ABSTRACT

This policy brief seeks to analyse the water, peace and security nexus in Turkana County in Kenya through highlighting the policy, legal and institutional gaps including development challenges and suggest policy recommendations for addressing them. It is intended for policy decision-makers at sub-national (county) and national levels. The content is based on the water-related conflict analysis study report for Turkana County and other literature sources including the policy and legal frameworks both at national and county level.

Keywords: Water resources, Water, Lake Turkana, Water policy, Conflict-sensitive water management, Peace and security

1. Introduction

Kenya is experiencing water scarcity driven by high rates of population growth, inappropriate water harvesting and storage technology, unsustainable water consumption patterns compounded with the impacts of climate change. This has led to a host of water-related conflicts involving local communities, private companies, county and national government agencies, environmental organisations, security forces and many other parties each with their own competing interests (GoK, 2018).

In the Arid and Semi-arid Lands (ASALs) of Kenya, the total demand for water often exceeds the water available to people and livestock (Maingey et al., 2022). This is the case in Turkana, an ASAL County and the second largest in Kenya located in northwest Kenya bordering Uganda, South Sudan and Ethiopia. The County covers 71,597.6 km² accounting for 13.5% of the total land area in Kenya. It is part of the Karamoja complex conflict zone, which is approximately 8,400 km² and occupied by 13 pastoralist communities: Bokora, Dessenach, Didinga, Dodoth, Jie, Matheniko, Nyangatom, Thur, Pian, Pokot, Tepeth, Topotha and Turkana (IGAD Karamoja Cluster, 2022). The County’s economic mainstay is pastoralism. Most livelihoods and economic activities are reliant on climate-sensitive sectors, such as, agriculture,
livestock, fisheries, water, forest, and wildlife. In addition, Turkana County is experiencing growth of large investments such as oil exploration, the Turkana Wind Power project and the Lamu-Port-South Sudan-Ethiopia Corridor (LAPSSET).

Therefore, it is against the above that this policy brief is developed in order to highlight the nexus between water, peace and security in Turkana County including development challenges and suggest policy recommendations for addressing the challenges. It is intended for policy decision-makers at sub-national (county) and national levels.

2. Policy and legislative framework for water resources governance

All water resources in Kenya are vested in the state under the Ministry of Water, Sanitation and Irrigation. The Water Act 2016 provides that every water resource is vested in and held by the national government in trust for the people of Kenya. The Water Resources Authority (WRA) is established under Section 11 of the Act as an agent of the national government to regulate the management and use of water resources. The Draft National Water Policy, 2018 outlines the framework on promoting comprehensive water resources management and development within decentralised institutions. The Constitution of Kenya, 2010, Article 43 provides for access to clean and safe water as a basic human right. It devolves the responsibility for water supply and sanitation service provision to counties. The Fourth Schedule of the Constitution provides that the functions and powers of the county governments include water and sanitation services, storm water management in built-up areas, and solid waste management. The national government is responsible for developing policies and regulations for water resource management, while counties are responsible for implementing these policies. The Water Act, 2016 reinforces these Constitutional provisions by identifying related functions as a shared responsibility between the national government through the Water Resources Authority (WRA) and the county governments.

The Water Act, 2016 establishes the National Water Harvesting and Storage Authority whose functions and powers include to undertake on behalf of the national government, the development of national public water works for water resources storage and flood control and develop a water harvesting policy and enforce water harvesting strategies among other functions. Section 29(l) of the Act establishes

**Turkana County**

Surface area: 71,597.6km², 2nd largest county in Kenya

**Geographic coordinates:** Between Longitudes 34°30’E and 36° 40’E and between Latitudes 10°30’N and 50° 30’N

**Neighbours:** Ethiopia, South Sudan, Uganda and the counties of West Pokot, Baringo, Samburu and Marsabit

Population: 926,976 (2019 census)

**Average household size:** 5.6 (2019 census)

Population density: 14 persons per Km² (2019 census)

**Refugee camps/settlements:** Kakuma camp (147,000 refugees) and Kalobeyei integrated settlement

Fig. 1 Google maps image capture of Lake Turkana and county-level generic information on Turkana County
the Water Resource Users Associations (WRUAs) as associations of water resource users at the sub-basin level for collaborative management of water resources and resolution of conflicts concerning the use of water resources. The Basin Water Resources Committees (BWRCs) are established under Section 25 of the Act for each respective basin area. These are responsible for the management of the water resources within a respective basin area. The Act mandates the Cabinet Secretary to establish waterworks development agencies to undertake the development, maintenance and management of the national public water works within their areas of jurisdiction.

3. Water resources situational analysis in Turkana County
Turkana County has the Lodwar Water and Sanitation Company (LOWASCO) that supplies water within Lodwar town and its environs, approximately up to 50km2. Other urban centres such as Kalokol are supplied water by Water Service Providers (WSPs) while most rural water points access water from the boreholes and shallow wells managed by the respective Water Users Associations (WRUAs). The main water sources in the County are springs, wells, boreholes, piped water, and rain water. Other sources include ponds, dams, Lake Turkana, streams and river Turkwel. The distance to the nearest water points average between 5-10 kms. In urban and peri-urban centres, some WRUAs have pipe water closer to settlements thus reducing the distance to the nearest water points. However, in far flung areas like Kibish, Lorengippi, Lomelo and Mogila, distances covered are much longer ranging from 10-20 kms. According to the Turkana County Water and Sewerage Services Sector Policy, 2016, the whole County, 39% of residents use improved sources of water, with the rest relying on unimproved sources. This has led to poor sanitation and poor hygiene posing substantial health risks and contributing to the emergence of waterborne diseases. It has also led to the strain on women and children having the task of searching for water especially for domestic use (Mulwa et al., 2021).
4. Development threats in Lake Turkana Basin
Lake Turkana Basin has a total surface area of 6,405 km², a catchment area of 130,860 km² and water volume of 203.6 km³. The basin is located in the north-western part of Kenya, bordering Ethiopia to the North. It is Africa’s fourth largest lake, one of the most saline lakes in East Africa and the largest desert lake in the world, surrounded by an arid landscape pattern, with a main annual flood peak in April. Lake Turkana is under threat as the demands for water for development increase. The Lake’s major source (90%) of water, Ethiopia’s Omo River is being developed with a series of major hydropower dams and irrigated agricultural schemes. These could significantly reduce the lake's inflow over a number of years and lead to the lake level dropping by as much as 22 meters from the average depth of 30 meters hence compounding the already worse situation of water scarcity (Mulwa et al., 2021). Concerns have also been raised about the impact of oil exploration on communities, land ownership and the environment, including water resources (Michel, 2020).

5. Conflict Context
The conflicts in Turkana are caused by competition over resources including water, unfavourable land tenure system, gender and social norms, and inadequate utilisation of traditional mechanisms for addressing conflict (Kibe, 2020). As part of the Karamoja complex conflict zone, there is a high level of mobility by the Turkana community as well as their neighbours, the Toposa of South Sudan and Nyangatom, and Dassenach of Ethiopia across the borders as a mechanism of adaptation to climate variability and intercommunal conflict over water and pasture resources. Cattle rustling is common in the process of migration. Conflicts in this region can be categorised in three layers: (1) inter-communal conflicts along Turkana and West Pokot borderline; (2) confrontations with the state in areas such as Kapedo; (3) tensions between indigenous communities and refugees.

5.1. Water resource scarcity
Thomas Homer-Dixon (1998) in his book Environmental Scarcity and Violence explains the competition for environmentally degraded resources as the underlying cause of conflict leading to resource capture and ecological marginalisation. Local water-related conflicts in Turkana reflect conflicts in a society in general (Percival & Homer-Dixon, 1998). Communities in Turkana County lack sufficient economic resources to develop the water resources available to them for consumption. They lack information and access to institutions; sufficient political and organisational capacity to negotiate payments for conserving water and thus risk losing their access to water to resources. They are rarely consulted in cases of infrastructure investments such as oil drilling and hydropower generation whose impacts are not adequately valued in either social, cultural or economic terms. They bear the costs of hydropower generation while rarely receiving a fair share of the benefits in the form of rural electrification. This results in mistrust of government authorities and tensions.

Fig. 3 Ladies fetching water from the Koyasa spring in Naita location, Kibish, Kenya, 2023.
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5.2 Weak water governance and management

The 2022 Report on Water-related conflicts in Turkana County by the Water, Peace and Security (WPS) Partnership identifies weak governance and poor management to be one of the most pronounced challenges affecting access to water in the County. According to the Report, there is weak regulation of boreholes in Lodwar Township and Kalokol centre as business activities and human occupation increases. Water cartels, popularly known as Nakanas control the sources of water, preventing communities from accessing water, such as Lagas in Kalokol, or they divert the piped water and sale. The influential elites including business people and politicians also abuse their power and resources by illegally diverting water to their homes and businesses. As a result, there is rising grievances amongst the local communities increasing the potential risks of localised conflict.

5.3 Weak water rights

In the context of increased competition between water users in Turkana County, comprehensive water rights can contribute to conflict reduction. Ownership of water resources does not necessarily come from government allocation of the resource, whether through the Water Resources Authority (WRA), to private companies or individuals or to community groups such as the Water Users Associations (WRUAs) and Beach Management Units (BMUs). To promote comprehensive water rights, it is more useful to begin with stakeholders interests on access and control over water, in which individuals and community groups use a range of strategies to claim and access water resources. This calls for expanding local community water rights through institutional co-management arrangements such as Sub-Catchment Management Plans (SCMPS) and Participatory Forest Management Plans (PFMPs) including delegation of authority and control, and ensuring gender equity in benefit sharing.

5.4 Lack of awareness on Alternate Dispute resolution mechanisms

While the Water Act, 2016 provides a clear legal framework with respect to water governance and conflict resolution elements, it is not enough to resolve water-related conflicts in Turkana County. Water uses and users change over time. Therefore, conflicts will always occur, despite the legal framework. To effectively resolve such conflicts, Alternative Dispute Resolution (ADR) is necessary. ADR refers to a wide variety of non-judicial consensual mechanisms within which parties in conflict voluntarily seek to reach a mutually acceptable settlement. In Kenya, the existing mechanisms for managing disputes include arbitration, mediation, conciliation, negotiation and expert determination. These mechanisms have been recognised as fundamental in resolving disputes and enhancing environmental justice specifically under Article 159 of the Constitution of Kenya, 2010. ADR mechanisms are less formal, shorter and simpler, and therefore more accessible and affordable than litigation (Hadwiger, 2017).
5.5 Weak linkage between Water Resources Management (WRM) and Water, Sanitation and Hygiene (WASH)

Access to sufficient and healthy drinking water and safe and dignified sanitation facilities (WASH) is a basic human right under the Constitution of Kenya, 2010. WASH services are strongly connected to the hydrological cycle and the landscape. In Turkana County, demand for water resources has increased tremendously to meet WASH services. Water scarcity with groundwater tables declining and surface water bodies becoming dry is increasing. However, there are no incentives to support upstream communities for their efforts to conserve catchment areas. Such incentives could include Payment for Ecosystem Services (PES) and Cooperate Social Responsibility (CSP). Therefore is the need for the National Government through WRA and the County Government of Turkana to create a strong linkage between Water Resources Management (WRM) and Water, Sanitation and Hygiene (WASH).

5.6 Lack of capacities of formalised WRUAs in Conflict resolution

In Kenya, the response to concerns over ensuring stakeholder participation and resolving water-related conflicts has been the establishment of the Water Resources Users Associations (WRUAs) under the Water Act, 2016. WRUAs are community-based associations of water resource users at the sub-basin level. They are established for collaborative management of water resources and resolution of conflicts concerning the utilisation of water resources. However, the experience has been disappointing. Local communities through WRUAs are yet to fully appreciate that they themselves are the custodians of the water resources at their local sub-basin level and not the National nor County Governments. WRUAs are unable to provide a significant contribution to efficient use, equitable allocation and sustainable water resources management and livelihood improvement of the poor and marginalised people. Major challenges include lack of defined structure and hierarchy at local and national levels; diversity of cultures, languages, and aspirations bringing mistrust and suspicion among members; fair responsibility and benefit-sharing challenges; and lack of transparency among officials.

6. Conclusion

The case of water-related conflicts in Turkana suggests the need to consider policy and legislative reforms including of political, social and economic formal and informal water governance and management systems. The devolution of water services by the Constitution of Kenya, 2010 to county governments to decentralise services is meant to bring about efficiency in services delivery, but such decentralisation efforts have not necessarily led to more socially just and efficient resource governance in Turkana County. There are several sources of tension in in the County including between the County Government and other informal organisations where government, community and non-governmental organisations all claiming authority to make decisions over water; between different groups claiming authority based on...
customary rights to water resources and between different water users such as livestock use and domestic and related users. The existing institutions are working in silos and most of the programmatic responses to water problems are implemented without sufficient scientific evidence, thus the failure of water projects in providing the solution. To some extent, given the socio-cultural and environmental conditions in Turkana, overlapping authority claims, tensions and contestations will always lead to water-related conflicts. Opening up space for constructive and inclusive dialogue is vital in coming up with inclusive solutions that recognises the access right of all groups including the marginalised groups and therefore resolve water-related conflicts.

7. Policy Recommendations

1. The County Government of Turkana needs to prioritise the finalisation and adoption of the Draft Water and Sewerage Services Sector Policy developed in 2016 and the Draft Environment Policy to create the link between Water Resources Management (WRM) and Water Sanitation and Hygiene (WASH). Both Policies should help streamline coordination of the different actors in WRM and WASH by bringing efficiency and equity in water resources governance.

2. The County Government of Turkana through the Department of Water, Environment and Mineral Resources needs to develop a County Climate Change Action Plan with specific actions on addressing water resources challenges such as water scarcity in the County. This will provide a framework for the implementation of the County Climate Change Policy, 2020.

3. Need to strengthen the County Peace Actors Forum (CPAF) and fasttrack the establishment of the County Peace Hub (County Situation Room), the only specialised early warning and response unit in the region which will help in the monitoring and sharing of information on conflicts in the County. The establishment of the Situation Room is established under the County Peace Building and Conflict Management Act, 2022. The CPAF should play a key role in coordinating partners, harmonising and fostering dialogue and consultations on water programmes and to share situation updates, successes and opportunities for cooperation.

4. The County Government of Turkana to ensure that competing water users in the county have access to ADR through mainstreaming water-related dispute resolution in the Alternative Dispute Resolution (ADR) mechanisms within the National Alternative Dispute Resolution Bill, 2021. Such mechanisms include the development and enforcement of peace agreements, which promote sharing of water resources, pasture and fish resources with cross-border communities.

5. The County Government of Turkana through the Ministry Tourism, Culture, Environment, Energy and Natural Resources to establish and strengthen local community institutional co-management arrangements including County budget allocations to Community-Based Organisations such as Water Resources Users Associations (WRUAs); Beach Management Units (BMUs); Community Forest Associations (CFAs). Public participation should be enhanced in the formulation and implementation of co-management mechanisms such as Sub-Catchment Management Plans (SCMPS) and Participatory Forest Management Plans (PFMPs) including delegation of authority and control, and ensuring gender equity in benefit sharing.
8. References

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**Water, Peace and Security (WPS) Partnership**

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