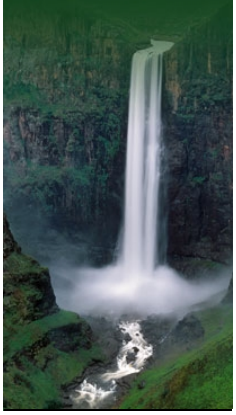
People and the River



Feedback

send a general website comment

report a specific problem with this page

Socio-economics in the Basin: Key Issues for Human Development:

Access to water

Traditionally, communities are often located close to a source of water; however, other factors are considered in settlement, including access to grazing and cultivatable land. Therefore, water must often be gathered from some distance away.

Water is a fundamental requirement needed to sustain life and well-being. Therefore, improving access to water is a critical element of poverty alleviation. As it is such a key requirement for livelihoods, it is often used as a key development indicator. Governments of the four basin states have made significant progress in past decades towards the provision of water to rural and isolated communities.

Water collection

A study conducted by WHO/UNICEF (2008) found that when people are required to travel more than 30 minutes on a single water-hauling trip, they are more likely to compromise their daily water consumption, carrying less water than the household needs for basic needs (drinking water, food preparation and personal hygiene). When drinking water is not readily available, women are more than twice as likely as men to shoulder the burden of collecting and hauling drinking water from a remote location.

Access to Water

Access to clean potable water and to basic sanitation is a key indicator for human development. According to United Nations (UN) standards, access to safe water (see the Box below) is measured by the proportion of the population with access to an adequate amount of safe drinking water located within a convenient distance from the user's dwelling (WHO/UNICEF 2008).

Families collecting water from a communal stand pipe.
Source:Source:DRFN 2008
(click to enlarge)

Box 1: The Drinking Water Ladder

Drinking water supply can be broken down into three categories, illustrated in the form of a "drinking water ladder". The category "improved drinking water sources" includes sources that, by nature of their construction or through active intervention, are protected from outside contamination, particularly faecal matter. These include piped water in a dwelling, plot or yard, and other improved sources. "Unimproved sources" make up the third part of the ladder.

- Unimproved drinking water sources (unprotected dug well, unprotected spring, cart with small tank/drum, tanker truck, and surface water (river, dam, lake, pond, stream, canal, irrigation channels), bottled water)
- Improved drinking water sources other than piped water (public taps or standpipes, tube wells or boreholes, protected dug wells, protected springs and rainwater collection)
- Water piped into a dwelling, plot or yard (piped household water connection located inside the user's dwelling, plot or yard).

Source: WHO/UNICEF 2008

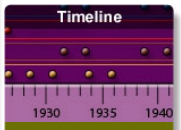
Chronic poverty is usually induced by long-term exposure to threats such as drought, famine and conflict. It is usually further exacerbated by remoteness as access to government services, markets, sanitation and healthcare often dwindle with distance from major urban centers. Due to their lack of proximity to these livelihood components, the rural poor are often the most vulnerable.

Due to their economic position, most impoverished people usually live in conditions with poor sanitation and limited or no access to clean water, thus further increasing their vulnerability. These combined multiple factors are often referred to as the cycle of poverty: numerous factors, such as malnutrition, illness and poor living conditions, that when combined, make it difficult for people to break out of the conditions of poverty to improve their level of well-being and create a more positive livelihood. That is, it is difficult to get and maintain a job or produce your own food when you are suffering from malaria or malnourishment. Poverty and

Interactive


Basin Map
Explore the sub-basins of the Orange-Senqu River
enter


Video Tour
Tour video scenes along the Orange-Senqu River related to People and the River
enter



Timeline
View a historical timeline of Orange-Senqu countries, including water agreements & infrastructure construction
enter


River Journey
Journey along the Orange-Senqu River through images and interviews
enter

health are inextricably connected issues that form a feedback loop.

Due to an inability or reduced capacity to work, sickness, disability and poor health increase poverty. Poverty, in turn, through reduced quality of life, exposes individuals and communities to health risks, as these groups are often marginalised to poor quality land with no facilities. Poor sanitation is a significant cause of illness and death in Africa. Burgeoning urban populations mean that many migrants seeking work in cities end up living in high-density, low-cost housing on the fringes of cities. Informal housing has little or no sanitation resulting in greatly increased health risks.

Improved Drinking Water Supply

In the global and African context, the Orange-Senqu riparian countries have managed to provide reasonable access to water for their citizens. According to newest statistics (http://www.indexmundi.com/) Botswana in 2008 had an "improved drinking water supply" coverage of 95%, as opposed to 93% in 1990. Lesotho's improved drinking water supply coverage stood at 85% in 2008, whilst Namibia has managed to improve drinking water supply coverage from 57% in 1990 to 91% in 2008. During the same period, South Africa also improved its coverage from 81% to 92%. This improvement compares favourably with global and regional estimates.

Vulnerability of water resources to environmental change

The United Nations Environment Programme (UNEP 2005)conducted a study to determine the vulnerability of water resources to environmental change in Africa, which included an assessment of the Orange-Senqu River basin.

Box 2: The Results of the UNEP Study for the Orange-Senqu River Basin

Physiography

- Over 50% of the area of the Orange-Senqu River basin can be classified as hyper-arid to semi-arid, with aridity increasing to the west.
- Water availability is particularly critical for the Orange-Senqu River basin. Climate change and climate variability for the coming years are expected to aggravate the situation by decreasing rainfall, runoff and recharge in large parts of the Orange-Senqu River basin.
- The Orange-Senqu River basin is highly developed, with many dams and transfer schemes in the upstream regions.

Socio-Economy

- The combination of population growth (which is, however, moderate in the African context) and urbanization puts further pressure on the provision of safe drinking water and sanitation, especially in urban areas. Access to safe water and sanitation is usually much better in urban than in rural areas but differs greatly between nations.
- Except for Lesotho, the Gross Domestic Product (GDP) of each of the riparian states of the river basins suggests a healthier economy for the Orange-Senqu River basin as a whole than for the rest of southern African countries. Poverty is more prevalent for the rest of the region than for the Orange-Senqu River basin.
- In most southern African countries, agricultural water use predominates over domestic and industrial use; it stands at about 60 percent for the Orange-Senqu River basin. In South Africa and Namibia agriculture accounts for a large share of the water use, around 63% and 74% respectively. In Botswana and Lesotho the number is lower (aboiut 43% and 45% respectively).
- Basin management authorities such as ORASECOM are essential tools to managing and avoiding conflicts. Ashton (2000) observed a remarkable correspondence between sites of actual or potential water conflict and the absence or scarcity of perennial rivers or lakes in Africa. An example of a potential conflict in southern Africa is the border dispute between Namibia and South Africa.

Management

- Water Sector Reforms are in progress with new water-related legislation and guidelines in place or in preparation, and with the establishment of new institutions for management of water resources on the basis of hydrologic boundaries. Orange-Senqu River basin countries are the most advanced with respect to reforms and implementation of National Water Master Plans compared to other SADC countries. An agreement was signed by the 4 riparian states in November 2000 establishing the Orange-Senqu River Commission.
- Regarding data availability and knowledge gaps, available information on the Orange-Senqu River basin is of better quality and greater detail than for most basins in SADC. Most rural communities rely on groundwater for their domestic water requirements; information on groundwater resources is less detailed and accurate than information on surface water resources.
- Water availability in the Orange-Senqu River basin is already at a critical stage, with a predicted deficit of 50 million m^3/a in South Africa by 2025 due to the allocated 12 000 ha to resource poor farmers (DWAF 2004). Considering the relatively high water demands and withdrawals for agricultural use, this river basin is among the most water-scarce regions in Africa. Basin Management Authorities, such as ORASECOM, are necessary in order to find solutions to the challenges faced by the basin countries and to reduce overall vulnerability across the Orange-Senqu River basin.

Source: UNEP 2005

Access to water and the United Nations

In December 2003, the United Nations (UN) General Assembly proclaimed the years 2005 to 2015 the International Decade for Action: "Water for Life". The primary goal of the "Water for Life" Decade is to promote efforts to fulfill international commitments made on water and water-related issues by 2015.

In 2003 the High Level Committee on Programmes (HLCP) set up United Nations-Water as a mechanism to consolidate and co-ordinate all UN bodies

dealing with water-related issues, specifically the urgent issues of water and sanitation issues. There are four specific programmes under United Nations-Water:

- World Water Assessment Programme (WWAP-http://www.unesco.org/water/wwap/)
- World Health Organisation (WHO- http://www.who.int/en/)/United Nations Children's Fund (UNICEF- http://www.unicef.org/) Joint Monitoring Programme on Water Supply and Sanitation (JMP-http://www.wssinfo.org/)
- UN–Water Decade Programme on Advocacy and Communication (UNW-DPAC http://www.un.org/waterforlifedecade/)
- UN–Water Decade Programme on Capacity Development (UNW-DPC) http://www.unwater.unu.edu/

The United Nations World Water Development Report

Since 2003 The United Nations World Water Development Report is released every three years in conjunction with the World Water Forum. The report gives an overall picture of the state of the world's freshwater resources and aims to provide decision-makers with the tools to implement sustainable use of our water. The reports to date are:

- Water for People, Water for Life, First edition, 2003
- Water: A Shared Responsibility, Second edition, 2006
- Water in a Changing World, Third edition, 2009

The reports examine water management challenges and present case studies highlighting different water management scenarios. The main challenges highlighted in the reports are:

- Meeting basic needs – for safe and sufficient water and sanitation
- Securing the food supply – especially for the poor and vulnerable through the more effective use of water
- Protecting ecosystems – ensuring their integrity via sustainable water resource management
- Sharing water resources – promoting peaceful cooperation between different uses of water and between concerned states, through approaches such as sustainable river basin management
- Managing risks – to provide security from a range of water related hazards
- Valuing water – to manage water in the light of its different values (economic, social, environmental, cultural) and to move towards pricing water to recover the costs of service provision, taking account of equity and the needs of the poor and vulnerable
- Governing water wisely – involving the public and the interests of all stakeholders
- Water and industry – promoting cleaner industry with respect to water quality and the needs of other users
- Water and energy – assessing water's key role in energy production to meet rising energy demands
- Ensuring the knowledge base – so that water knowledge becomes more universally available
- Water and cities – recognising the distinctive challenges of an increasingly urbanised world

Next: Food Security