

# **International Network on Small Community Water Supply Management**

*Presenter's name*

*Presenter's organization*

# Presentation Outline

- Why are small community water supplies important?
- What is the International Network for the Management of Small Water Supplies?
- What can you contribute?





***"Water is life's matter and matrix,  
mother and medium. There is no  
life without water."***

Albert Szent-Gyorgyi  
Hungarian biochemist and  
1937 Nobel Prize Winner for Physiology and Medicine

## Current State of the World

### - Global morbidity and mortality rates from water, sanitation and hygiene-related diseases -

Disease	Cases per year	Deaths per year (year)	
Cholera	131 943	2 272	(2005)
Typhoid fever	16 million	600 000	(2000)
Diarrhoeal disease	4.6 billion	2.2 million	(1992 - 2000)

(WHO 2000, 2006, 2007 and Prüss-Üstün et al. 2008)



WHO/Carolos Gaggero

**90% of the toll of diarrhoeal disease is borne by children under five**

## Current State of the World

### - Annual cost of not dealing with water and sanitation -

#### Lives lost

- 2.2 million deaths attributed to diarrhoea alone

#### Health care costs:

- USD 7 billion per year to health agencies
- USD 340 million to individuals

#### Value of time lost

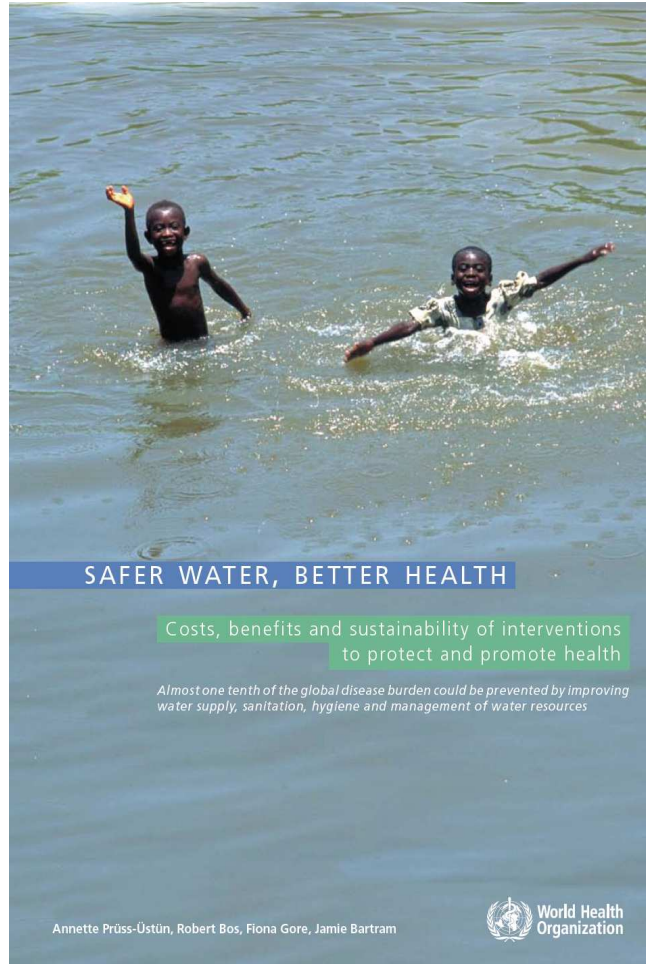
- USD 63 billion per year

(Hutton and Haller, 2004)



WHO/V. Pierre

# Safer Water, Better Health

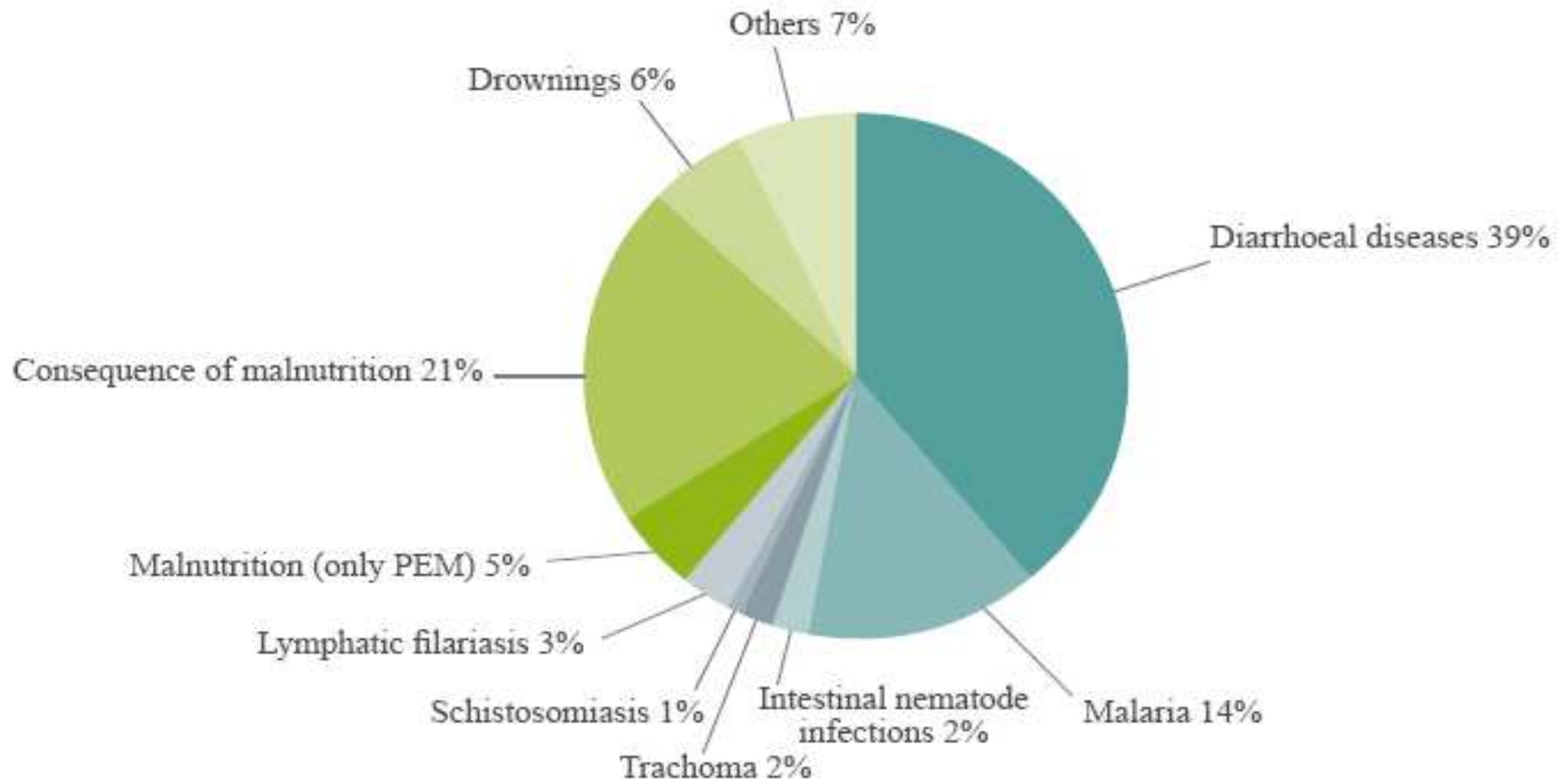


Q: How much disease could be prevented by better managing water, sanitation and health ?

A: 10%

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

# Safer Water, Better Health



PEM: protein–energy malnutrition

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

# Current State of the World

## - MDG target for drinking water and sanitation -

To halve, between 1990 and 2015, the proportion of the population without improved drinking water and sanitation means:

Giving 300 000 more people per day up to 2015 improved drinking water sources

USD 1.8 billion/year \*

Providing an additional 450 000 people per day up to 2015 with improved sanitation

USD 9.5 billion/year \*

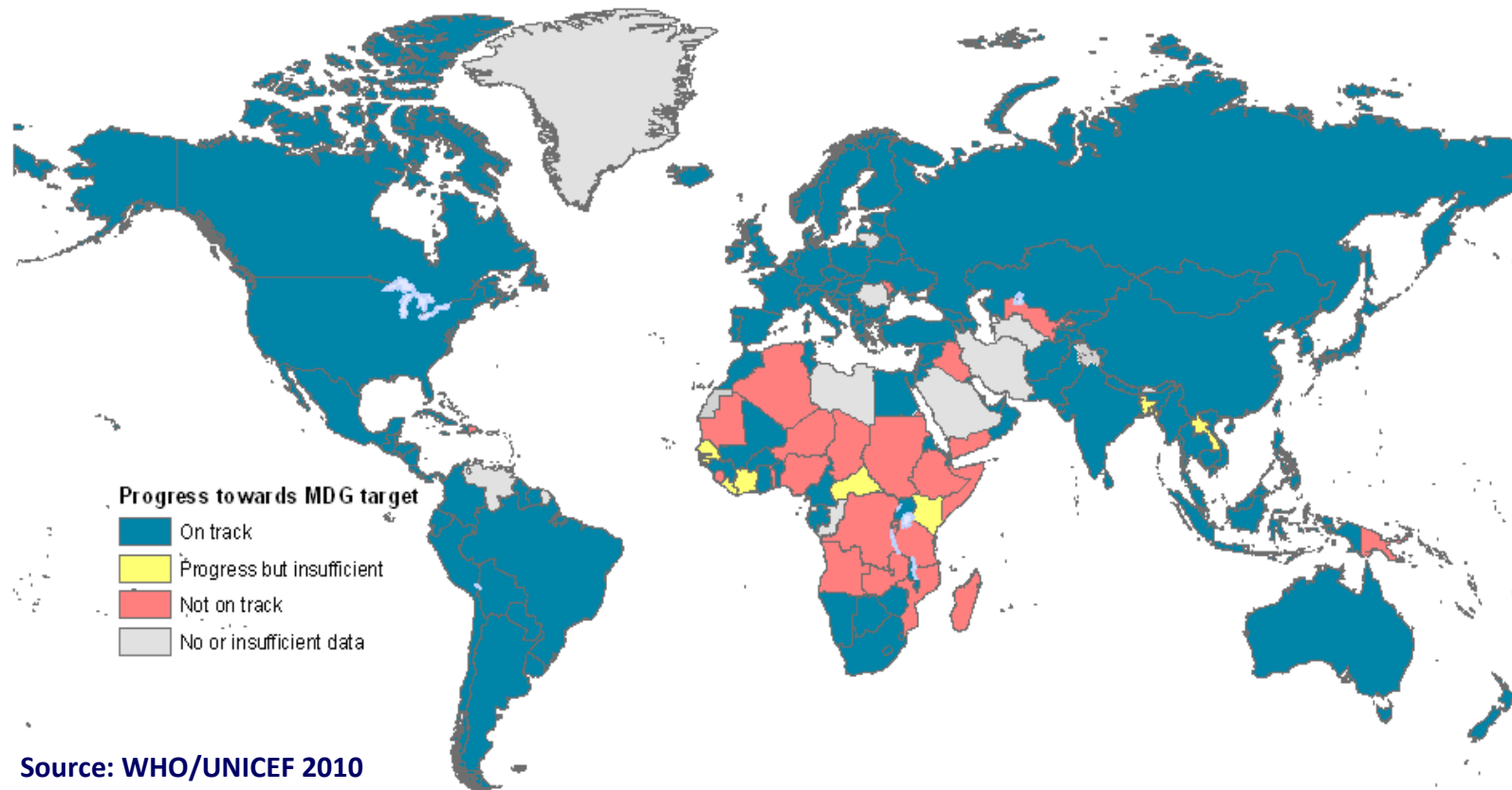
Ensuring continuation of services to an unprecedented population and maintenance and renewal of infrastructure

\* Total annual cost 2000

# Drinking-water

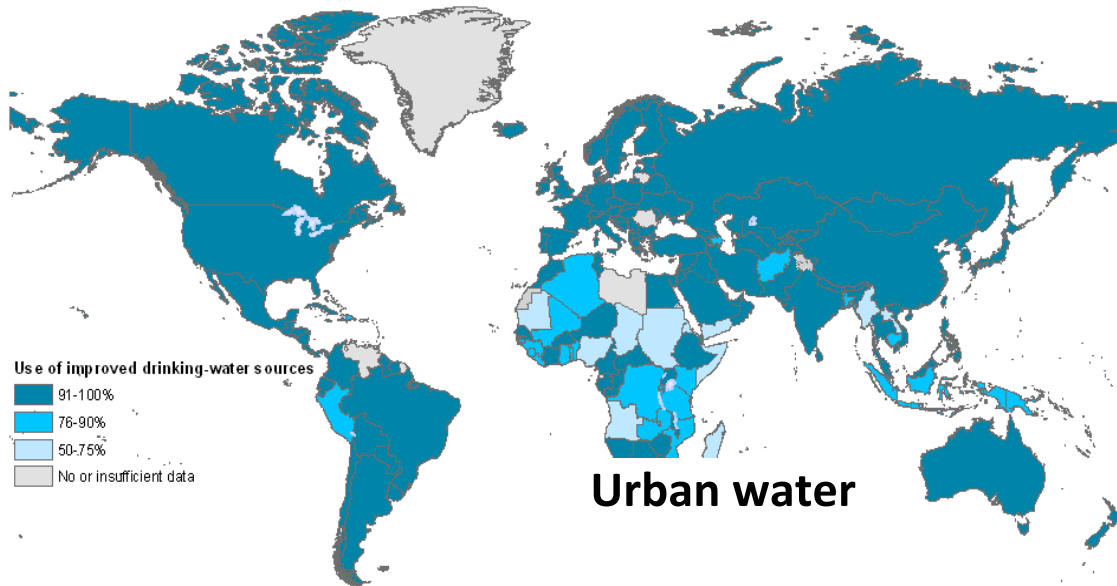
The world is on track for the MDG7 target

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

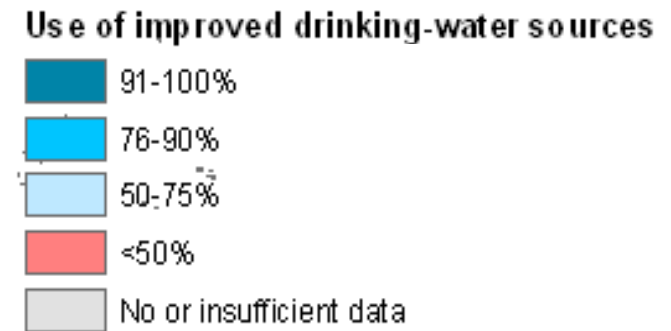


# Urban – Rural Disparities in Africa, Asia and Latin America

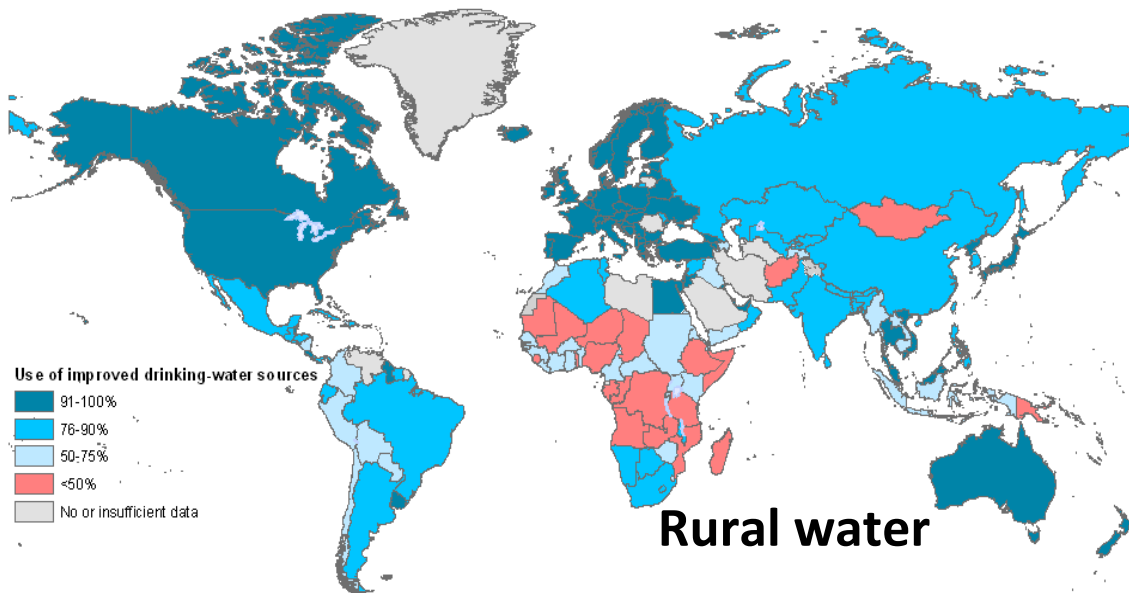
Almost 3.3 billion people live in rural locations and are, typically, served by small community water supplies.



Urban water



Small water supplies need to be addressed in order to meet the MDG drinking water target

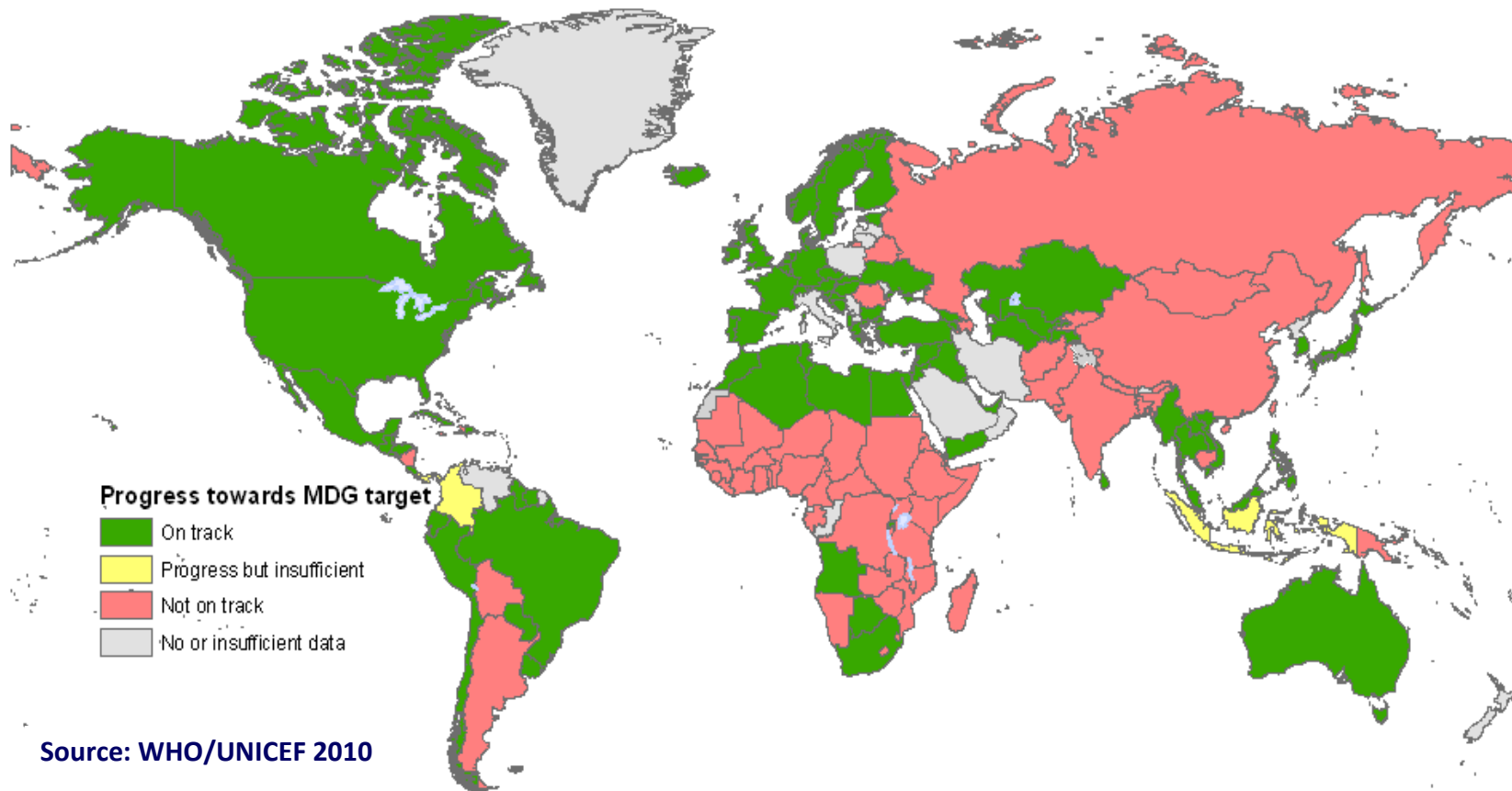


Rural water

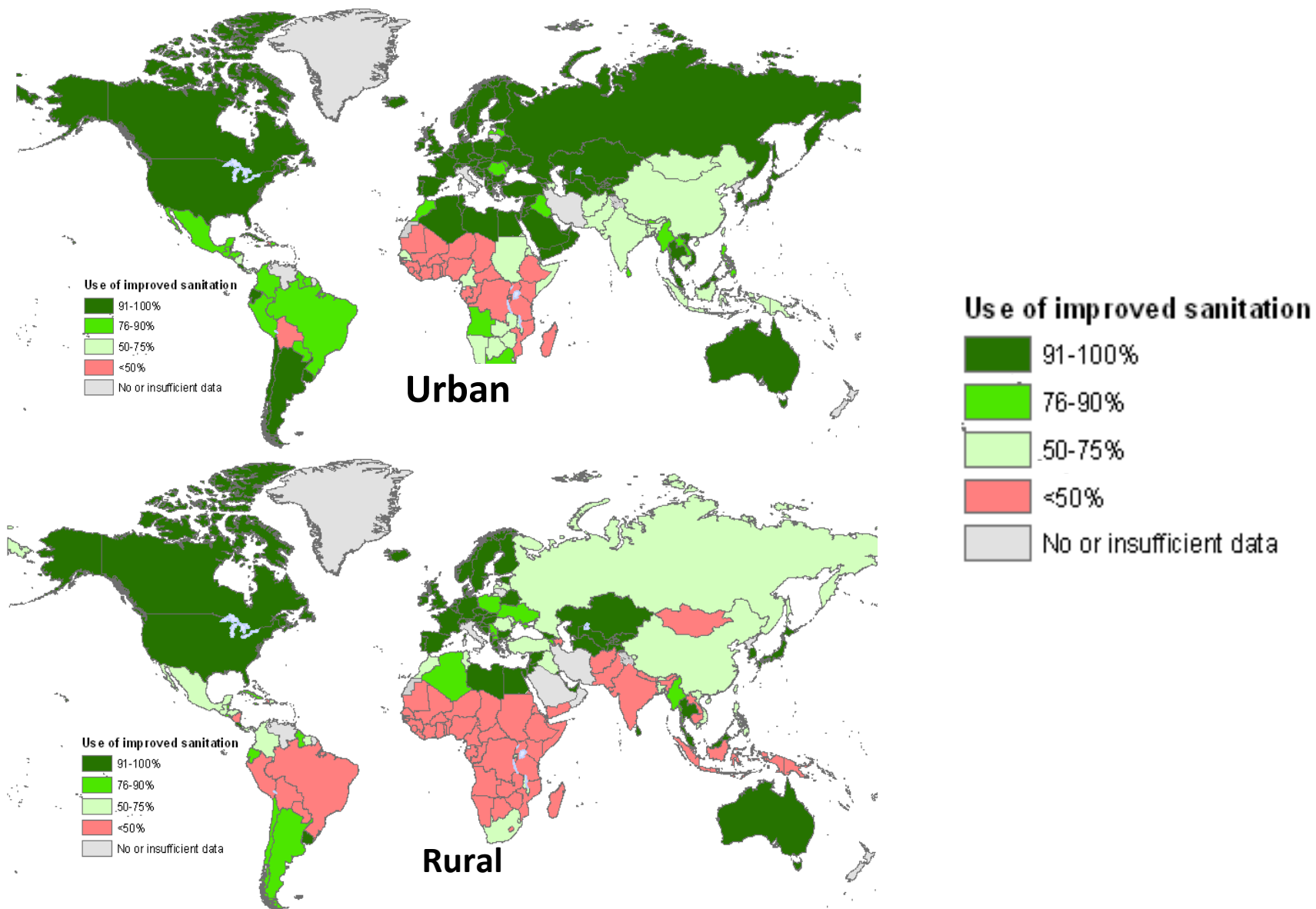
# Sanitation

The world is **not on track** for MDG7 target

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



# Urban-rural disparities in use of improved sanitation



# Typical Challenges Associated with Small Community Water Supplies

- Located in rural and/or remote areas;
- Limited funding and multiple priorities, with many communities lacking an economic base;
- Higher per capita costs (e.g. operation, maintenance and construction);



# Typical Challenges Associated with Small Community Water Supplies (Cont'd)

- Difficult to recruit and train operators (e.g. positions often part-time and underpaid);
- Operators lack a support network, standard operating procedures and technical support;
- Little capacity to proactively assess and manage risk;



# Typical Challenges Associated with Small Community Water Supplies (Cont'd)

- Perception of risks not clear at community level; and
- Unclear roles and responsibilities; and



Source of public health problems in both developed and developing countries

# Developed regions experience similar challenges

## In the USA:

- Almost 1 in 4 Americans (41 and 23 million people) rely on private drinking and non-community water supplies, respectively  
(EPA 2002 and 1999 and Census Bureau 1999)
- Most drinking-water outbreaks in 1991 to 2002 were associated with individual (e.g. private wells) or non-community systems  
(Craun et al., 2006)

## In Europe:

- 1 in 10 Europeans (40 to 50 million people) receive drinking water from small or very small systems, including private wells
- Microbiological contamination is by far the major problem but data on water-borne disease is often not collected systematically  
(Hulsmann 2005)

# International Network for the Management of Small Community Water Supplies (SCWSM Network)

## Goal:

To accelerate progress towards universal, sustainable access to safe water, through an increased focus on and improved management of small community water supplies.

This includes the achievement of the MDG drinking-water and sanitation target by 2015 as a key milestone.

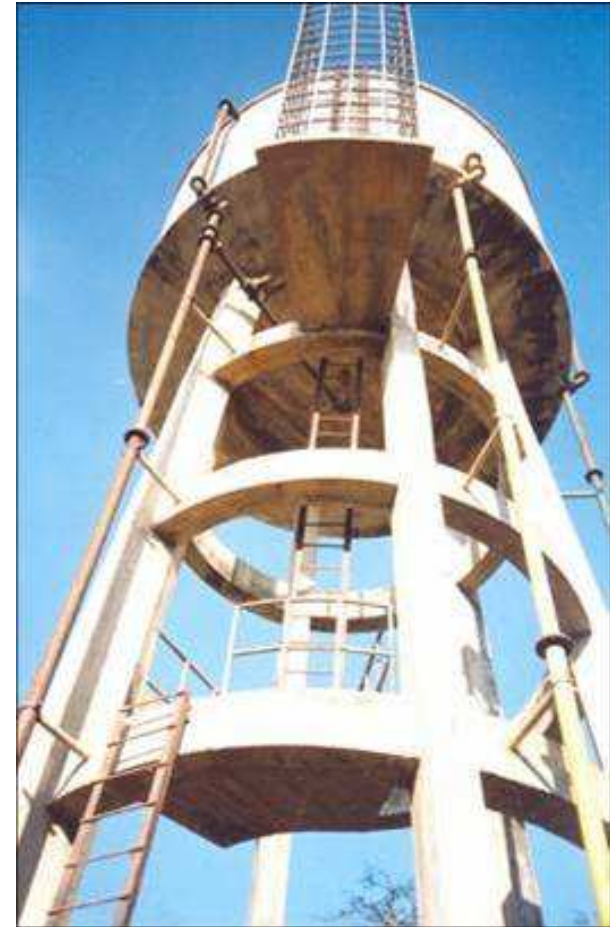


# SCWM Network

## - Objectives -

To support the mainstream and improved management of small community water supplies:

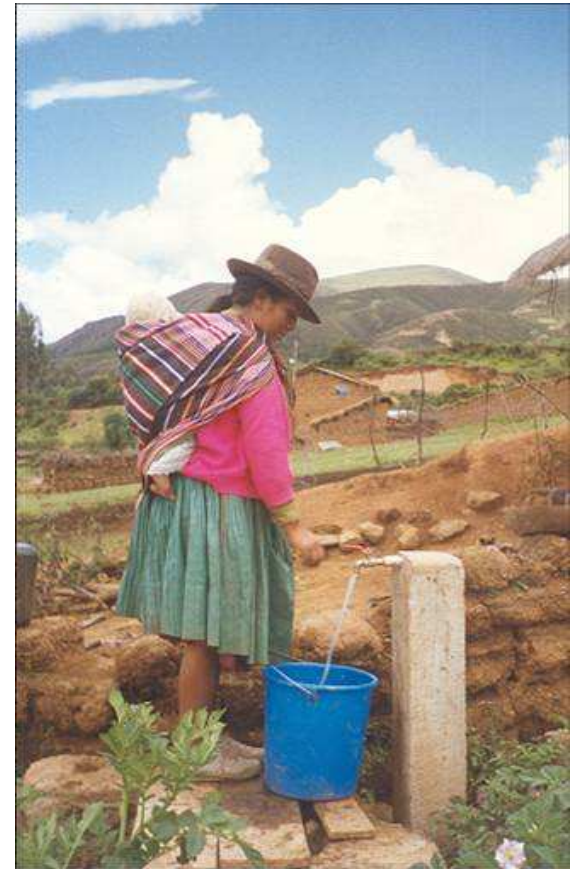
- Build evidence base to support decision making;
- Advocate and collaborate with stakeholders to obtain commitments from senior decision makers; and
- Develop and/or facilitate access to guidance and tools



# SCWM Network

## - Role of Network Members -

- Share expertise and lessons learned
- Lead and participate in Network activities
- Provide strategic advice and recommendations to WHO



# SCWM Network

## - Plan of Work -

### **Build evidence base:**

- Collect evidence on health challenges associated with small supplies, globally and/or at country-level
- Undertake cost/benefit analysis of improving the management of community water supplies

### **Advocate and collaborate:**

- Develop strategies to advocate for change and to collaborate with, for example, NGOs and Governments;

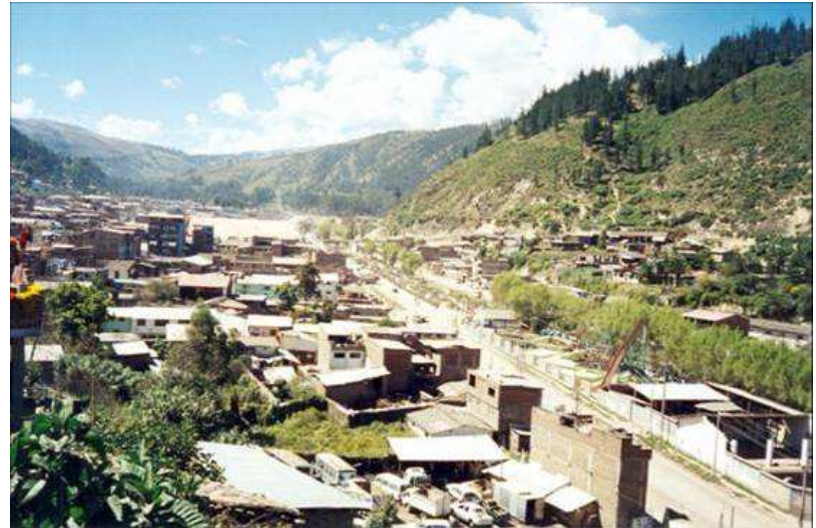


# SCWM Network

## - Plan of Work -

### Develop and/or facilitate access to guidance and tools

- Develop and implement communication and promotion strategies for guidance and tools
- Develop guidance on management of small supplies, targeted to managers and planners
- Develop guidance on how to apply WSPs for small community water supplies
- Collect evidence to support the identification of interventions that improve the management of small community water supplies
- Develop generic risk assessment tool for small water supplies



# SCWM Network

## - Some Accomplishments to Date -

### Build evidence base:

- Publishing guidance on how to undertake a social cost-benefit analysis, with a special focus on small community water supplies

### Advocate and collaborate:

- Released fact sheet on importance of improving small community water supply management, include results of global economic analysis;
- A virtual forum has been established for the Network and participation in it is continuing to grow.



[www.who.int/water\\_sanitation\\_health/WHS\\_WWD2010\\_small\\_systems\\_2010\\_4\\_en.pdf](http://www.who.int/water_sanitation_health/WHS_WWD2010_small_systems_2010_4_en.pdf)

# SCWM Network

## -Some accomplishments to Date – (Cont'd)

### Develop and/or facilitate access to guidance and tools

- Manual on how to apply WSPs in small community water supplies has been prepared and being edited for publication
- Guidance on how to use communication in order to protect public health is being edited for publication
- Over 130 examples of risk communication tools from around the world have been posted in the Network's virtual forum
- An on-line searchable database of terms (The Lexicon) has been released with multi-language terminology equivalences – [www.who.int/thelexicon](http://www.who.int/thelexicon)



How Can You Contribute?



For more information, please email [scwsm@who.int](mailto:scwsm@who.int)