



# SUDAN

## Water and Sanitation Profile

POPULATION AND HEALTH STATISTICS	
Population (2006)	37.7 million
Proportion of population living in urban areas	42%
Urban/Rural population growth rates (1980-2000)	2.3 / -2.0%
Diarrheal deaths/year (2004)	17,200
Under age 5 mortality rate	91/1000 live births
Under age 5 mortality rate due to diarrheal disease (2000)	12.9%

### SECTOR OVERVIEW

Although the World Health Organization estimated that 70 percent of Sudan’s population had access to improved drinking water in 2004, the reality is that access to water and sanitation is extremely low in rural areas. The World Bank estimates that rural access to safe water is as low as 14 percent; access to and appropriate use of sanitation facilities in these areas may be virtually nonexistent.

Since the establishment of the Government of Southern Sudan (GOSS) in 2005, southern Sudan has experienced a rapid influx of people displaced by Sudan’s 22 year civil war. The state of water supply and sanitation (WSS) facilities in the areas to which people have returned are hardly functional from a physical perspective, much less a managerial and financial perspective. UNICEF records show that of the 6,500 rural water points recorded on the national database, only 35 percent may currently be operational because of the war, lack of operation and maintenance (O&M), and poor quality of construction. Evidence also suggests that water consumption at existing water points does not exceed six liters per capita per day (mainly because of the long transportation distance between water points and

settlements), which is far below the recommended standard of 20 liters. The GOSS is committed to achieving Millennium Development Goals (MDGs) by 2015, which it considers a framework for development and a top priority. Currently, however, neither existing nor projected data suggest that these targets will be achieved.

### SECTOR FRAMEWORK

Sudan’s recovery from the civil war and the current humanitarian operations in response to the Darfur crisis are the driving forces in the sector. Reform of the water sector’s institutional set-up and the delegation of responsibilities between the national government, the states, and the GOSS are among the goals laid out by the Ministry of Water Resources and Irrigation’s 2007 Work Plan. Strengthening cooperation among all of these institutions is another goal.

Three ministries oversee the water sector for the GOSS. The Ministry of Water Resources and Irrigation has overall leadership of the sector, water resources management, and water for production.

WATER AVAILABILITY IN SUDAN	
Renewable water resources per capita, m <sup>3</sup> /person/year (1960-2007)	1,707
Water withdrawals, m <sup>3</sup> /person/year (2000)	1,134
Projected water resources per capita, m <sup>3</sup> /person/year in 2015	272
Note: 2015 projected water resources per capita is a straight-line regression calculation based on population growth rates with no adjustment for consumption or technology changes	

## KEY AGENCIES

Agency	Description	Contact Information
Ministry of Water Resources and Irrigation	<ul style="list-style-type: none"> <li>• Overall leadership of water sector</li> <li>• Water resources management</li> <li>• Water supply</li> </ul>	
Ministry of Cooperatives and Rural Development	<ul style="list-style-type: none"> <li>▪ Oversees rural WSS</li> </ul>	
Ministry of Housing, Lands, and Public Utilities	<ul style="list-style-type: none"> <li>▪ Manages urban WSS services</li> </ul>	
Rural Water Supply and Sanitation Regional Directorates	<ul style="list-style-type: none"> <li>▪ Coordinates, plans, and implements WSS service delivery and hygiene promotion in rural areas</li> </ul>	
Khartoum State Water Corporation (KSWC)	<ul style="list-style-type: none"> <li>▪ Water service to Khartoum and surrounding metro areas</li> </ul>	Mohamed Sahal <a href="mailto:mohsahal@yahoo.com">mohsahal@yahoo.com</a> 249-183-775998

The Ministry of Cooperatives and Rural Development oversees rural water supply and sanitation. The Ministry of Housing, Lands, and Public Utilities manages urban water supply and sewerage.

Within the Ministry of Physical Infrastructure, Directorates for Rural Water Supply and Sanitation at the state level are responsible for coordinating, planning, and implementing water and sanitation service delivery and hygiene promotion. Water and Sanitation teams are also being established at the county levels. During 2007, only 0.3 percent of federal spending went toward water programs. Most water programs in southern Sudan are currently being managed by humanitarian agencies, which also provide technical, material, and capacity-building support.

### THE URBAN SUB-SECTOR

Khartoum City and the surrounding urban areas are served by the Khartoum State Water Corporation (KSWC). There is a critical shortage of potable water in greater Khartoum city. The estimated current demand is in excess of one million cubic meters per day, with around two-thirds of the city currently not supplied with water. Many of Khartoum's residents currently have to drink contaminated water, leading to disease and public health issues. High non-revenue

water and the low capacity to operate and maintain the system on a sustainable basis continue to be a problem. The central government highly subsidizes KSWC, and water users are charged very little, if at all, for access and consumption.

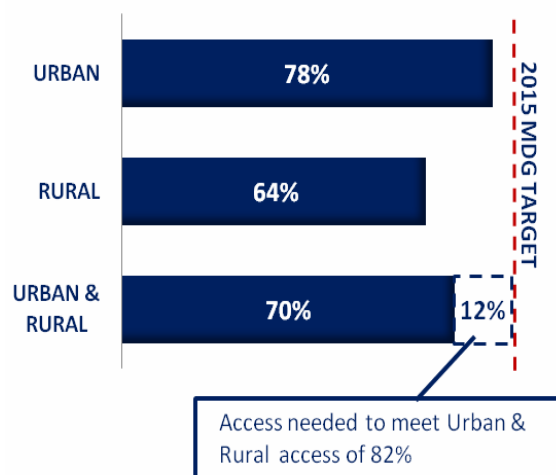
Where urban WSS services do not exist, water customers will pay a considerable portion of their income to small water enterprises (SWEs), but the rates charged by SWEs are reasonable considering the costs involved and seem to be competitive. SWEs are water haulers who often operate on thin profit margins due to taxing practices by local government agents.

### THE RURAL SUB-SECTOR

Sudan's rural WSS sub-sector is grossly inadequate due to the long years of conflict and displacement of its residents. Severe water scarcity remains a serious constraint to development in arid and semi-arid areas. Nevertheless, humanitarian operations are particularly focused on expanding access to water points and adequate sanitation facilities in the face of many challenges, including ongoing conflict, high rates of returning refugees, and institutional disorganization.

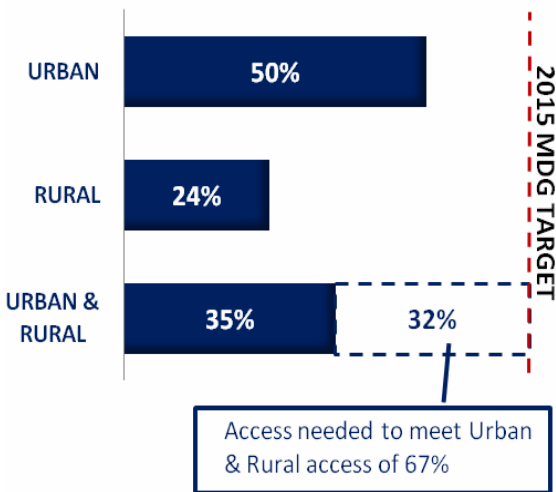
For instance, USAID's humanitarian assistance to Sudan and Darfur includes expanding access to water and promoting hygienic practices to reduce high mortality rates associated with poor water conditions in rural areas. Working through NGOs and

Meeting MDG 7: Access to Water in 2006



Data Source: UN MDG Indicator Database

### Meeting MDG 7: Access to Sanitation in 2006



Data Source: UN MDG Indicator Database

other international humanitarian organizations, USAID and the European Union are not only focusing on access to water, but setting up water pump O&M committees and developing a small degree of cost-recovery mechanisms to promote more sustainability.

### DONOR INVOLVEMENT

The main framework for donor support and coordination in Sudan is the Multi-Donor Trust Fund (MDTF). Established after the Oslo donor conference, the facility works closely with the secretariats in both the north and south. In the north, the MDTF's Community Development Fund provides basic social services (health, education, water) in war-affected areas; the Rural Water Supply and Sanitation project focuses on providing these services to all states in southern Sudan.

The United States and the European Union are by far the largest donors to Sudan. A majority of this funding is directed towards ongoing (Darfur) and post-conflict humanitarian interventions in the form of food aid and disaster assistance. The African Development Bank is the lead agency in the areas of capacity building, gender mainstreaming and infrastructure.

DONOR	ACTIVITIES	CONTACT INFORMATION
The World Bank	<ul style="list-style-type: none"> <li>▪ Rural WSS infrastructure development</li> <li>▪ Small-scale operation and maintenance capacity building and information management</li> </ul>	Solomon Alemu, <a href="mailto:salemu@worldbank.org">salemu@worldbank.org</a> , Tel: 202-473-4075
DFID	<ul style="list-style-type: none"> <li>▪ Access to basic water and sanitation services</li> <li>▪ Transboundary issues – Nile River Basin Initiative</li> <li>▪ Basic services for refugees</li> </ul>	Tel: 249 183 741 760
USAID	<ul style="list-style-type: none"> <li>▪ Rural WSS sector support for basic services</li> <li>▪ Access to water and sanitation facilities, groundwater production</li> <li>▪ Capacity building for rural water managers</li> <li>▪ Hygiene awareness</li> <li>▪ Basic services for refugees</li> </ul>	Michael Andreini
European Union	<ul style="list-style-type: none"> <li>▪ Basic services for refugees</li> <li>▪ Humanitarian services, access to water and sanitation for returning refugees</li> <li>▪ Donor coordination</li> </ul>	
UNICEF	<ul style="list-style-type: none"> <li>▪ Strengthening the WSS capacity for basic services in South Sudan</li> <li>▪ Basic services for refugees</li> <li>▪ Increasing access to water and sanitation, set-up of water pump committees for more sustainable operations and management</li> </ul>	Juba Office 249.0811) 820088 <a href="mailto:mmukiria@unicef.org">mmukiria@unicef.org</a>

Additional information and sources: Statistics were compiled from the WHOSIS database, WRI-Earthtrends Water Resources and Freshwater Ecosystems database, and the UN MDG Indicators database. Other sources included World Bank Rural Water Supply and Sanitation Project Information Document (2006), USAID-DCHA Sudan Monthly Update (2005) USAID-DCHA Sudan Complex Emergency Situation Report #1, FY 2009 (2008) and, USAID-OFDA Funding Guidance Darfur, Sudan February, 2008.

This Water and Sanitation Profile was prepared under the **Advancing the Blue Revolution Initiative (ABRI)**. ABRI is funded by the U.S. Agency for International Development and addresses some of the most challenging water issues in the Middle East and Africa, including the lack of access by the poor to improved water and sanitation services, inefficient and nonproductive water use, and transboundary river basin management. ABRI works closely with host country governments, actively pursues co-investments from the private sector, reaches out to like-minded foundations, and partners with regional institutions.