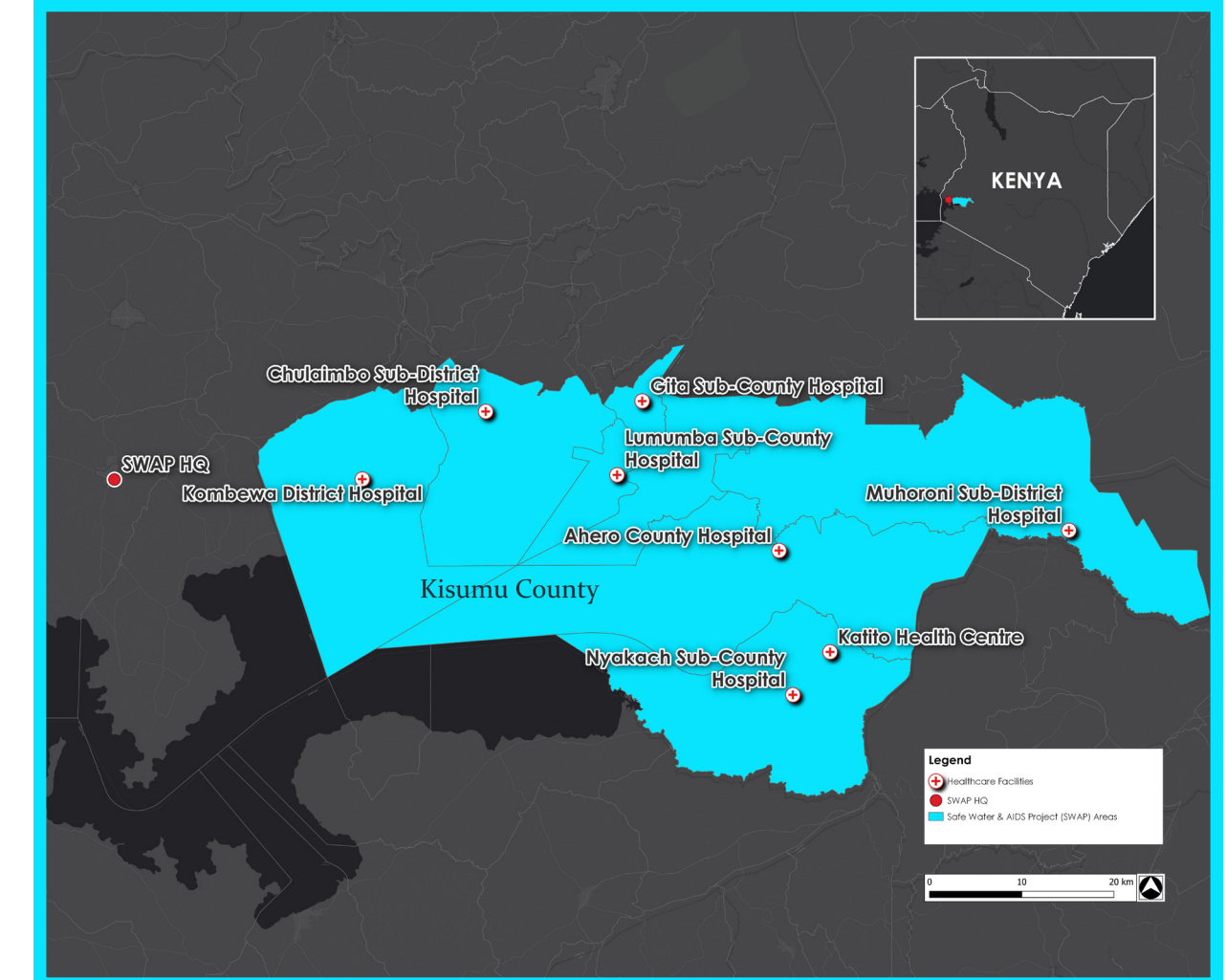




# Introduction & Evaluation

of STREAM chlorine production and Packaging Services in County Hospitals, Kisumu County, Kenya



## Design and Test Chlorine Production, Packaging and Distribution Services in County Hospitals

- Established STREAM chlorine production and packaging service centers in 8 hospitals in Kisumu County.
- Chlorine service centers (Hubs) supply their hospital, and a network of lower level healthcare facilities (spokes).
- STREAM chlorine produced directly from the system maintains concentration for at least 3 weeks, thereby supporting the hub-and-spoke distribution model.

## Evaluation of STREAM Chlorine Shelf-life – Chlorine Degradation

- In partnership with Ahero County Hospital and Katitu Sub and Centers for Disease Control and Prevention.
- Evaluated whether STREAM chlorine produced by hospitals had adequate shelf life to justify use.
- Tested chlorine for free available chlorine (FAC) using N,N-diethyl-p-phenylenediamine at irregular intervals up to 176 days.
- Chlorine production with STREAM proved feasible in hospitals with a shelf-life of greater than 3 weeks. If STREAM oxidant concentration needs to be maintained longer, then buffering with sodium hydroxide to pH 12 extends shelf life for more than 6 months.

