

AFRICAN WATER DEVELOPMENT REPORT MONITORING WATER AND THE URBAN ENVIRONMENT AT THE REGIONAL LEVEL

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PRESENTATION OUTLINE

- The African Water Vision.
- Policy Objectives
- Urbanization in Africa
- Types of Settlements
- Adequacy of Urban Water Supply
- Water Supply Performance Issues and Constraints.
- Health Impacts

Presentation Outline (cont'd)

- Indicators Related to Urban Water.
- Urban Water Needs in Selected Counties
- Levels of Monitoring
- National Water Workgroups & National Water Information Systems
- Concluding Messages

The African Water Vision

Equitable and sustainable use and management of water resources for poverty alleviation, socio-economic development, regional co-operation, and the environment

TARGETS

- **Millennium Development Goals**
 - ➤ **Target 10: To halve, by 2015, the proportion of people without sustainable access to safe drinking water.**
 - ➤ **Target 11: To achieve, by 2020, a significant improvement in the lives of at least 100 million slum dwellers.**

- **The World Summit on Sustainable Development in 2002**
 - ➤ **To halve, by 2015, the proportion of people who do not have access to basic sanitation.**

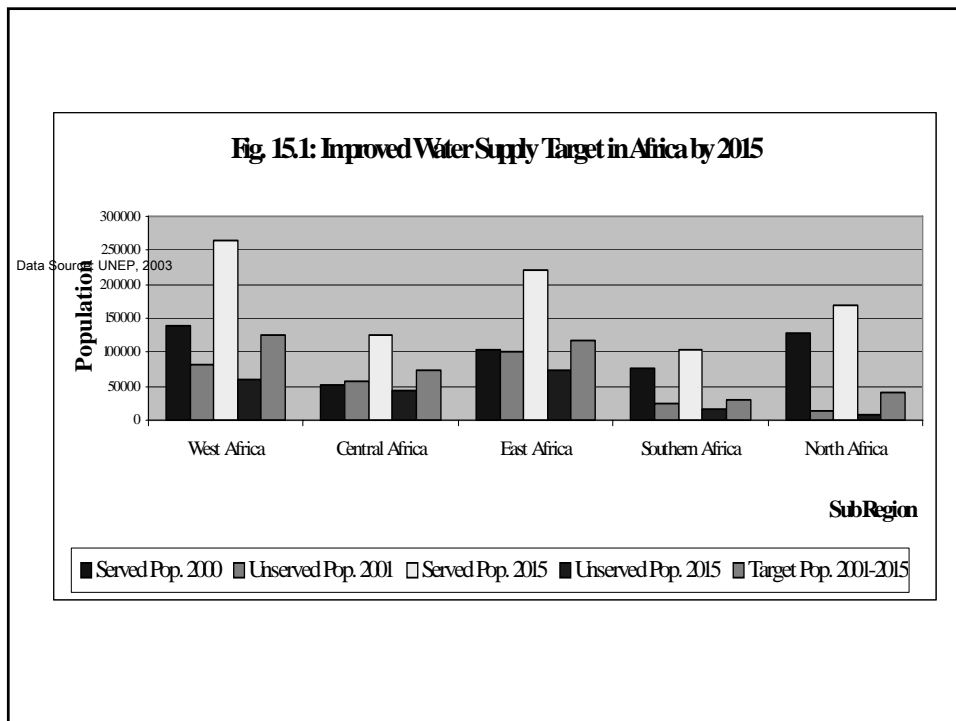
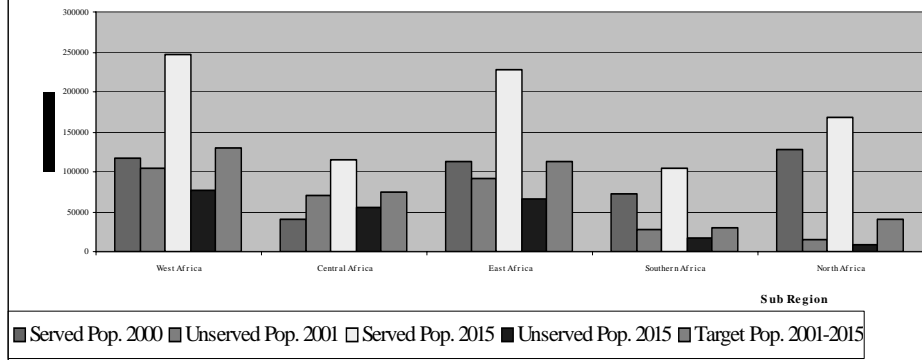
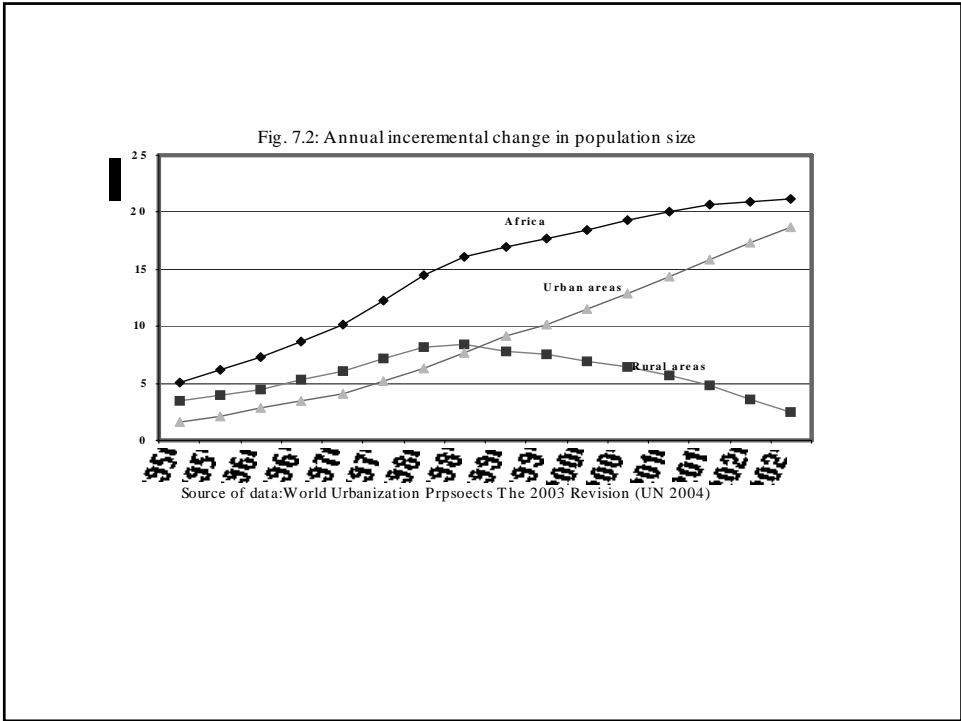


Fig. 15.2: Improved Sanitation Targets in Africa by 2015



Urbanization in Africa

- Africa is the least urbanized continent.
- Highest urban growth and the most rapid rate of urbanization in the world.
- 1950 to 2005 the urban inhabitants in Africa grew by an average annual rate of 4.3% from about 33 million to 353 million persons
- The share of the urban areas in the total population (the rate of urbanization) in Africa increased from 14.9% in 1950 to 39.7% in 2005.
- By year 2025 about half of the population in Africa will be living in urban areas (UN 2004).



TYPES OF SETTLEMENTS

Size class of settlement	Number of inhabitants in millions			
	1970	2000	2005	2015
Small urban settlements	67.1 81%	206.6 69.9%	242 68.6%	318.4 65%
Urban agglomerations	10.1 12.2%	69.7 23.6%	82.9 23.5%	126.2 25.8%
Mega-cities	5.6 6.8%	19.1 6.5%	27.9 7.9%	44.5 9.1%
Total Urban inhabitants	82.8 100%	295.4 100%	352.9 100%	489.1 100%

Indicators of Urbanization 1950-2030

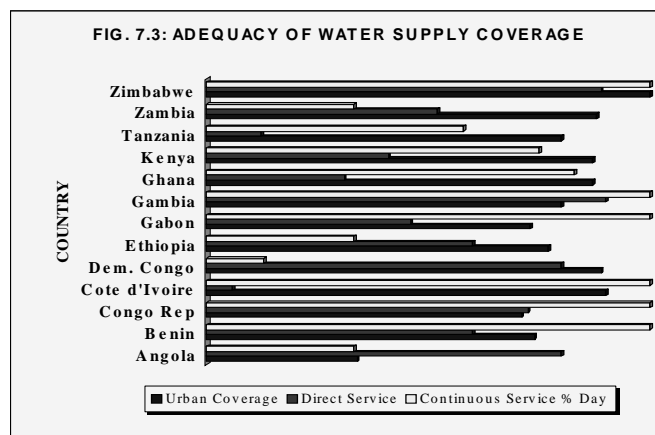
	<i>Urban population</i>	<i>Rate of urbanization</i>	<i>Urban growth rate</i>
<i>1950</i>	33	14.9	4.4
<i>1975</i>	103	25.2	4.5
<i>2000</i>	296	37.2	3.6
<i>2005</i>	353	39.8	3.4
<i>2015</i>	489	45.1	3.0
<i>2030</i>	748	53.5	2.7

Adequacy of Urban Water Supply

- Millions of urban dwellers have inadequate provision of water, sanitation and drainage.
- Large disease burdens and thousands of premature deaths each year.
- Less than half the population in most urban centres in Africa, Asia and Latin America have water piped to their homes, and less than one-third have proper sanitation.
- Those living in large cities are generally better served than those in smaller urban centres.

Adequacy (cont'd)

- Low-income urban dwellers are often pay high prices for very inadequate water provision.
- Low Incomes purchase water from vendors at 2–50 times the price per litre paid by higher-income groups, who receive heavily subsidized water piped into their homes.
- The problem is not necessarily one of government's lack of funds. In many cities and smaller urban centres, it is possible to improve provision for water and sanitation in low-income settlements while charging their inhabitants less than they currently pay for inadequate provision.



Water Supply Performance Issues and Constraints

The key issues contributing to poor performance are:

- Inadequate data on operation and maintenance.
- Insufficient and inefficient use of funds
- Poor management of WS Facilities.
- Inappropriate system design.
- Political Interference
- Low value for O&M.
- Inadequate policies, legal frameworks and overlapping responsibilities

Sustainability

1. Ensuring the continuous availability of sufficient quantities of water of sufficient quality, within adequate institutional frameworks; and
2. Applying sound management practices, appropriate technologies, and full-cost accounting, and effectively maintaining facilities and equipment.

Health Impacts

- Urbanization can be an important source of health problem
- Currently 30-60 per cent of the urban population are in low-income countries, and lack adequate housing with sanitary facilities, drainage systems, and piping for clean water.
- This number is expected to increase since local and city authorities often lack the resources, knowledge, trained personnel and financial capacity needed to meet their responsibilities in providing services and amenities essential for healthy living.

Indicators Related to Urban Water.

- Actual and total W.S.&S coverages.
- % Unserved by adequate W.S & S.
- Incidence of water-related diseases.
- Investment in W.S & S.
- Growth of mega-cities
- Water supply cost per litre
- % of unaccounted for water
- Water consumption level (l/cap, water tariffs)
- Area of wetlands drained for urban expansion.
- Industrial water use and productivity.
- Pollution from Industry.
- Population exposed water-related risks

LEVELS OF MONITORING

African Water Development Reporting

SAWDR	NAWDR	CAWDR	EAWDR	WAWDR
Okavango Limpopo Zambezi Orange	Nubian NWSAS	Congo Lake Chad	Lake Victoria Nile Shabelle	Niger Volta Senegal
National Water Monitoring Workgroups National Water Information Systems National Water Development Reporting	National Water Monitoring Workgroups National Water Information Systems National Water Development Reporting	National Water Monitoring Workgroups National Water Information Systems National Water Development Reporting	National Water Monitoring Workgroups National Water Information Systems National Water Development Reporting	National Water Monitoring Workgroups National Water Information Systems National Water Development Reporting

NATIONAL WATER WORKGROUPS

1. Meteorological Service
2. Hydrological Service
3. Irrigation Services
4. Universities
5. Research Institutions
6. Ministry of Health
7. Ministry of Water
8. Geological surveys
9. NGOs
10. Development Partners

National Water Information Systems

- Federated System with hub at Water Ministry
- Each NWG to have a link
- Frequency of information updates to be decided by NWG
- Linked to River/Lake/Aquifer Basin Information System
- Consistency in Focal points to existing systems such as Meteo, Hydro, JMP, AWICH, HYCOS, Aquastat, etc
- Universities and Research Institutes to be utilized for analyses

Reporting Linkages

- Basic Document is National Water Development Report on AWW Challenges
- River/Lake/Aquifer Reports to focus on Transboundary Waters
- Sub regional Reports to support REC planning
- African Water Development Report
- Global Report such as WWDR

Conclusions

- Monitoring and Reporting in the African Water Sector should:
 1. Follow bottom up approach
 2. Integrative at the National level
 3. Serve National and Basin Needs first
 4. Linked to a functioning and funded National Water Information system
 5. Updated in a regular cycle
 6. Development Partner projects should be designed to support the National Water Information System.
 7. A Minimum set of Indicators should form the basis of all levels of reporting.

THANK YOU!!