

Africa Use Case

At the 2018 Inception Workshop in Geneva, the WWQA decided to pilot and demonstrate current capabilities and future water quality information services through three use case studies in Africa. The Use Cases provide an initial testbed that puts the quality of surface water and groundwater into the context of the local 2030 Agenda and its multiple linkages across the Sustainable Development Goals. The UN Environment Programme is cooperating with relevant organisations including the UN-Water Expert Group on Water Quality and Wastewater in the World Water Quality Alliance to develop a World Water Quality Assessment for consideration by UNEA-5.

Africa Use Cases Aim:

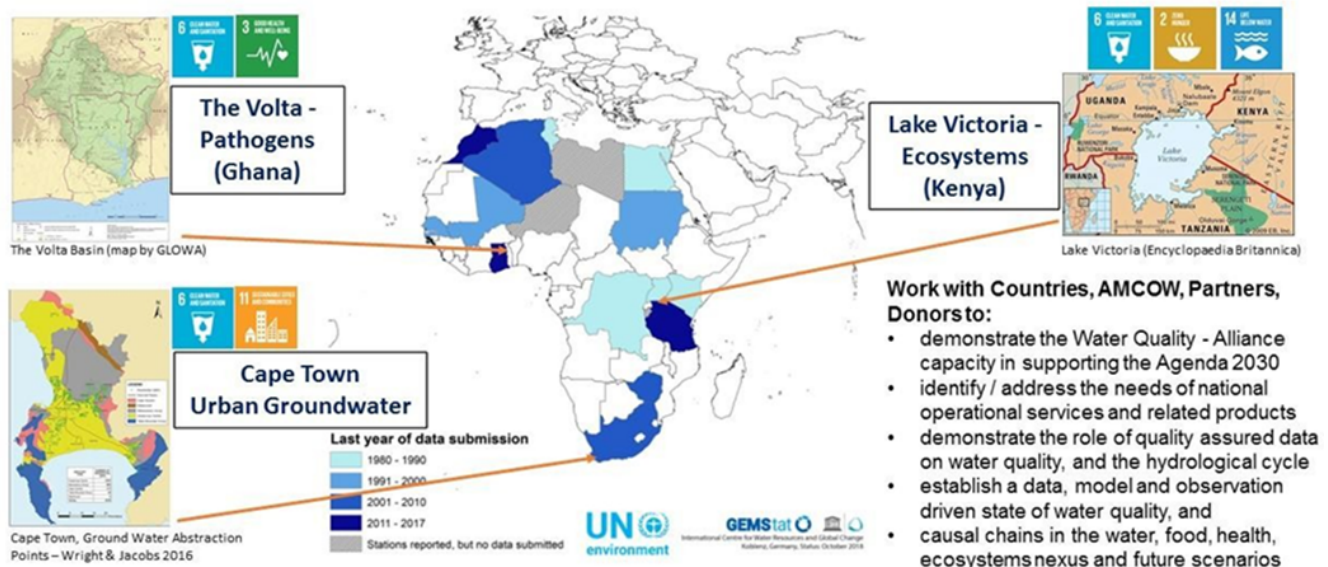
The African use case studies are the initial testbed putting water quality in surface and groundwater into focus of the local Agenda 2030 and its multiple linkages across goals. Central in this first test will be to combine an in-situ data, modelling and Earth Observation (EO) driven approach to derive the best possible current baseline state of water quality in those cases with a multi-stakeholder driven process defining demand for water quality services. Ultimately, the objective would be to arrive at evidence-based information linking water quality hotspots to solutions and investment priorities. The results produced by the use cases in this two-pronged approach are meant to be shared widely with the WWQA for further consideration

The selected African Use Cases comprise of:

Volta Basin: Transboundary river basin, shared between Burkina Faso, Togo, Mali, Cote D'Ivoire and Ghana. Main water quality issue are pathogens.

Lake Victoria: Transboundary lake, shared between Kenya, Tanzania, Uganda, Rwanda and Burundi. Main water quality issue is impact on ecosystem health.

Cape Town Main Aquifer Systems: Variety of aquifer systems in and around Cape Town; earmarked for water supply to Cape Town. Main water quality issues are pollution due to land use activities, geogenic elevated concentrations and impact on surface ecosystems.



Volta River Basin

The study area will focus on the basin contributing to Lake Volta within Ghana. However, where possible, this will be expanded to include the other contributing countries - in order of contributions: Burkina Faso (43%), Togo (6%), Benin (4%), Mali (4%), Côte d'Ivoire (3%) - with the remainder of the basin being within Ghana (40%).

Lake Victoria Basin

The study area will focus on riparian countries to the Lake (Uganda, Tanzania, Kenya). However, where information is available, this will include the portions of the lake catchment in Burundi and Rwanda.

Cape Town Main Aquifer Systems

The three aquifers targeted for supply to the City of Cape Town: Cape Flats Aquifer, Atlantis Aquifer, and Table Mountain Group (TMG) Aquifers. The TMG aquifers are more extensive than that specific model boundary and includes the greater TMG Target Zones, which include TMG aquifer explorations areas in the vicinity of the major dams of the Western Cape Water Supply System (WCWSS).

Africa Use Case Poster

