

# Human Right to Water, Drinking-water Policy Framework and Health Aspects

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Conference on Water Law Reforms and the Right to  
Water

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# Outline

- Health rationale and the Right to Water
- WHO, Right to Health, Right to Water
- Technical issues on health and RtW

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- **Health rationale and the Right to Water**
- WHO, Right to Health, Right to Water
- Technical issues on health and RtW

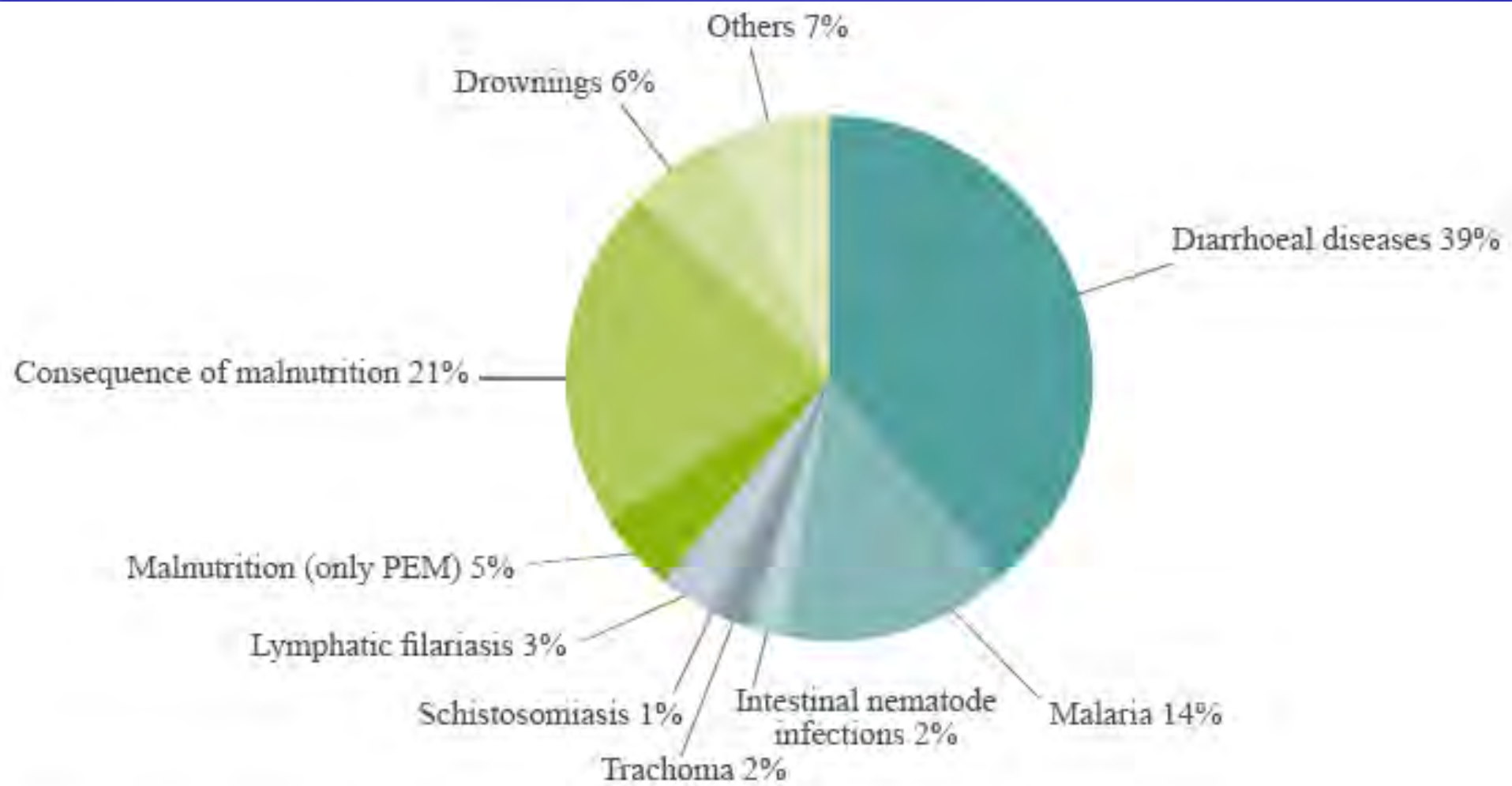
# 2008 Report:

## Safer Water, Better Health

Q: How much disease could be prevented by better managing water, sanitation and health ?

**A: 10%**

➤ *"Almost one tenth of the global disease burden could be prevented by improving water supply, sanitation, hygiene and management of water resources"*

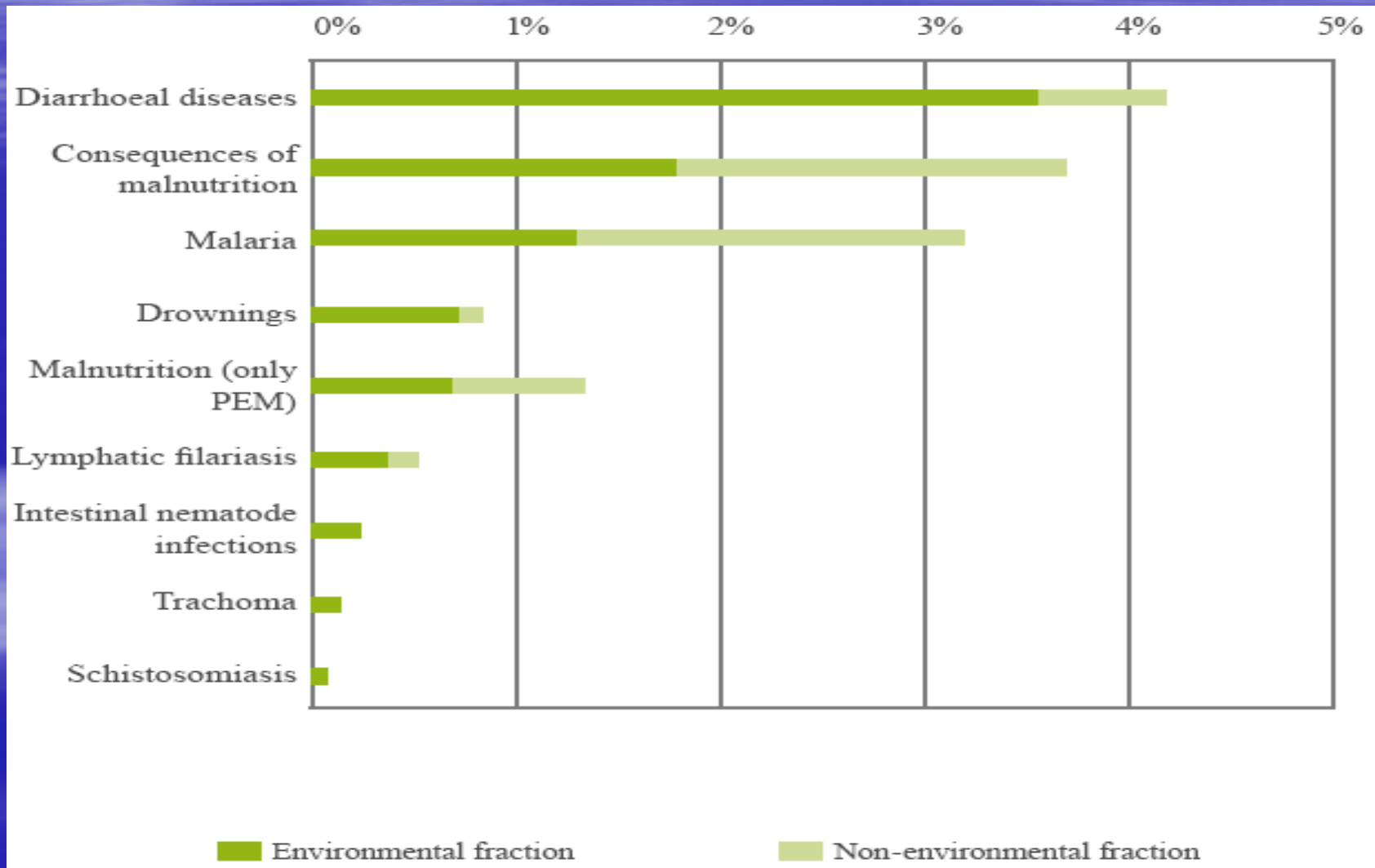


PEM: protein-energy malnutrition

<sup>a</sup> In disability-adjusted life years, or DALYs.

# Diseases with largest WSH contribution

(2002, fraction of global burden of disease/DALYs)



# Distribution of WSH burden

- 38% of all WSH deaths occur in children under age 5
- Improved WSH could reduce child mortality by 28%



# Annual cost of not dealing with water and sanitation

## **Lives lost**

- 1.6 million annually due to diarrhoea alone

## **Health care costs:**

- USD7 billion per year to health agencies
- USD340 million to individuals

## **Value of time lost**

- USD 63 billion per year



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- Health rationale and the Right to Water
- **WHO, Right to Health, Right to Water**
- Technical issues on health and RtW

# UN & WHO commitment to health-related human rights

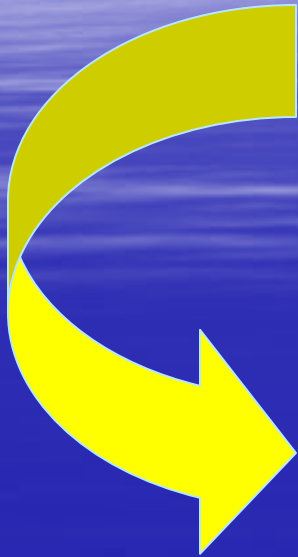
- **UN Charter (1945)**
  - Member States of the United Nations set forth human rights as one of the United Nations' key purposes (Art. 1(3))
  
- **WHO Constitution (1946)**
  - WHO Member States recognized "the enjoyment of the highest attainable standard of health" as "one of the fundamental rights of every human being without distinction of race, religion, political belief, economic or social condition" (Preamble)



# What is the right to *health*?

- ...does not mean the right to be healthy  
...
- ...is a claim to a set of social arrangements – norms, institutions, laws, an enabling environment – that can best secure the enjoyment of this right...

**“The right to health”**



**Underlying  
determinants**



**Health-care**

# The legal bases of the right to water

- Right to an adequate standard of living, including...
- Right to life & human dignity
- ***Right to health***
- Right to housing
- Right to food

# Outline

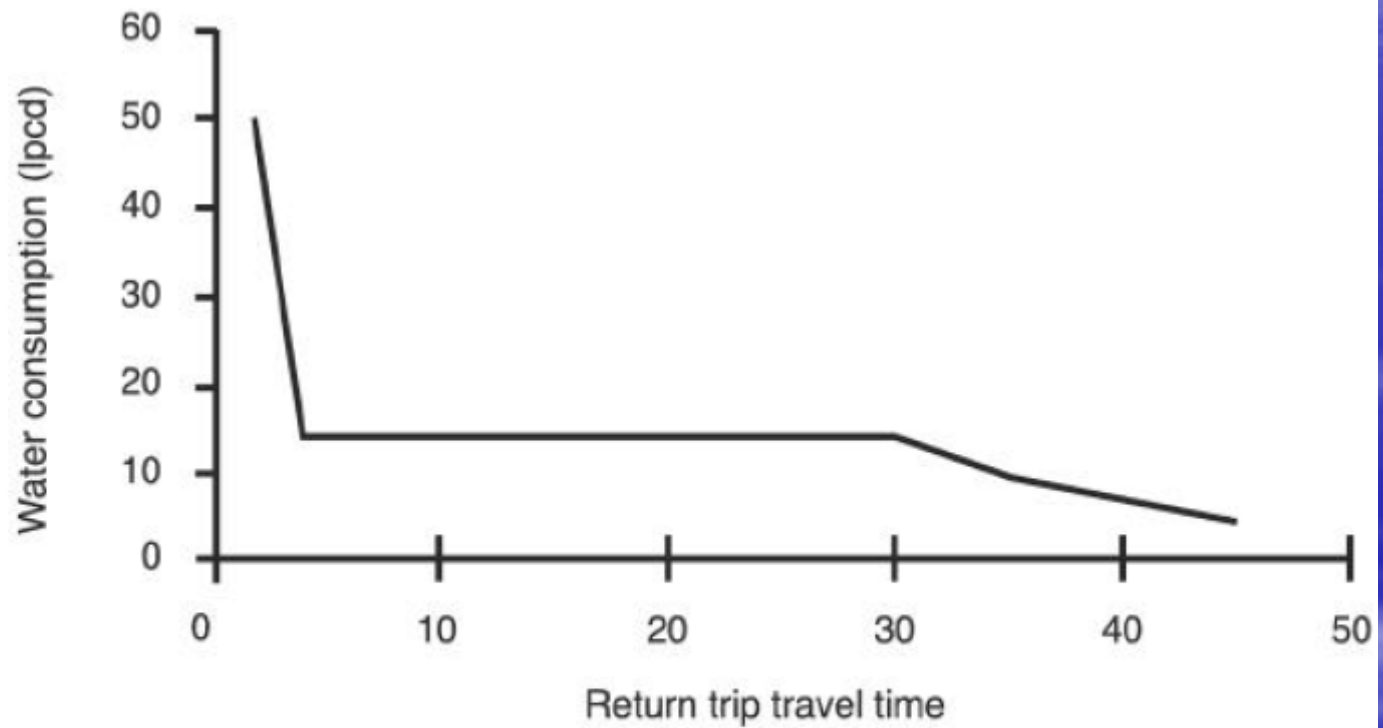
- Health rationale and the Right to Water
- WHO, Right to Health, Right to Water
- **Technical issues on health and RtW**
  - 'access'
  - 'sufficient'
  - 'equity'



# General Comment 15 on the Right to Water:

- The human right to water entitles everyone to **sufficient, safe, acceptable, physically accessible and affordable water for personal and domestic uses.**"
- An **adequate** amount of safe water is necessary to prevent death from dehydration, to reduce the risk of water-related disease and to provide for consumption, cooking, personal and domestic hygiene requirements.





**Figure 2.2: Graph of travel time (in minutes) versus consumption (taken from WELL, 1998)**

**Table S1: Summary of requirement for water service level to promote health**

Service level	Access measure	<i>Needs met</i>	Level of health concern
No access (quantity collected often below 5 l/c/d)	More than 1000m or 30 minutes total collection time	Consumption – cannot be assured Hygiene – not possible (unless practised at source)	Very high
Basic access (average quantity unlikely to exceed 20 l/c/d)	Between 100 and 1000m or 5 to 30 minutes total collection time	Consumption – should be assured Hygiene – handwashing and basic food hygiene possible; laundry/ bathing difficult to assure unless carried out at source	High
Intermediate access (average quantity about 50 l/c/d)	Water delivered through one tap on-plot (or within 100m or 5 minutes total collection time)	Consumption – assured Hygiene – all basic personal and food hygiene assured; laundry and bathing should also be assured	Low
Optimal access (average quantity 100 l/c/d and above)	Water supplied through multiple taps continuously	Consumption – all needs met Hygiene – all needs should be met	Very low

# WHO/UNICEF 'JMP'

- **Millennium Development Goals:**
  - Goal 7, Target 10 : "Halving, by 2015, the proportion of people without sustainable access to safe drinking water and basic sanitation."

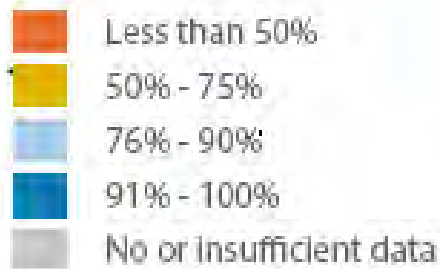
# WHO/UNICEF Joint Monitoring Programme for Water Supply and Sanitation (JMP)

**Mandated by UN to monitor progress towards MDG 7 Target 7c:**

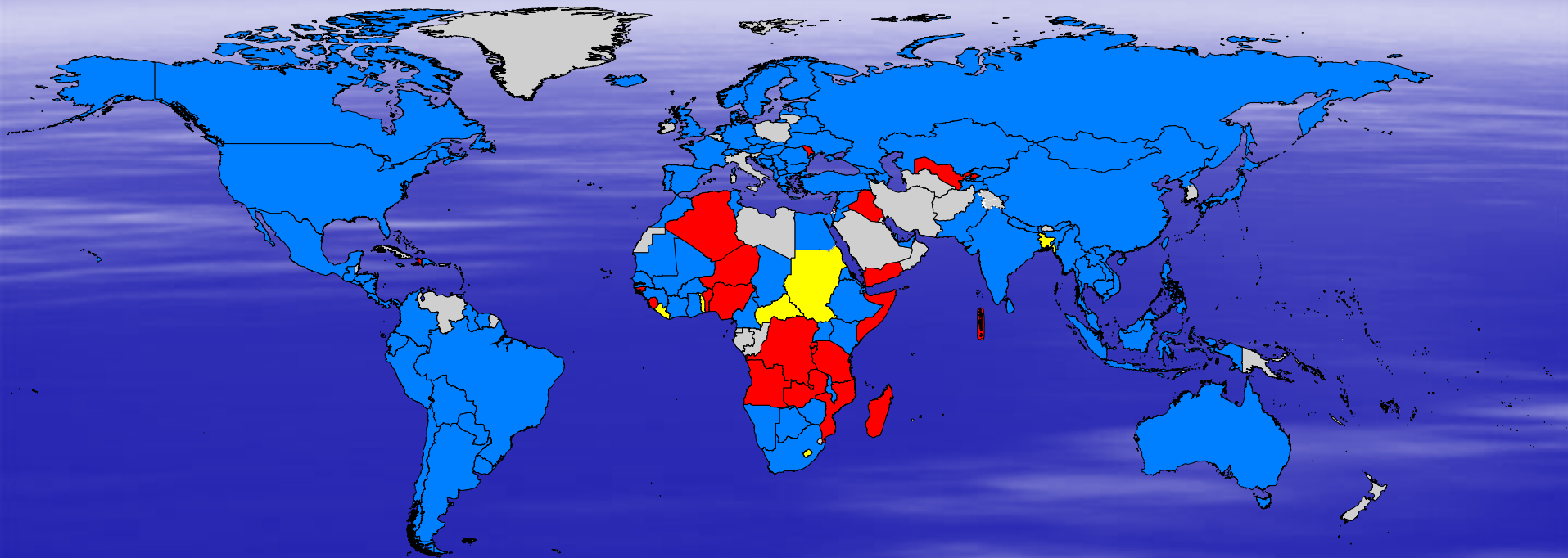
- Halve, by 2015, the proportion of people without sustainable access to safe drinking water and basic sanitation
- Through national data sources:
  - National censuses
  - Household sample surveys (DHS, MICS, WHS, LSMS, CWIQ etc.)
- Using **Indicators:**
  - Proportion of the population that <sup>uses</sup> ~~has access to~~ an **improved** drinking water source (urban and rural)
  - Proportion of population that <sup>uses</sup> ~~has access to~~ an **improved** sanitation facility (urban and rural)

World map showing the percentage of the population aged 65 and over by country. The map uses a color scale to represent different age distribution ranges:

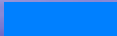



- Less than 50%
- 50% - 75%
- 76% - 90%
- 91% - 100%
- No or insufficient data



# Drinking-water Perspectives, 2006



## Progress towards the MDG drinking water target, 2006

	On track	Coverage in 2006 was less than 5 per cent below the rate it needed to be for the country to reach the MDG target, or coverage was higher than 95%
	Progress but insufficient	Coverage in 2006 was 5 per cent to 10 per cent below the rate it needed to be for the country to reach the MDG target
	Not on track	Coverage in 2006 was more than 10 per cent below the rate it needed to be for the country to reach the MDG target, or the 1990 - 2006 trend shows unchanged or decreasing coverage
	No or insufficient data	Data were unavailable or insufficient to estimate trends



# New features in WHO/UNICEF 2008: *Index of Progress*

Sanitation:  
Countries that are  
*"not on track"*

Country	Proportion of the population that gained access to improved sanitation since 1990  (%)
Yemen	39
Benin	30
Cameroon	29
Comoros	29
Mali	29
Zambia	27



# Comparing JMP and National definitions

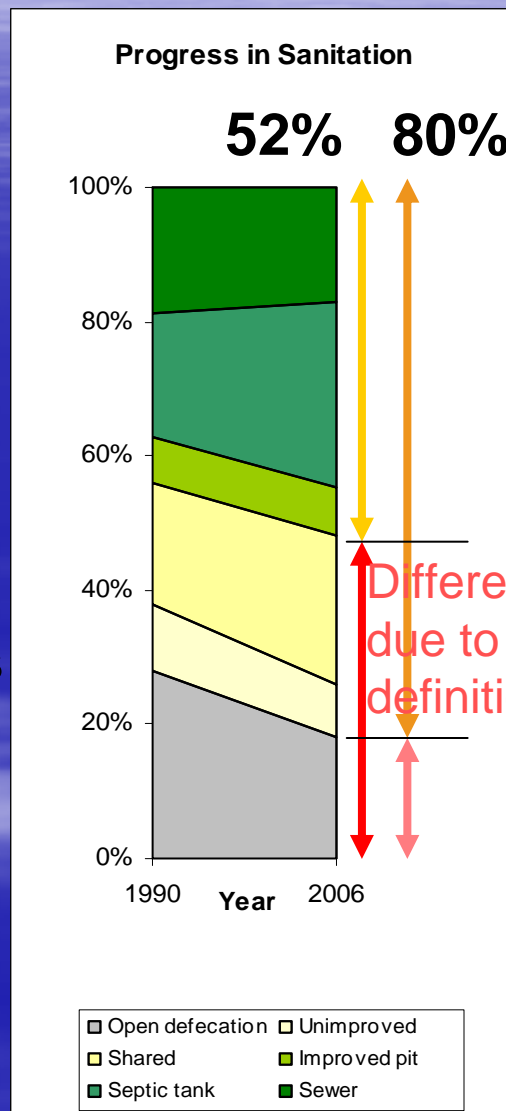
## MDG Definition

### ■ With access

- Sewer connection
- Septic tank
- VIP/improved pit

### ■ Without access

- Shared facilities
- Unimproved facilities
- Open defecation



## National Definition

### ■ With Access

- Sewer connection
- Septic tank
- VIP/improved pit
- Shared facilities
- Unimproved facilities

### ■ Without Access

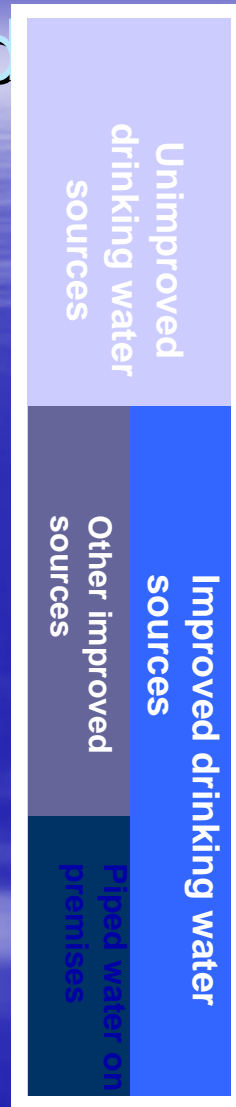
- Open defecation

# New features in 2008:

## The Drinking Water Ladder

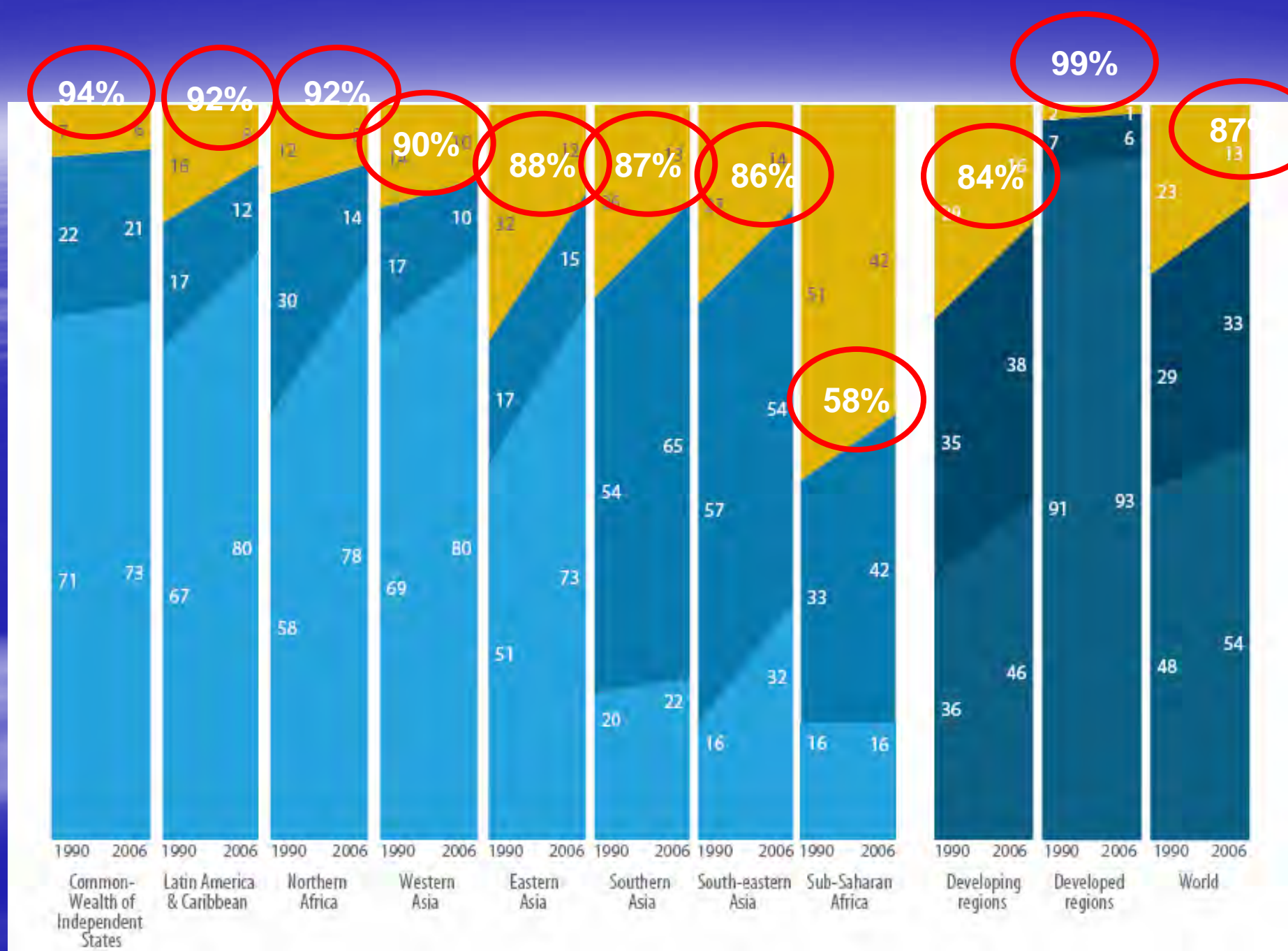
Other improved  
sources

Piped water on  
premises



Unimproved  
drinking water  
sources

Improved drinking water  
sources

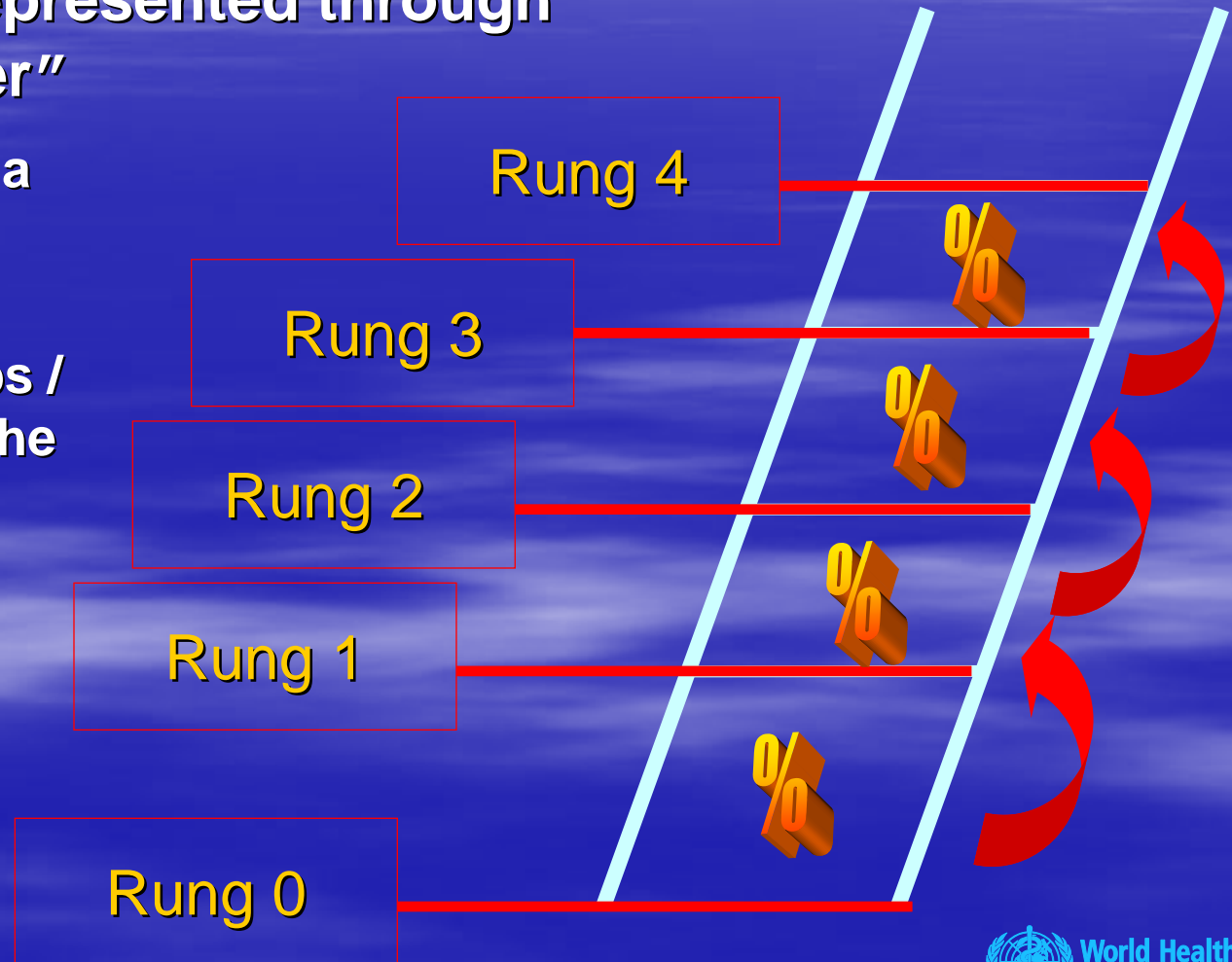


# Improving benchmarks

## the ladder principle

- Access can be represented through an access “ladder”

- Rungs represent a sequence of benchmarks.
- Population groups / size situated on the rungs.



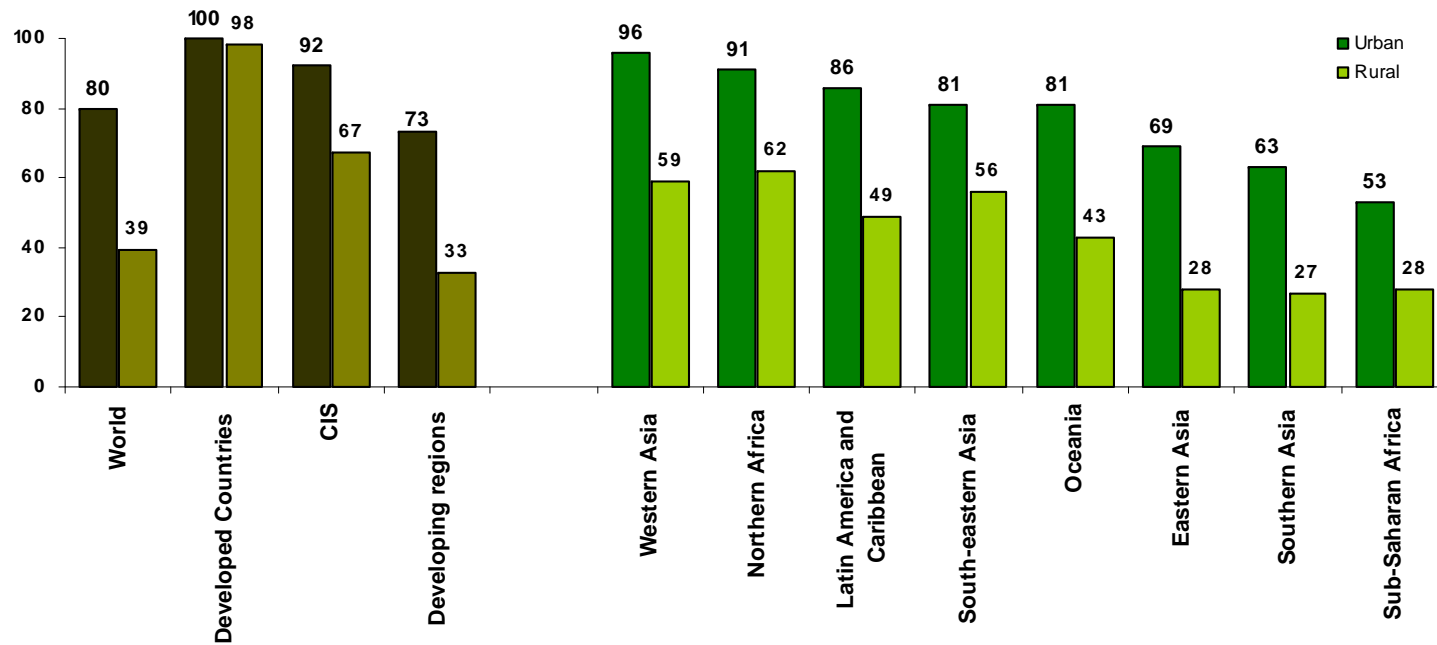
# Equality & Non-discrimination

"...any discrimination on the grounds of race, colour, sex, language, religion, political or other opinion, national or social origin, property, birth, physical or mental disability, health status, (including HIV/AIDS), sexual orientation, civil, political, social or other status, which has the intention or effect of nullifying or impairing the equal enjoyment or exercise of the right to water".

*(General comment 15)*



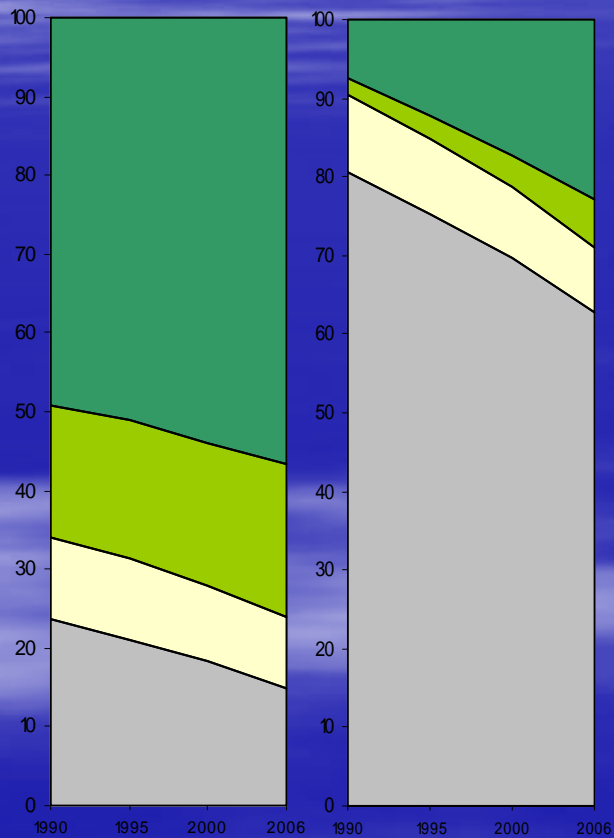
# Disparities Masked by National Averages: Rural versus urban sanitation (2004)



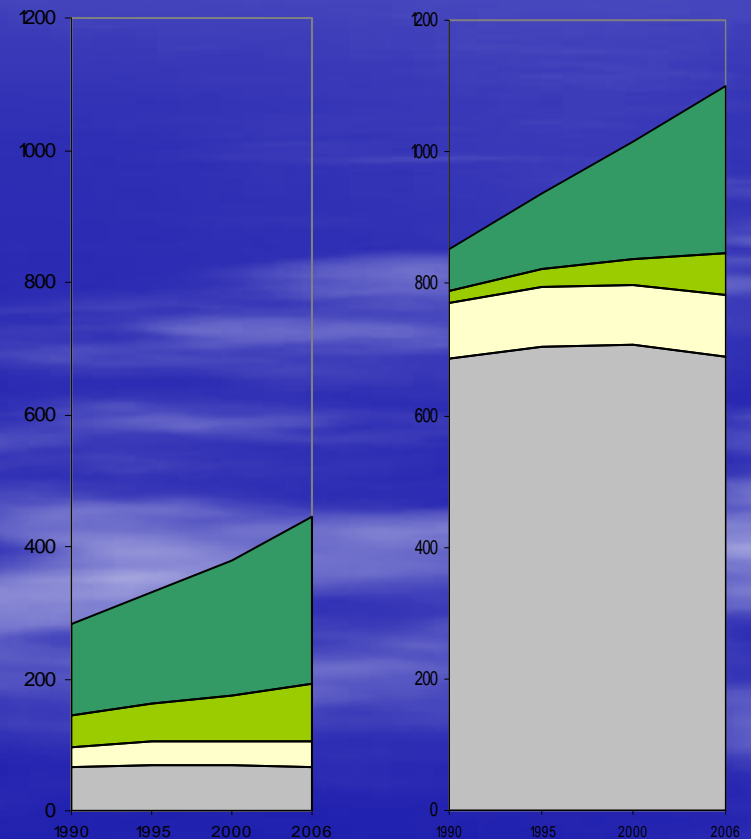
*Meeting the  
MDG  
Drinking  
Water and  
Sanitation  
Target –  
The urban  
and rural  
challenge of  
the decade  
WHO and  
UNICEF,  
2006*

# Urban-Rural disparities

Urban-Rural  
(percentage)

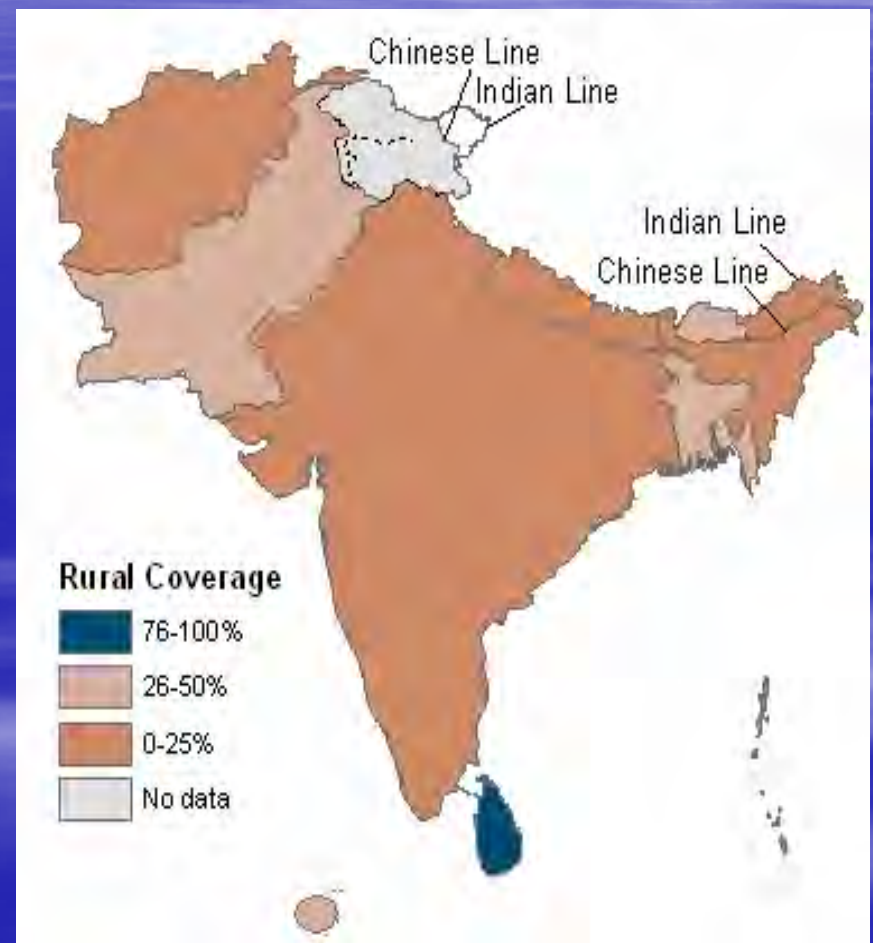


Urban-Rural  
(Millions)

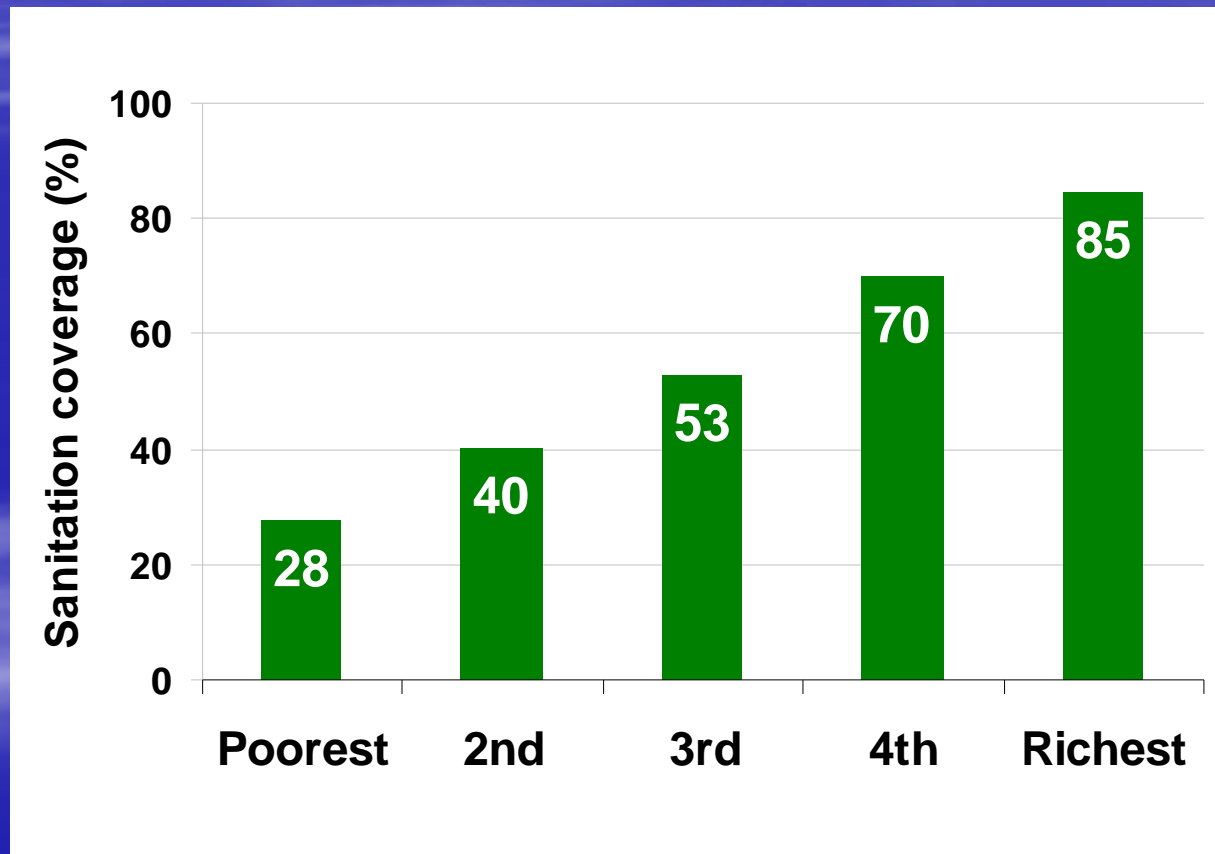




# Urban-Rural disparities



The **richest** are **three times more likely** to use improved sanitation than the **poorest**

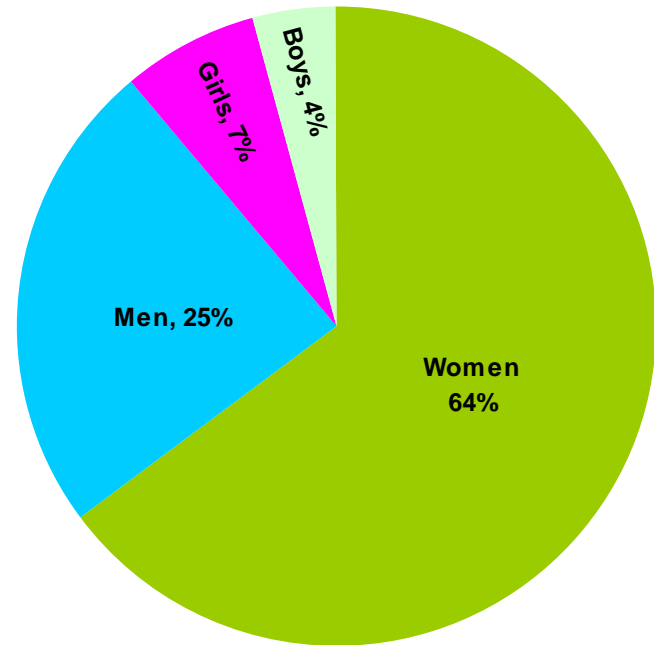


Source: Based on data drawn from Multiple Indicator Cluster Surveys (MICS) and Demographic and Health Surveys (DHS) in 38 developing countries in 2005 and 2006

# New data presented in the 2008 report

- Time to source
- Disposal of children's faeces
- Household water treatment/storage
- Gender and water collection

**Women shoulder the largest burden  
in collecting water**

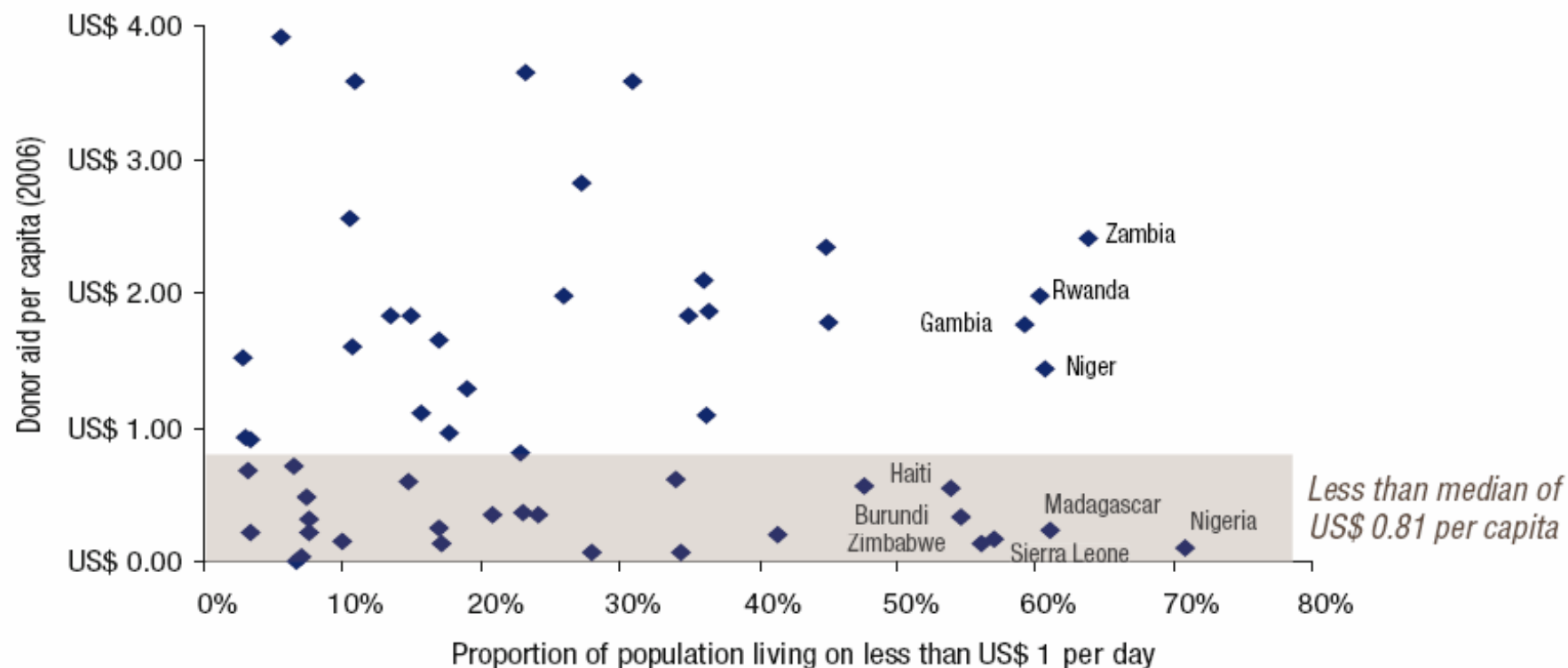


**Distribution of those who usually collect water**



# GLAAS Pilot study: some solid data sources

**Six of the 10 countries with more than 50% of the population living on less than US\$ 1 per day receive less than the median aid per capita for sanitation and drinking-water**



# Outline

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# Thank You!

Jamie Bartram  
World Health Organization Headquarters, Geneva

Disease or injury	Algeria	Albania	Algeria	Andorra	Angola	Antigua and Barbuda	Argentina	Armenia	Australia	
Total DALYs	17 011.0	502.8	5 499.8	8.5	10 757.1	13.3	6 293.3	516.2	2 153.9	
Total WSH-related	2 691.8	5.8	520.0	0.0	2 593.0	0.2	96.4	5.7	9.5	
% of total DALYs	15.8%	1.2%	9.5%	0.3%	24.1%	1.2%	1.5%	1.1%	0.4%	
Diarrhoeal diseases <sup>a</sup>	1 192.4	0.9	250.1	0.0	1 437.1	0.1	41.8	3.1	3.9	
Intestinal nematode infections <sup>b</sup>	13.0	0.0	76.1	0.0	40.3	0.0	5.9	0.0	0.0	
Malnutrition (only PEM) <sup>a,c</sup>	153.7	0.9	23.4	0.0	156.6	0.0	10.8	0.3	0.0	
Consequences of malnutrition <sup>a,c</sup>	676.6	2.4	29.6	0.0	343.9	0.0	0.0	0.3	0.0	
Trachoma <sup>b</sup>	5.3	0.0	0.0	0.0	4.1	0.0	0.0	0.0	0.1	
Schistosomiasis <sup>b</sup>	0.0	0.0	65.5	0.0	47.8	0.0	0.0	0.0	0.0	
Lymphatic filariasis <sup>b</sup>	0.0	0.0	0.0	0.0	17.9	0.0	0.0	0.0	0.0	
Subtotal water supply, sanitation and hygiene	2 041.1	4.3	444.7	0.0	2 047.6	0.1	58.5	3.6	4.0	
Malaria <sup>c</sup>	23.1	0.0	0.0	0.0	283.3	0.0	0.2	0.3	0.0	
Dengue <sup>c</sup>	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	
Onchocerciasis <sup>c</sup>	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	
Japanese encephalitis <sup>c</sup>	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Subtotal water resource management	24.1	0.0	0.1	0.0	283.6	0.0	0.2	0.3	0.1	
Drownings <sup>c</sup>	57.5	0.9	25.9	0.0	52.5	0.0	20.6	1.3	3.3	
Subtotal safety of water environments	57.5	0.9	25.9	0.0	52.5	0.0	20.6	1.3	3.3	
Other infectious diseases <sup>a,d</sup>	569.1	0.6	49.3	0.0	209.4	0.0	17.2	0.5	2.1	



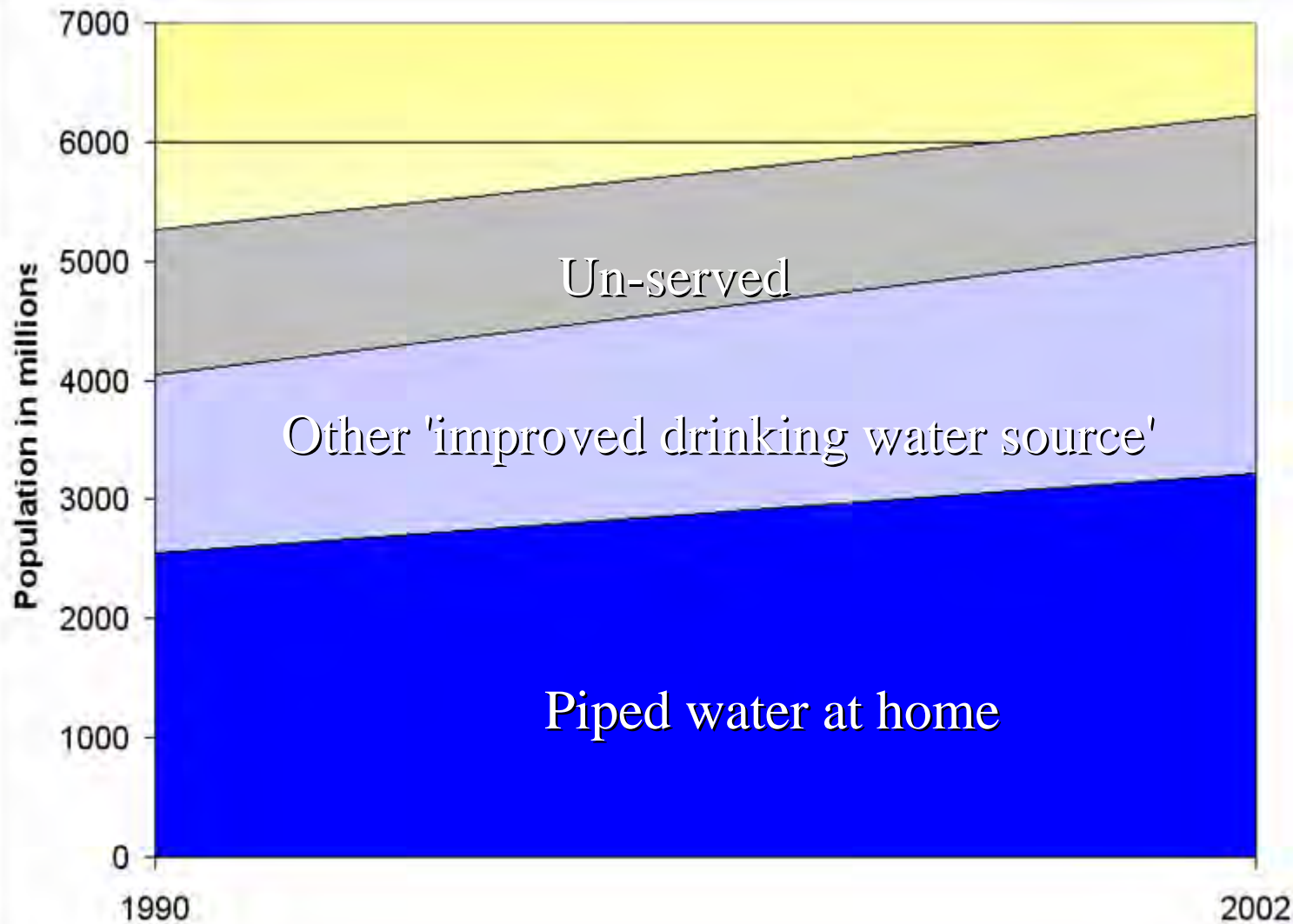
# Core obligations (General Comment 15):

- (a) non-discrimination
- (b) minimum essential amount of water
- (c) Access to water facilities or services that provide sufficient, safe and regular water; that have a sufficient number of water outlets to avoid prohibitive waiting times; and that are at a reasonable distance from the household
- (d) personal security when physically accessing water

# Core obligations cont. (General Comment 15)

- (e) Equitable distribution of facilities & services
- (f) A national water strategy and plan of action**
- (g) Monitoring
- (h) Low-cost targeted programmes to vulnerable and marginalized groups;
- (i) Measures to prevent, treat and control diseases linked to water, in particular ensuring access to adequate sanitation.

# Improved Drinking Water: Trends in service levels



*Meeting the  
MDG  
Drinking  
Water and  
Sanitation  
Target:  
Mid-term  
Assessment  
of Progress  
WHO and  
UNICEF,  
2004*

# WHO's Constitutional Objective

*"the  
attainment  
by all peoples  
of the highest  
attainable levels of health"*