are pulled by the retailer in times of meter at public points the projects cover costs.



FINANCING INVESTMENT IN WATER
Is your community or company a water service provider?
K-Rep Bank can help you realise your dreams



K-Rep Bank
A different kind of bank. The bank for you.

- ❑ Initiated in 2007 with support from WSP Africa, GPOBA, PPIAF and EU Water Facility
- ❑ 40% subsidy, **40% loan and 20% equity by community**
- ❑ **12 projects financed so far, loans worth USD 1 million**, 4600 new connections and 67,000 beneficiaries
- ❑ **Scale up planned for 50 projects** with a project development facility funded by PPIAF
- ❑ Guarantee facility by USAID



Thank You