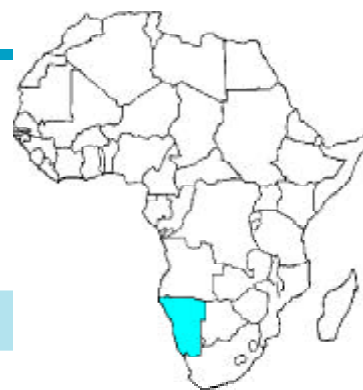


32. NAMIBIA



32.1 Background

32.1.1 General

Area (in thousands) :	827 km ²	Population (in thousands) :	1,726
		Urban :	533
		Rural :	1,193
Main language :	English	Growth Rate:	2.2%/yr

32.1.2 Water Resources

Rainfall :	450 mm	Total water use:	
Renewable water resources :	9 km ³ /yr	Domestic :	6%
Total water withdrawals :	0 km ³ /yr	Industrial :	12%
=	77 m ³ /cap/yr	Agricultural :	82%

32.1.3 Health and Hygiene Education

Life expectancy :	52.4 yrs	Infant Mort Rate:	65 infant deaths/1000 live births
School health/hygiene education policy :	Yes	Child Mort. Rate:	122 child deaths/1000 live births
School curricula with health education :	100%		

32.2 Coverage

32.2.1 Current Coverage (in thousands)^a

Water Supply	Population	Pop. With House Connection	Pop. With Public Waterpoint	Population Served	Population Unserved	% Pop. Served
Urban water	533	341	75	533	0	100
Rural water	1,193	0	513	799	394	67
Total water	1,726	341	588	1,332	394	77

Sanitation	Population	Pop. With Public Sewer	Pop. With Other System	Population Served	Population Unserved	% Pop. Served
Urban sanitation	533	349	50	512	21	96
Rural sanitation	1,193	0	257	203	990	17
Total sanitation	1,726	349	307	715	1,011	41

32.2.2 Operational Aspects

Operations	% of total
Water systems providing intermittent supply	100
Water systems using disinfection	85
Rural water systems functioning	95-100
Treatment of wastewater from public sewers	100

Average availability of water in urban areas: 24 hrs/day



32.2.3 Water Quality

National drinking water quality standards exist and are the same as the WHO Guidelines. In general, drinking water quality is effective in urban and in rural systems.

8.32.2.4 Population Projections (in thousands)

Population	1980	1990	2000	2010	2020	2030
Urban	-	359	533	-	-	-
Rural	-	991	1,193	-	-	-
Total	1,029	1,350	1,726	1,916	2,177	2,495

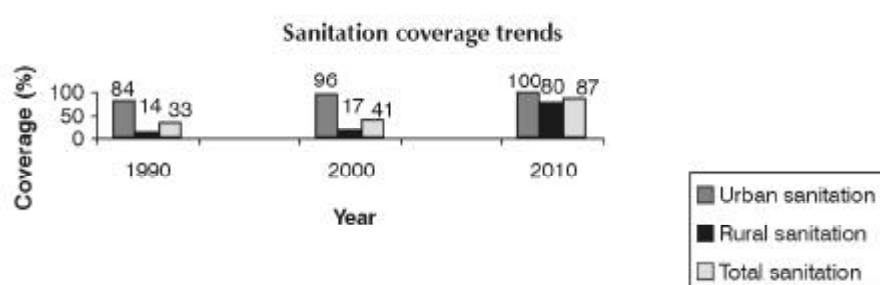
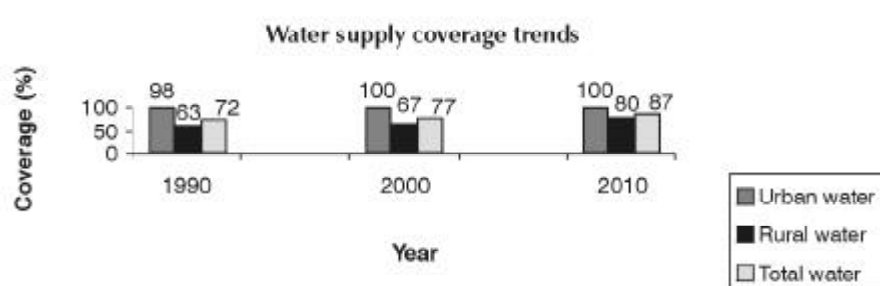
32.2.5 Coverage Trends (in thousands)

Year	Total Population	Population Served	Population Unserved	% Served
Urban water				
1980	-	-	-	-
1990	359	352	7	98
2000	533	533	0	100
Rural water				
1980	-	-	-	-
1990	991	624	367	63
2000	1,193	799	394	67
Total water				
1980	1,029	-	-	-
1990	1,350	976	374	72
2000	1,726	1,332	394	77
Urban sanitation				
1980	-	-	-	-
1990	359	302	57	84
2000	533	512	21	96
Rural sanitation				
1980	-	-	-	-
1990	991	139	852	14
2000	1,193	203	990	17
Total sanitation				
1980	1,029	-	-	-
1990	1,350	441	909	33
2000	1,726	715	1,011	41

32.2.6 Coverage Targets (in thousands)

Target Area	Target Pop. (Yr 2010)	% Served
Urban water	840	100
Rural water	1,343	80
Urban sanitation (sewerage)	815	97
Urban sanitation (other)	25	3
Rural sanitation	1,343	80





32.3 Largest City: Windhoek

Population (in thousands)	: 271	Urban	: 226 (83%)
		Informal settlements	: 45 (17%)
Growth Rate			: 5%
Water Production			: 14 l/cap/day
Metering of connections			: 100%
Unaccounted for Water			: 11%
Water Disinfection			: 98%
Unacceptable Water Quality Tests			: 3%
Treatment of Wastewater from Public Sewers			: 100%

Water	Population Served (thousands)	Sanitation	Population Served (thousands)
House connections	226	Public sewers	226
Yard taps	-	Septic tanks	-
Public standpipes	45	Wet latrines	-
Boreholes with handpumps	-	VIP latrines	-
Other	-	Simple pit latrines	-
Total served	271	Others (communal)	45
Total unserved	0	Total served	271
		Total unserved	0



32.4 Costs and Investments

32.4.1 Costs and Tariffs (US\$/m³)

Average water production cost	0.37
Average water tariff	0.29
Average sewage tariff	0.41

32.4.2 User Charges (US\$/month)

Water Supply	Average Charge	Sanitation	Average Charge
House connections	2.21	Sewerage	6.08
Other public systems	0.44	On-site disposal	0.44

32.4.3 Construction Costs (US\$/capita)

Water Supply	Cost	Sanitation	Cost
Piped systems with houseconnections	186	Sewerage with house connections	152
Public standposts	67	Small bore sewers	-
Boreholes with handpumps	20	Septic tank	-
Protected dug wells	10	Wet latrines	-
Rainwater collection	-	VIP latrines	-
		Simple pit latrines	-

32.4.4 Sources of Investment (1000 US\$)

Service Area	National Funds	External Funds	Total
Urban water	^a 39,808	^a 7,467	47,275
Rural water	^b 18,450	^b 7,233	25,683
Urban sanitation			
Rural sanitation			
Total	58,268	14,700	72,968

^aamount for both urban water and sanitation, ^bamount for both rural water and sanitation.
Government allocation to sector over 1990-1999: _% of national development expenditure

32.5 Policy, Planning and Institutions

32.5.1 Water Supply and Sanitation Policy

Policy on water supply and sanitation states that, the sector in Namibia should contribute towards public health, reduce water collection burden and support basic needs for subsistence. The operational strategy further states that a basic life line supply of 20 lcpd must be provided within 1,000 meters of every homestead. Consumers must pay for their own water supplies and excessive water usage is discouraged. The policy further states that water supply to the rural areas shall be on cost-recovery basis at least for operation and maintenance.

The sanitation sub-sector policy objectives are to:

- Contribute towards improved health
- Ensure a hygienic environment
- Protect water sources from pollution
- Promote conservation of water
- Promote economic development.

32.5.2 National Water Supply and Sanitation Plan: Yes (Year 1993-water; 1999-sanitation)



32.5.3 Key Sector Institutions:

Urban Water

Ministry of Agriculture, Water and Rural Development
Ministry of Regional, Local Government and housing

Rural Water

Ministry of Agriculture, Water and Rural Development

Urban Sanitation

Ministry of Regional, Local Government and Housing

Rural Sanitation

Ministry of Health and Social Services

32.5.4 External Support Organizations

UNICEF, GTZ, FINNIDA, ARCS, WHO, Red Cross

32.6 Collaboration and Coordination

National co-ordination is carried out through an inter-ministerial committee, WASCO (Water and Sanitation Co-ordinating Committee). WATSAN Forum is an intersectoral forum for discussion whose aims are to enhance dialogue, exchange ideas and information, and co-ordinate between stakeholders in the water supply and sanitation sector ; meetings are bi-monthly but not well attended.

32.7 New Approaches

A new national strategy on Sanitation and Hygiene Promotion is being developed, and should include new approaches including application of participatory (PHAST and PRA) techniques with communities and social marketing.

Box 1

Action on the AFRICA 2000 Initiative

The Brazzaville Declaration was presented to the President of the republic of Namibia and the Minister of Health and Social Services as well as to other United Nation agencies.

Achievements :

- National Development Plan : The sanitation subsector of the National Development Plan (NDP) provides for the whole population to have access to sanitation facilities, in both rural and urban areas.
- Appropriate technologies : The Directorate of Rural Water Supply of the MAWRD has a Rural Development Centre and is exploring ways to improve water and sanitation facilities.

32.8 Major Constraints to Sector Development

- Funding Limitations
- Inadequate cost-recovery framework

32.9 Contact Person/Agency for Further Information

32.9.1 Country-Level WHO Contacts

1. Agency : MOHSS
Person : Mr. P. J. Naholo
Address : Private Bag 13198 Windhoek
Telephone No : 264 61-2032321

2. Agency : WHO
Person : Mr. A. Bride EHO
Address : P. O. Box 3444, Windhoek, Namibia
Telephone No : 00 264 61 2046288
E-mail : tbride@mhss.gov.na



32.9.2 Government, Multilateral Or Bilateral Agency Contacts

1. Agency : National Planning Commission
Person : Mr. S. T. Quita
Address : Private Bag 13356 Windhoek
Telephone No : 264 61-2834111
Fax No : 264 61-239376
2. Agency : UNICEF
Person : Mr. Jens Greger
Address : P. O. Box 1706 Windhoek
Telephone No : 264 61-229220
Fax No : 264 61 -224413
E-mail : jgreger@unicef.org
3. Agency : City of Windhoek
Person : Mr. I. Zeriapi
Address : P. O. Box 59 Windhoek
Telephone No : 264 61-2902448
Fax No : 264 61-2902006
4. Agency : MAWRD
Person : Mr. J. W. Van Der Colf
Address : Private Bag 13193 Windhoek
Telephone No : 264 61-2087289
Fax No : 264 61-2087299
5. Agency : MRLGH
Person : Ms. I. F. Nauyala
Address : Private Bag 13289 Windhoek
Telephone No : 264 61- 2975183
Fax No : 264 61 - 226049
6. Agency : NAMWATER
Person : Mr. I. A. T. Ashipala
Address : Private Bag 13389 Windhoek
Telephone No : 264 61 3202095
Fax No: 264 61-3202097
E-mail : Ahipalal@namwater.com.na

Note: (-) = No data provided; NMF = No Meaningful Figure

^aSource: All data except population with house connection, public water point, public sewers & other system = 1999 WHO Headquarter; Pop with house connection, public water point, public sewers & other system = Questionnaire JMP (1999).

