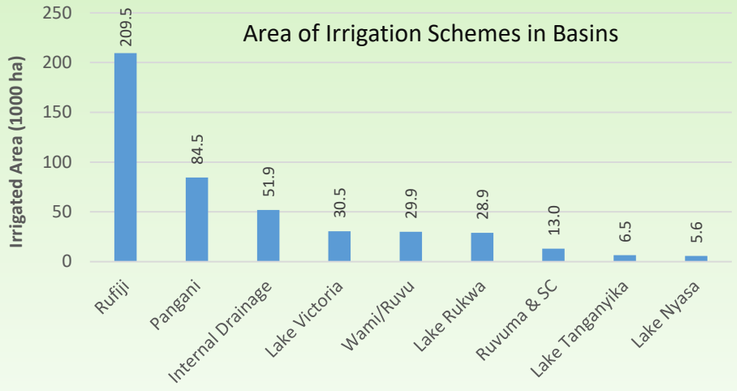
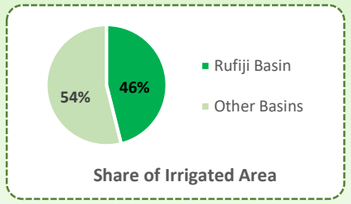
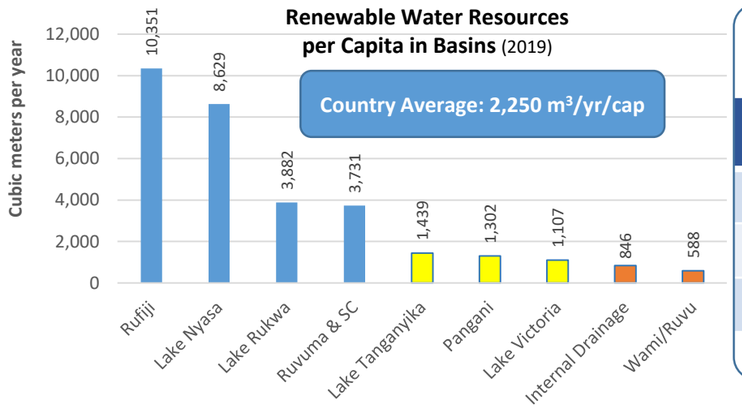
Water Resources Division

Tanzania Water Demands Key Figures



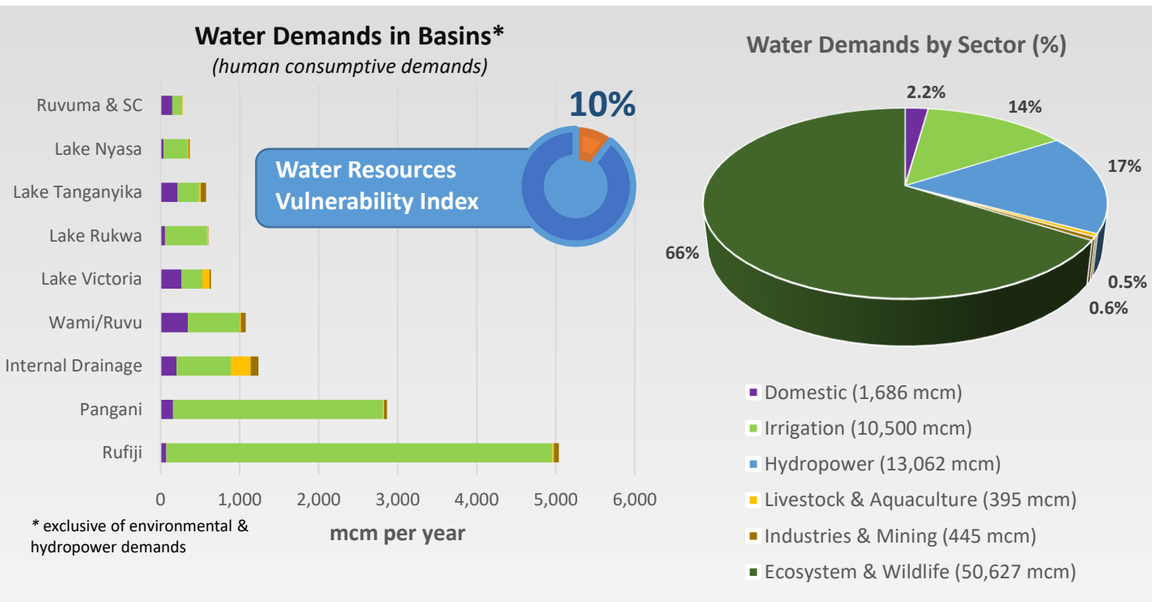
Tanzania's Total Irrigated Area: 460,300 ha





The Falkenmark Water Stress Indicator

Available Renewable Water per Capita (m^3/yr)	Indication
< 1700	Water Stress
< 1000	Water Scarcity
< 500	Absolute Water Scarcity



Ecosystem is the largest water user in Tanzania mainland. About 45% of the renewable water resources is required for replenishment of environmental demands, and 31% is currently utilized for domestic, industries, irrigation, and livestock sectors. In the latter portion, Irrigation sector accounts for about 82% of human-consumptive uses, which makes it the second rank in water demands. Third rank goes to hydropower, building up 23% of total demands, however it is mostly a non-consumptive use.

Water Resources Fact Sheet
Tanzania Mainland

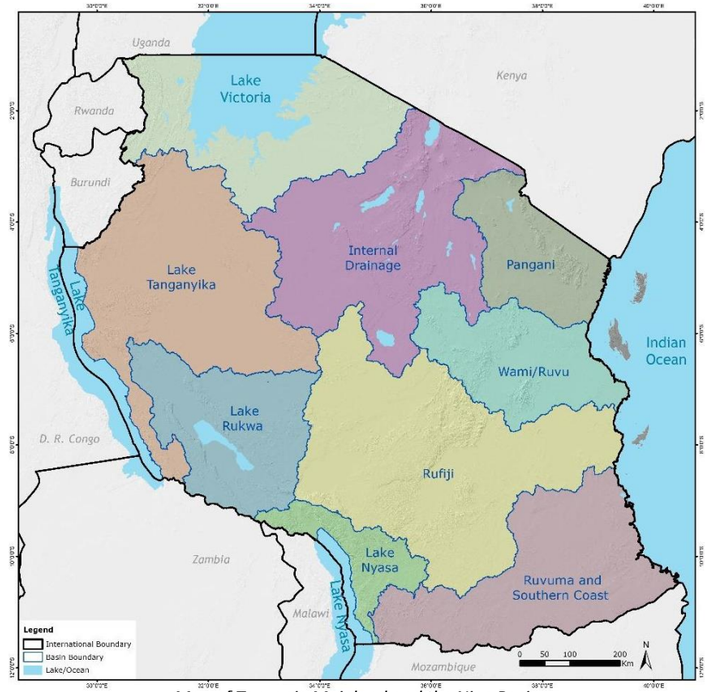
Physiographic Profile	
Mainland Area	**944,800** km²
No. of Basins	**9**
No. of Major Lakes	**14**
Protected Areas	
No.	**792**
Area	**374,280** Km²
Dominant Soil Texture	**Sandy Clay Loam**
Dominant Productive Formation	**Granitoide - Meta-sediment Complexes**
Mean Vegetation Index	**0.32**
Forest Cover Change (2000-2015)	**-0.62** %/yr
Average Slope	**5.84%**
Altimetry	
Highest:	**5895** m.a.s.l*
Lowest:	**0** m.a.s.l
Mean Elevation:	**1026** m.a.s.l

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

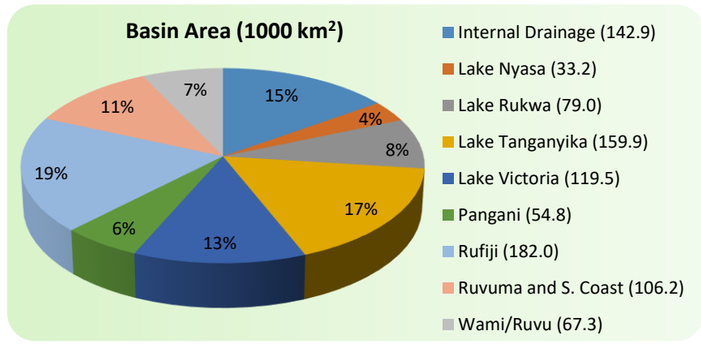
Socio-Economic Profile	
Population (2019)	**55.9** million
Urban	**18.5** million
Rural	**37.4** Million
Population Density	**59.2** person/km²
Households Connected to Electricity Grid	**33%**
Water per Capita (2019)	**2250** m³/yr
Access to Clean Water (HBS,2019)	**73%**
Malaria Prevalence in Children (6 to 59 month)	**7.0%**
Human Development Index	**0.538**
Water and Sanitation-Related Deaths (% of total deaths)	**12%**

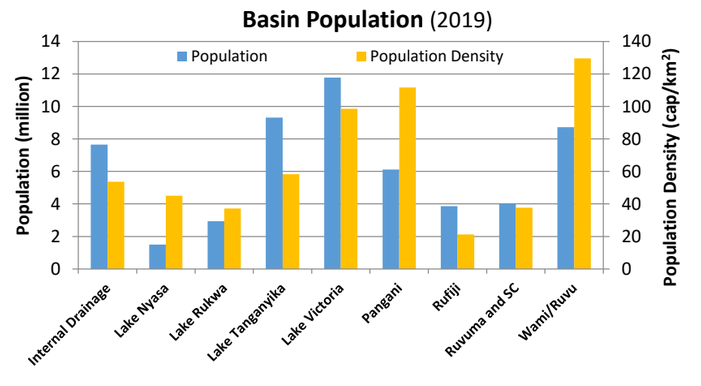
Hydro-Climatic Profile*	
Average Precipitation	**921** mm/yr
Average Temperature	**20** °C
Average Evapotranspiration	**1,326** mm/yr
Average Renewable Water Resources	**125,763** mcm/yr
Surface Water	**104,568** mcm/yr
Groundwater	**21,195** mcm/yr
Water Demands	
Averaged Total	**76,716** mcm/yr
Human Consumptive	**13,027** mcm/yr

** Based on the Basin IWRMDPs, 2015*



Map of Tanzania Mainland and the Nine Basins



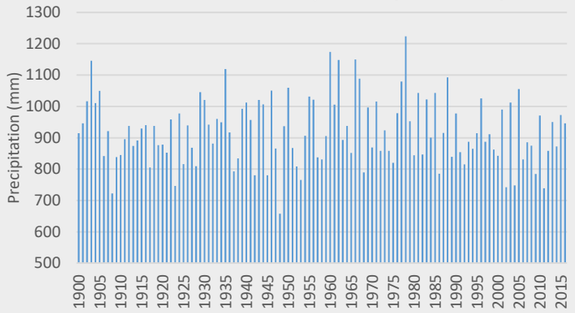


Tanzania mainland is comprised of nine hydrologic basins. Four basins in the East – comprising 43% of country's area – drain into Indian Ocean. The northernmost basin drain into Lake Victoria that is the southernmost watersheds of the great Nile Basin. Lake Tanganyika and Lake Nyasa are two other transboundary freshwater lakes, which about 20% of the area of the territory drains into. Seven of the nine basins are shared basins with the neighboring countries.

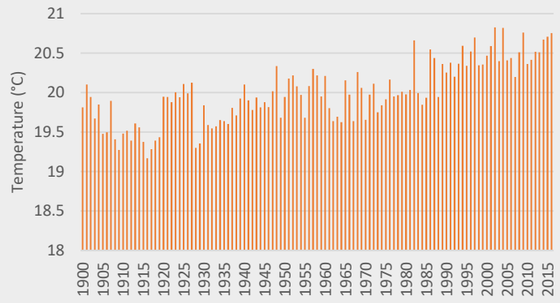
Water Resources Division

Tanzania Water Resources Key Figures

Historic Annual Precipitation (1900-2016)



Historic Average Air Temperature (1900-2016)



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

Long Term Rainfall Variation	
Rainfall Average 1900-1930	**911** mm
Rainfall Average 1985-2016	**898** mm
Difference in Long-term Average	**- 13** mm

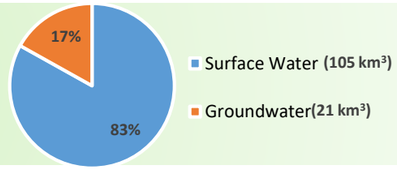
Difference in Rainfall*: - 1.4%

Long Term Temperature Variation	
Temperature Average 1900-1930	**19.66** °C
Temperature Average 1985-2016	**20.45** °C
Difference in Long-term Average	**+ 0.79** °C

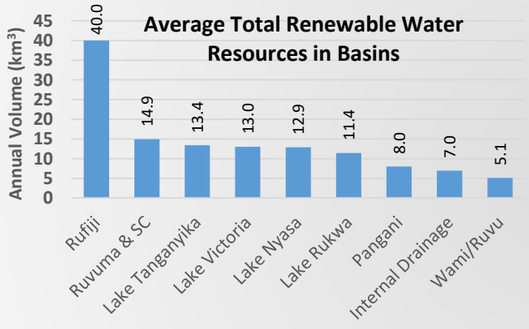
Difference in Temperature*: + 4.0%

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

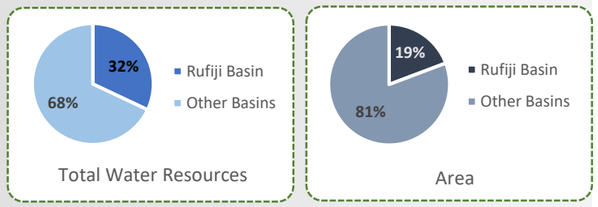
Annual Renewable Water Resources: 126 km³



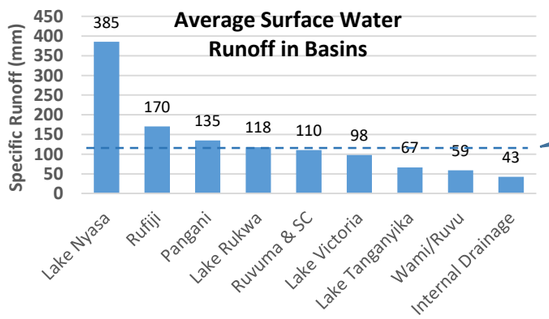
Average Total Renewable Water Resources in Basins



Share of Rufiji Basin in Tanzania Renewable Water Resources



Average Surface Water Runoff in Basins



Average Country-wide Specific Runoff: 111 mm

There is a large variation of runoff production within different basins in Tanzania:
- *Lake Nyasa Basin as high as 246% above average*
- *Internal Drainage Basin as low as 38% of average*

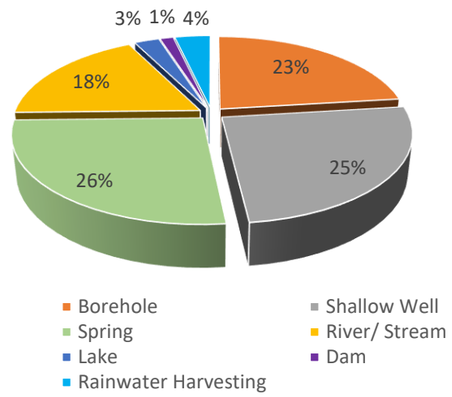
Tanzania mainland receives in average an annual precipitation of 870 km³ out of which as much as 744 km³ returns back to the atmosphere and about 126 km³ (14.5%) turns into surface and ground water as renewable freshwater resources.

Water Resources Division

Tanzania Water Infrastructure Key Figures

Water Infrastructure Profile	
No. of Water Points (2019)	**131,316**
No. of Monitoring Stations:	
Weather	**118**
Rainfall	**297**
Hydrological	**362**
Hydrogeological	**86**
No. of Dams and Reservoirs	**776**
Reservoirs Capacity	**5,462** mcm
Irrigation Schemes	
No.	**2919**
Area	**460,300** ha
Irrigation Efficiency	**25%-30%**
Main Crops (irrigated)	**Paddy, Maize, Sugarcane, vegetable**

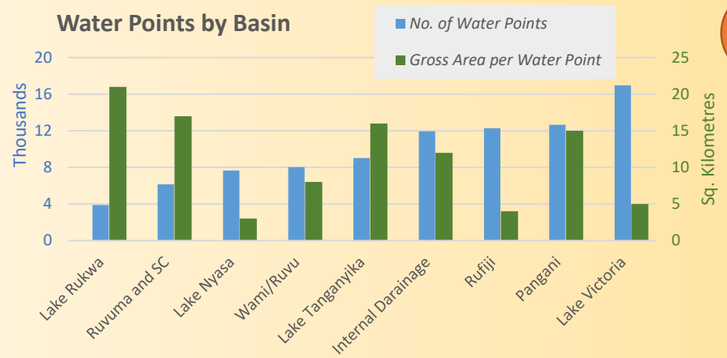
Water Points by Sources of Water



No. of Functioning Water Points: 89,371 68%

Water Points Supplied by Groundwater and Springs 74%

Water Points by Basin

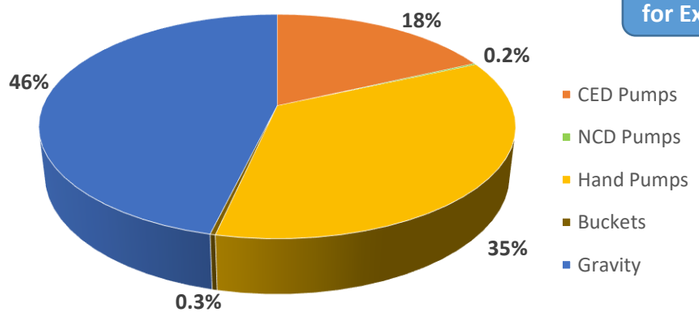


Average Gross Area per Water Point: 7.2 km²

Percent of rural population using at least basic drinking water services 65%

Percent of urban population using at least basic drinking water services 87.6%

Extraction Technologies at Water Points



Water Points that Need Energy for Extraction of Water 54%

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)*

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.