

**Operation and Maintenance Network
WSSCC WASH Forum
Dakar, December 2004**

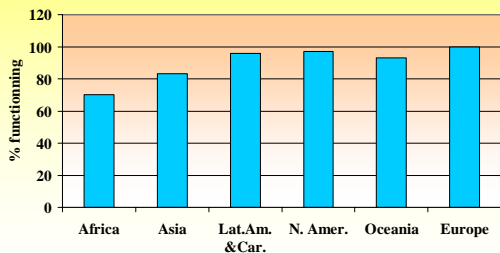
José Augusto Hueb
Water, Sanitation and Health

World Health Organization

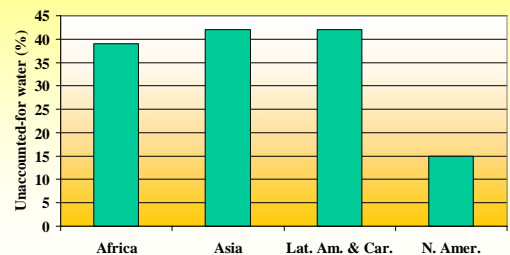
Health hazards of poor water supply and sanitation

- 4 billion cases of diarrhoea each year
- 1.8 million deaths by diarrhoeal diseases
- 10% of the developing world population affected by intestinal worms
- 6 million people are blind from trachoma
- 200 million people in the world are infected with schistosomiasis.

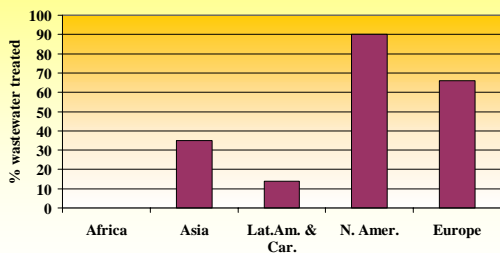
Median percentage of rural water supplies which are functioning, 1990-2000



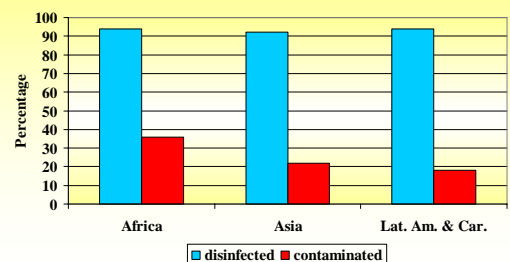
Mean rates of unaccounted-for water in large cities in Africa, Asia, Latin America and the Caribbean, and Northern America



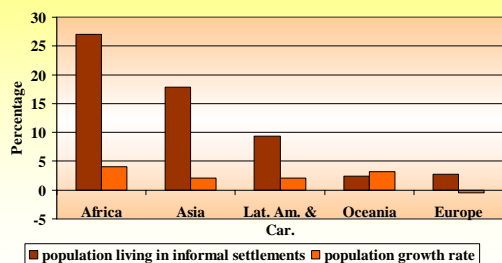
Median percentage of wastewater treated by treatment plants



Percentage of water supplied which is effectively disinfected (free residual chlorine over 0.1 mg/l), and percentage of drinking-water quality test results that violate national standards (microbiological, chemical, physical, aesthetic)



Population growth rates and proportions living in informal settlements: regional means for the largest cities



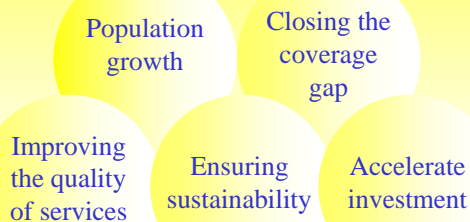
Urban population prospects

2000: 2.845 billion people

2015: 3.817 billion people
(34% increase)

2025: 4.536 billion people
(60% increase)

Major challenges facing the sector



Key issues contributing to poor operation and maintenance water supply and sanitation facilities

- Inadequate Data on Operation and Maintenance
- Insufficient and Inefficient Use of Funds
- Poor Management of Water Supply Facilities
- Inappropriate System Design
- Low Profile of O and M
- Inadequate Policies, Legal Frameworks and Overlapping Responsibilities
- Political Interference

Major Milestones

Date	Place	Event
An "initial" Working Group (1988 – 1991)		
Nov. 1988	The Hague	Informal working session with ESA representatives
Feb. 1990	The Hague	Pre-planning meeting
June 1990	Geneva	First meeting of the "Initial" Working Group
Sept. 1990	New Delhi	Meeting on O&M, parallel to the meeting of the Council and ESAs
Feb. 1991	Geneva	Meeting of the Advisory Committee of the Working Group
A "tools – producing" Working Group (1991 – 1994)		
Sept. 1991	Oslo	Working Group mandated by the WSS Collaborative Council
June 1992	Geneva	Meeting of the Advisory Committee
June 1993	Geneva	Meeting of the O&M Working Group
Sept. 1993	Rabat	Special session on O&M at the Global Forum of the Collaborative Council
June 1994	Geneva	Meeting of the O&M Working Group
An "implementing" Working Group (1995 – 1997)		
June 1995	Geneva	Meeting of the O&M Working Group
Oct. 1995	Barbados	Special session on O&M at the Global Forum of the Collaborative Council
Sept. 1996	Geneva	Meeting of the O&M Working Group
Feb. 1997	New Delhi	Core group meeting
From a Working Group to a Network (1997 – 2000)		
Oct. 1997	Manila	Special session on O&M at the Global Forum of the Collaborative Council and establishment of the O&M Network
Feb. 1998	The Hague	O&M Network meeting
Nov. 2000	Iguazu	O&M Network meeting
		Handing over the O&M Network to the Institute of Public Health of Japan at the Global Forum in Iguazu, Brazil
2001 +	Japan	Promotion and advocacy, web site, workshops, exchange of information

Achievements

Advocacy and Planning →

➤ *Regional workshops*

➤ *Country workshops*

➤ *Participation in major global and regional events*

Achievements

Information exchange

- *Meetings of the Core and Advisory groups of the O&M Working Group and Network*
- *Information on O&M in different newsletters and WebPages*

Achievements

Manuals and guidelines

- *Selected case studies on O&M of WSS systems*
- *Tools for the assessment of O&M status of urban and rural WSS*
- *O&M of urban WSS : a guide for managers*
- *Training course on leakage control*
- *Upgrading of water treatment plants*
- *Training Package on management of O&M of rural WSS*
- *Models of management systems for the O&M of rural WSS*
- *Manual on linking technology choice with O&M in the context of community – managed WSS*

Achievements

Promotion and dissemination

- *Promotional posters*
- *Flyers on O&M tools*
- *Documents distributed at national workshops and major meetings*
- *Dissemination of publications through WHO and IRC networks*

Achievements

Training and capacity-building

- *Management of urban water supply and sanitation systems (Bangladesh (1996), China (1997), Malaysia (1995), Vietnam (1997))*
- *Management of O&M of rural water supply and sanitation systems (Burkina Faso (1994, 1995, 1996, 1997, 1998, 1999, 2000), Mozambique (1997, 2000), Vietnam (1997, 1998)); other training events could not be monitored.*
- *Leakage control (Pakistan (1995), Egypt (1995), Morocco (1997), Vietnam (1998))*

Achievements

Networking

- *Gradual constitution of a network of professionals*
- *O&M Working group linkages with other WSSCC Working Groups and major agencies*
- *Lead by the IPHJ with new focus, new partners, new emphasis.*

Evaluation of the O&M Network

Issue	Item	Level
Relevance	O&M Urban Water supply	●●
	O&M Rural Water Supply	●●●
	O&M Urban Sanitation	●
	O&M Rural Sanitation	●
Efficiency	Working Group coordination	●●●
	Access to funding	●●
	Linkages with other groups	●●
	Implementation at country level	●●
	Productivity of group	●●

Effectiveness	Advocacy	●●●
	Information exchange	●●
	Manuals and guidelines	●●●
	Promotion and dissemination	●
Impact	Training and capacity-building	●●
	Networking	●●
	On decision-makers	●●●
Sustainability	On country level institutions	●●
	On consumers	?
	Of O&M network	●

Needs Identified from the Evaluation of the Network

- **Coordination**
- **Network development**
- **Promotion and implementation of existing tools**
- **Revision and updating of tools**
- **Development of tools on new issues**
- **Alliances for action**