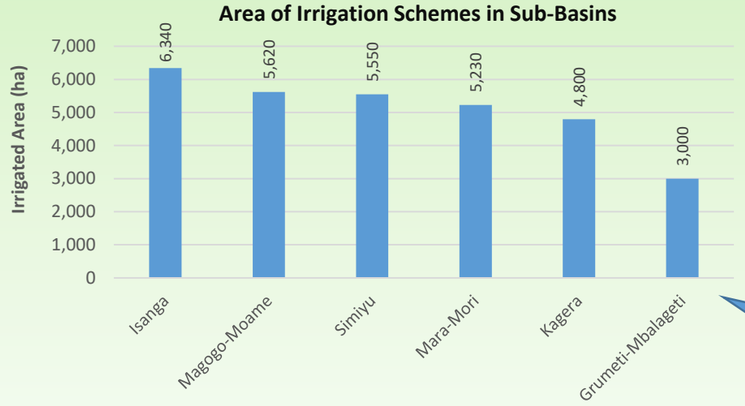
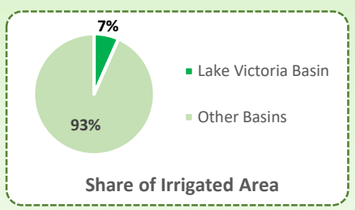
Water Resources Division

Lake Victoria Basin
Water Demands Key Figures

Area of Irrigation Schemes in Sub-Basins

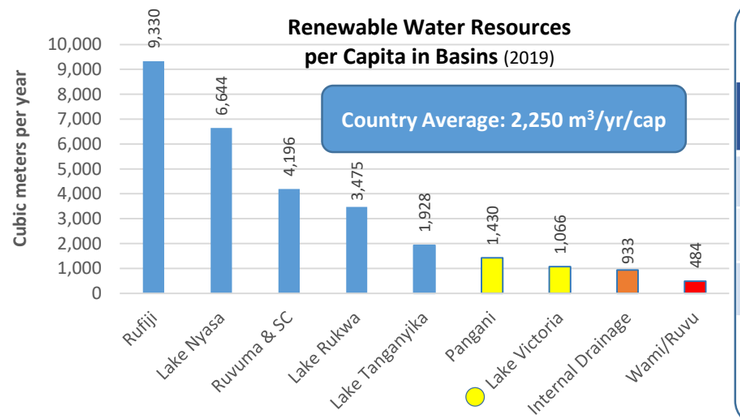


Tanzania's Total Irrigated Area: 460,300 ha



Lake Victoria Basin:
30,540 ha of farms irrigated;
4th Rank in Irrigated Area

Renewable Water Resources per Capita in Basins (2019)



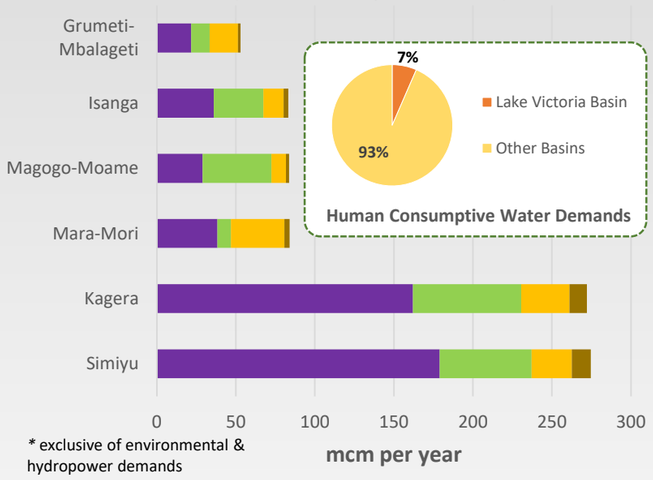
Country Average: 2,250 m³/yr/cap

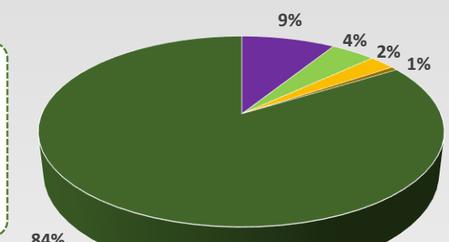
The Falkenmark Water Stress Indicator

Available Renewable Water per Capita (m³/yr)	Indication
< 1700	Water Stress
< 1000	Water Scarcity
< 500	Absolute Water Scarcity

Lake Victoria Basin is experiencing water stress

Water Demands in Sub-Basins*
(human consumptive demands)





* exclusive of environmental & hydropower demands

Water Demands by Sector (%)
Lake Victoria Basin

Ecosystem is the largest water user in Lake Victoria Basin. About 34% of the renewable water resources in the basin is required for replenishment of environmental demands, and only 6.5% is currently utilised for domestic, industries, irrigation, and livestock sectors. In the latter portion, domestic sector accounts for nearly 55% of human-consumptive uses, which makes it the second rank in water demand as a total. There is no hydropower plant in the basin at present.

THE UNITED REPUBLIC OF TANZANIA
Ministry of Water
Water Resources Division

Water Resources Fact Sheet
Lake Victoria Basin

Physiographic Profile

Land Area	**119,700** km²
No. of Sub-basins	**6**
No. of Lakes	
Major Lakes	**1**
Other Lakes	**5**
Protected Areas	
No.	**80**
Area	**30,844** Km²
Dominant Soil Texture	**Sandy Loam**
Dominant Productive Formation	**Migmatite/ Granitoide/ Meta-Sediment Complexes**
Mean Vegetation Index	**0.24**
Forest Cover Change (2000-2015)	**-1.26** %/yr
Average Slope	**3.7 %**
Altimetry	
Highest	**2,547** m.a.s.l*
Lowest	**951** m.a.s.l
Mean Elevation	**1,279** m.a.s.l

** m.a.s.l: meters above mean sea level*

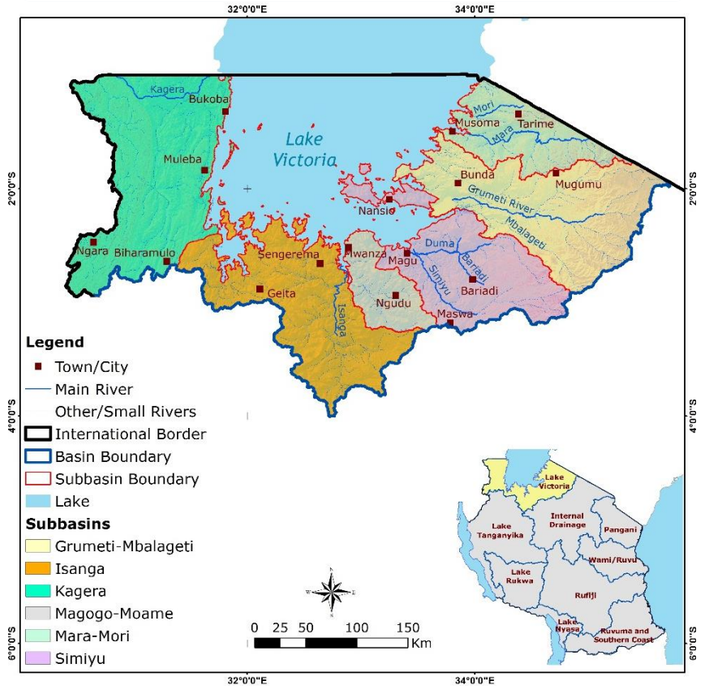
Socio-Economic Profile (2019)

Population	**12.2** million
Population Density	**102** person/km²
Water per Capita	**1,066** m³/yr

Hydro-Climatic & Water Resources Profile*

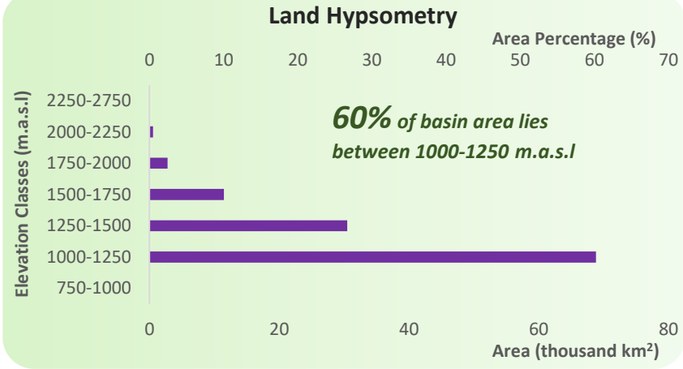
Average Precipitation	**1,265** mm/yr
Average Temperature	**20.5** °C
Average Evapotranspiration	
Potential	**1,454** mm/yr
Actual	**954** mm/yr
Average Renewable Water Resources	**13,027** mcm/yr
Surface Water	**11,700** mcm/yr
Groundwater	**1,327** mcm/yr
Water Demands	
Averaged Total	**5,251** mcm/yr
Human Consumptive	**851** mcm/yr
Water Resources Vulnerability Index	**6.5** %

** According to Lake Victoria Basin IWRMDP, 2015*

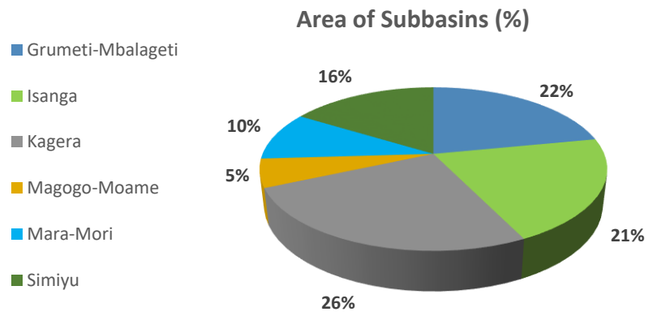


Map of Lake Victoria Basin

Land Hypsometry



Area of Subbasins (%)

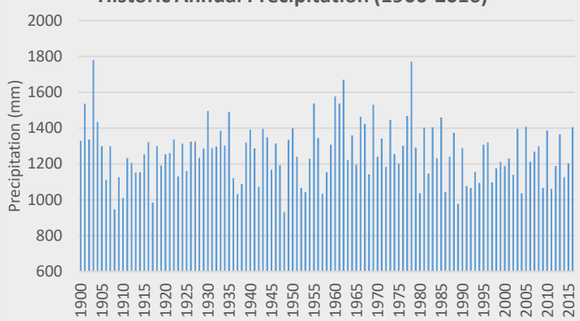


Tanzania mainland is comprised of nine hydrologic basins. Lake Victoria Basin is the 4th largest basin that encompasses about 13% of the area of the country. The basin embraces Lake Victoria in the northernmost part of Tanzania, where it has borders with Kenya and Uganda. The three countries share the Lake, but the basin is extended into the territories of Rwanda and Burundi as well.

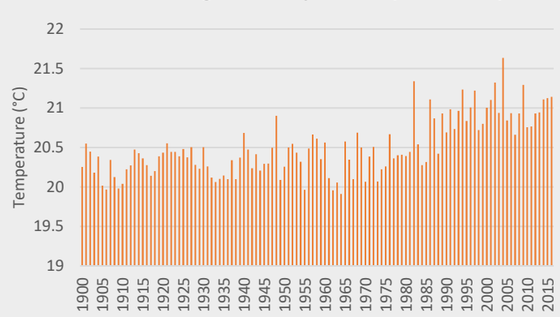
Water Resources Division

Lake Victoria Basin
Water Resources Key Figures

Historic Annual Precipitation (1900-2016)



Historic Average Air Temperature (1900-2016)



Averaged for Lake Victoria Basin; Source: Climatic Research Unit, University of East Anglia, UK; http://www.cru.uea.ac.uk/data

Long Term Rainfall Variation	
Rainfall Average 1900-1930	**1263** mm
Rainfall Average 1985-2016	**1215** mm
Difference in Long-term Average	**- 48** mm

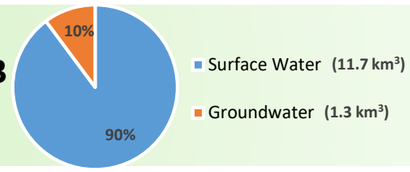
Difference in Rainfall*: - 3.8%

Long Term Temperature Variation	
Temperature Average 1900-1930	**20.31** °C
Temperature Average 1985-2016	**20.95** °C
Difference in Long-term Average	**+ 0.64** °C

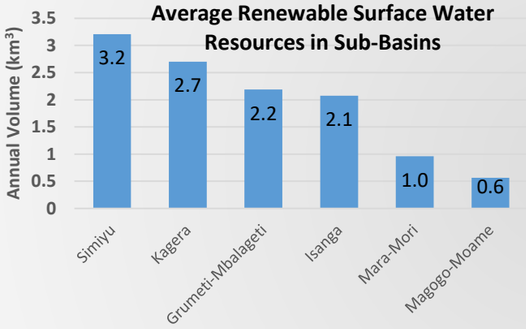
Difference in Temperature*: + 3.1%

** Over 85 Years (30-yr average values, centered on 1915-2000)*

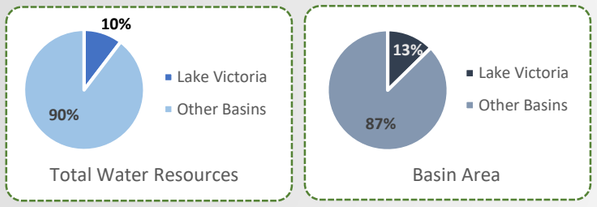
Annual Renewable Water Resources: 13.0 km³
(inside Tanzania borders)



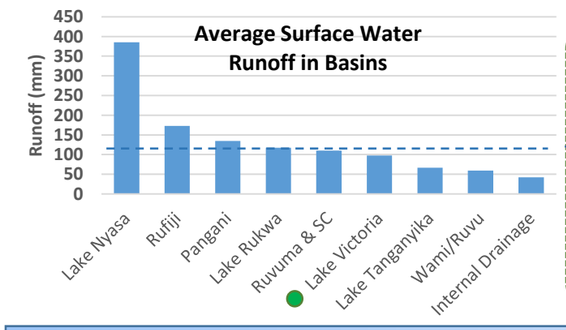
Average Renewable Surface Water Resources in Sub-Basins



Share of Lake Victoria Basin in Tanzania,s Total Renewable Water Resources



Average Surface Water Runoff in Basins



Average Country-wide Runoff: 111 mm

Runoff production in Lake Victoria Basin:
97.9 mm

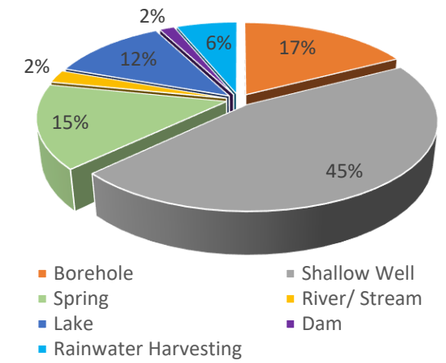
Lake Victoria Basin receives in average an annual precipitation of 151 km³ out of which as much as 138 km³ returns back to the atmosphere and 13 km³ (about 8.6%) turns into surface and ground water as renewable freshwater resources.

Water Resources Division

Lake Victoria Basin
Water Infrastructure Key Figures

Water Infrastructure Profile	
Water Points	
No. of Water Points	**17,090**
No. of Taps	**21,044**
No. of Monitoring Stations:	
Weather	**17**
Rainfall	**33**
Hydrological	**27**
No. of Dams and Reservoirs	**154**
Reservoirs Capacity	**85.6** mcm
Irrigation Schemes	
No.	**234**
Area	**30,543** ha
Irrigation Efficiency	**30%**
Main Crops (irrigated)	**Maize, Legume, Sorghum, Cotton, Coffee, Banana, Sugarcane, Rice**

Water Points by Sources of Water

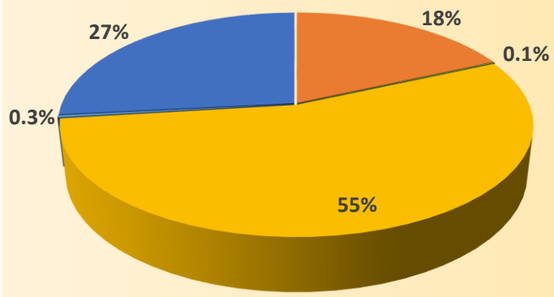


Average Gross Area per Water Point: 7 km²

Functioning Water Taps: 12,863 **61%**

Water Points Supplied by Groundwater and Springs **78%**

Extraction Technologies at Water Points



Water Points that Need Energy for Extraction of Water **75%**

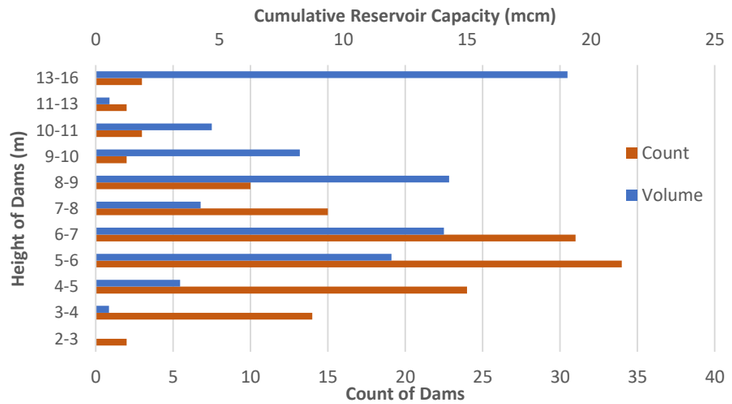
CED Pumps: *Conventional Energy-Driven Pumps (includes Thermal Electricity, Hydroelectricity, Gasoline & Diesel)*

NCD Pumps: *Non-Conventional Energy -Driven Pumps (includes Solar Electricity, Windmill)*

Hand Pumps: *(includes Lever Pumps, Mono Pumps, Rope Pumps, Play Pumps)*

Statistics of Dams in the Basin

There are 154 man-made dams constructed in Lake Victoria Basin with a total reservoir capacity of about 85.6 mcm.
The largest reservoir belongs to Manchira Dam with a height of 16 m and capacity of 14 mcm in Serengeti District.



Water supply access in Tanzania – mainly in rural areas – is realised through "water points", i.e. usually a public place for people to obtain clean water.
Water from water points is potable water consumed for the people or livestock. Means of access to water at the supply points are usually in form of communal standpipes. However, other shapes of access to water are present such as water kiosks, water tanks, hand pumps, developed or undeveloped springs, and cattle troughs.