

Project brief

Rapid Integrated Water Assessment in 10 Arid and Semi-Arid Land (ASAL) Counties, Kenya



At the request of the Technical Committee for Water Security in the ASAL Regions of Kenya, UNEP-DHI conducted a rapid integrated assessment of water resources in 10 ASAL counties. The study identified key challenges and opportunities to building water security in the region so as to inform future interventions.

BACKGROUND

The Arid and Semi-Arid Lands (ASALs) are home to 36% of Kenya's population, 70% of its livestock, and 90% of its wildlife.

Safeguarding the health and economic development of this region and achieving increased water security requires improving the quality and availability of water in a way that does not exceed sustainable limits. However, the sustainable management of water resources is challenged by a variety of natural and socioeconomic conditions: from droughts and floods to ambitious irrigation plans and competing governance structures. Addressing these challenges requires a holistic, multidisciplinary assessment of water resources and their management.



PARTNERS

- UNEP Regional Office for Africa

OBJECTIVES

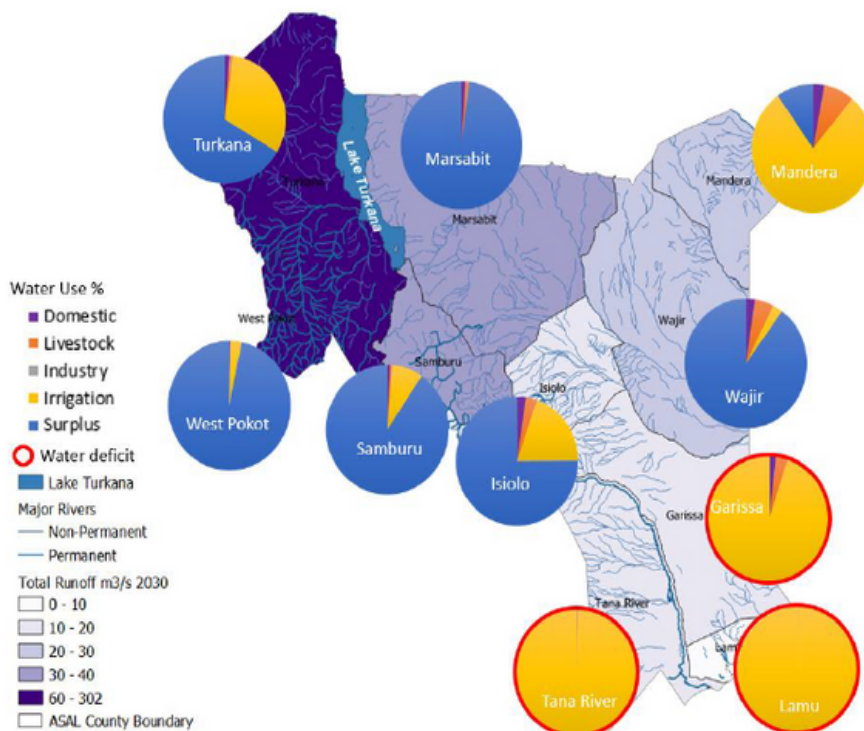
Identifying the key social, environmental, institutional, and economic issues challenging water resource management in target ASAL counties

SDG ACTION



PROJECT APPROACH

The project was conducted as a desk study over 18 weeks, data was assessed according to 4 broad profiles: governance, demography, water resources, and risks, and information was collected on previous and on-going integrated water resources management (IWRM) projects financed by donors in the target counties. The project used DHI's state-of-the-art Global Hydrological Model to calculate estimates of current and future water availability in the target counties.



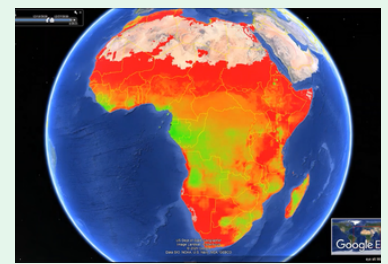
Projected total annual water run-off and percentage water use in target counties in 2030. While most regions are projected to have an annual surplus of water in 2030, the Tana River, Garissa, and Lamu counties will likely experience a water deficit due to proposed irrigation development.

DELIVERABLES & APPLICATIONS

The project makes 9 high-level recommendations for improving water security in the ASAL regions spanning three broad areas: improvement of physical infrastructure, governance arrangements, and data. Key gaps requiring further investigation are also highlighted. Project deliverables are expected to inform future interventions supported by the UN and other relevant actors.

DATASETS

The study drew on data submitted by members of the Technical Committee and other relevant stakeholders. Key supporting documents included the 2019 Kenya Census, the National Water Master Plan 2030 reports, and freely available Earth observation data.



KEY RESOURCES

[Full Report](#)

[Executive Summary](#)

[Global Hydrological Model](#)

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