

Open Data for Enhanced Water Accessibility by Women in Machakos County, Kenya

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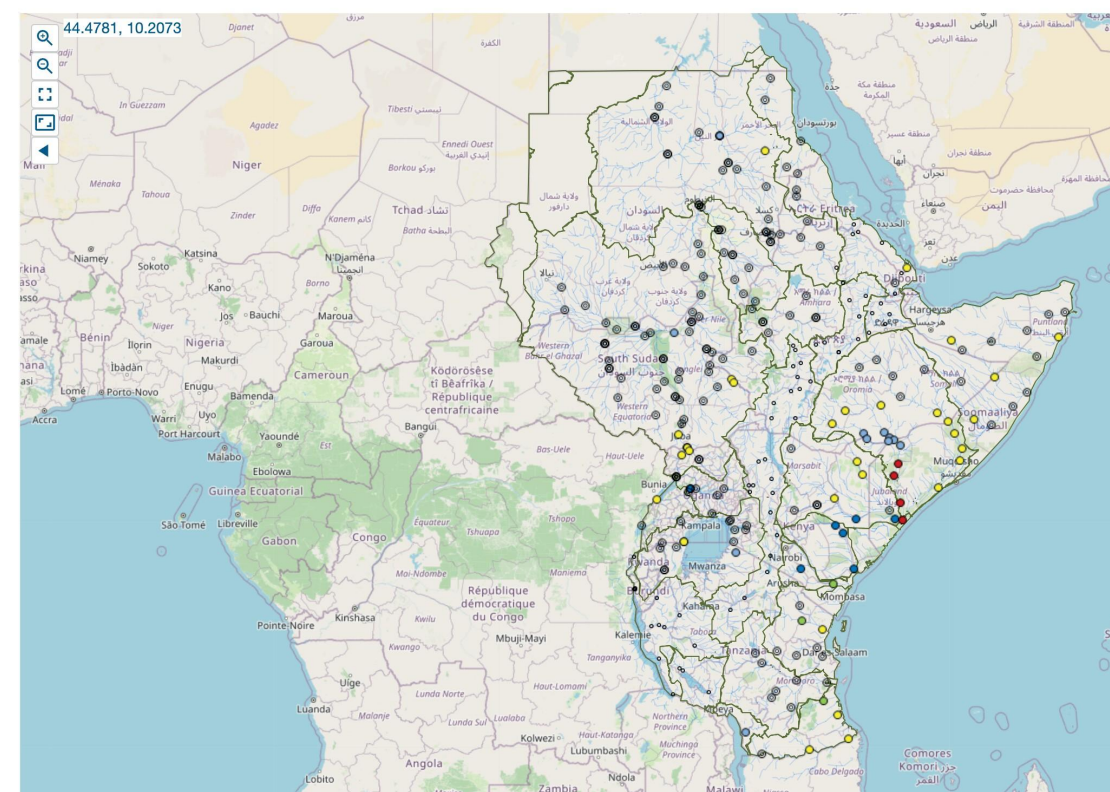
Background

Rivers, springs, and subterranean aquifers are among the water sources in Machakos County. The county is classified as a semi-arid. Approximately 350,000 of the 1.26 million people who live in the County are within the water service area, leaving a significant portion of the population, 72.2%, without this crucial resource.



- Pollution brought about by both industrial and human activity:
- Population growth and increasing water demands from growing industries, as well as climate change:

ICPAC Water Forecast Portal



East Africa Hydro Watch

Opportunities

- Research and development on alternative technologies and methods for abstracting water:
- Adoption of renewable energy sources including wind and solar energy.
- Adoption of technologies like Q-field and strengthening East Africa Hydro Watch can empower women in water management.
- Earth observation technologies can be embraced to guarantee that women and girls, have the technical ability to map water sources and monitor water quality.
- Technical capacity building of women, girls, youth and local leaders on Q-field as a low-cost technology.
- The potential and aptitude of women to utilize earth observation technologies for water access are conducive to the accomplishment of the SDGs no. 6.3.2 as well as Kenya's Vision 2030 economic blueprint.

Water Access Challenges

- Water scarcity remain a big challenge especially for women and girls, as they are primarily responsible for water collection in many households.
- Degradation of water towers: Tana and Athi Catchment Areas have been degraded as a result of human activities, which are likely to worsen and eventually affect the economic development and the living conditions of its population.

Recommendations

- Empower women, girls, and youth through earth observation technology training.
- Invest in innovative, affordable water abstraction methods using renewable energy.
- Collaborate with stakeholders to tackle water scarcity challenges and enhance water governance in the County.



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