



Water Affecting Public Health in Kenya

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Introduction

- Although the number of people who have water access has increased and the water disparity between urban and rural populations has decreased, Kenya still suffers from water scarcity
- 59% of Kenyans have access to safe drinking water; and despite 85% of the urban population with access to a reliable water source, only 50% of the rural population have access to water (Figure 1)
- Kenya has made more progress in improving access rates to clean water than the average Sub-Saharan African country (Figure 2)

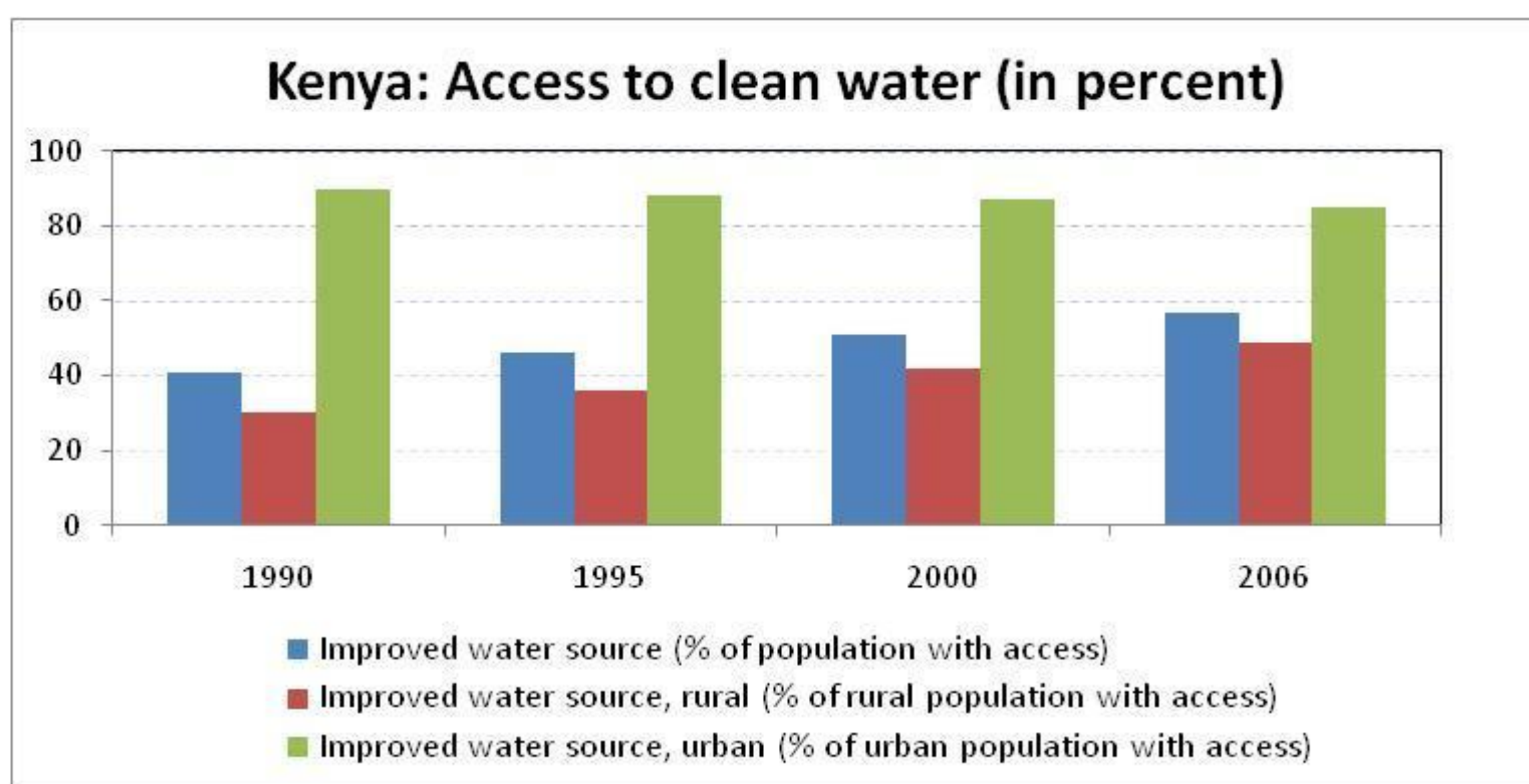


Figure 1: Access to clean water in Kenya (Marshall 2011)

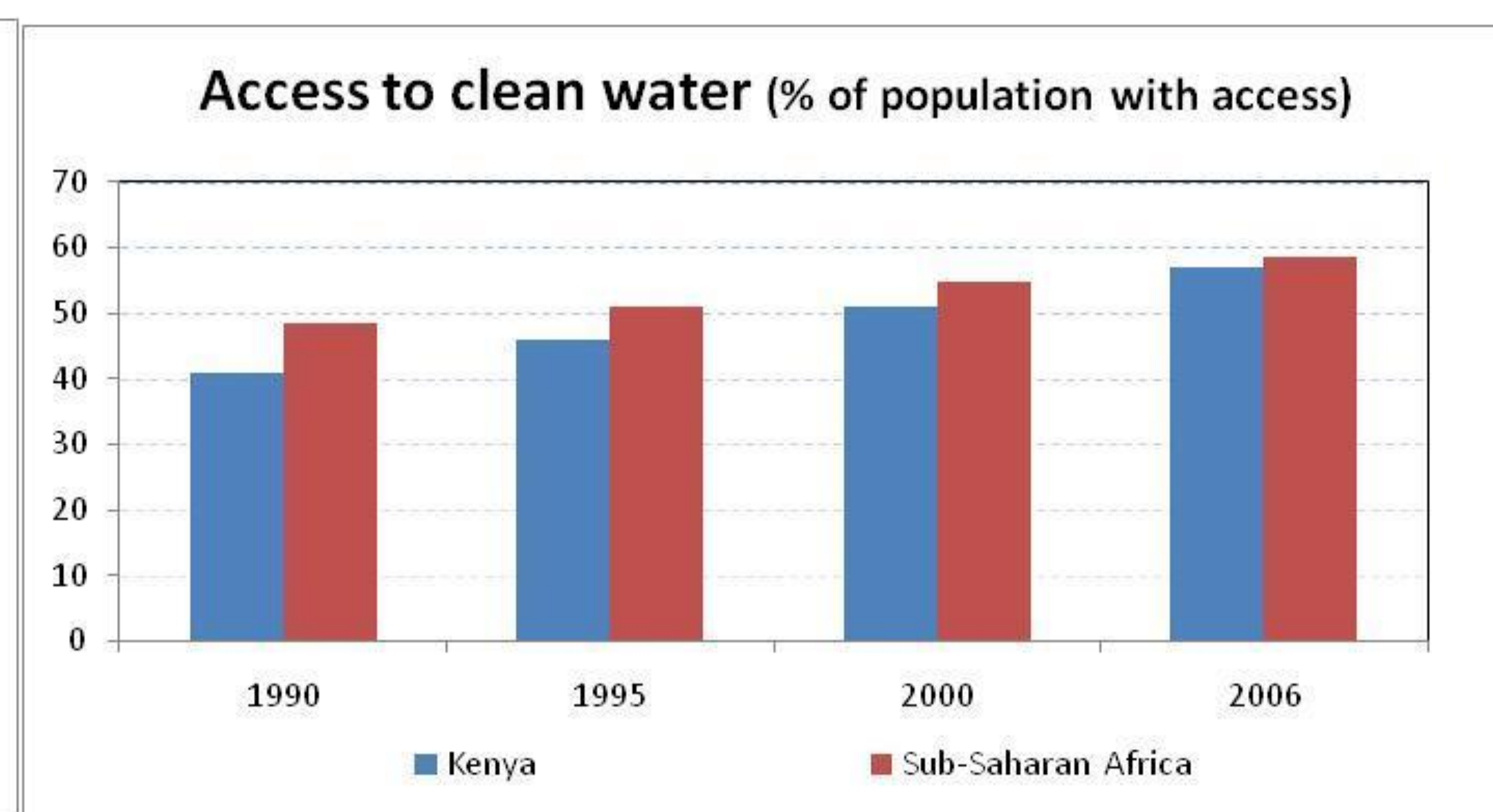


Figure 2: Access to clean water in Kenya and Sub-Saharan Africa (Marshall 2011)

Sanitation and Hygiene

- The provision of safe water, adequate sanitation, and proper hygiene has been established as one of the most effective ways of preventing waterborne illnesses and improving health in developing countries.
- There have been significant investments by nongovernmental organizations and governmental agencies in Kenya to improve such water, sanitation, and hygiene practices with water, sanitation, and hygiene (WASH) projects.
- The reliance on unprotected water sources, low sanitation coverage, and poor hygiene practices has led to water-related disease outbreaks such as cholera and typhoid, increased cases of diarrhea, and even death.
- Kenya's poor sanitation and hygiene can partly be attributed to sociocultural issues, which hamper most of the positive health practices governing the management and use of water, sanitation facilities, and hygiene practices.

Maternal and Newborn Health

- Kenya's lack of proper water sanitation has been associated with poor health services that are affecting maternal and newborn deaths, which still remains unacceptably high in comparison to other developing countries. The maternal mortality ratio increased from 412 to 488 maternal deaths per 100,000 live births, with rural communities bearing the most effects.
- The contamination of water may also affect food
- This may cause malnutrition and mortality, particularly among children as they are most vulnerable to diarrheal diseases.

Solutions

- Kenya's natural renewable water resources heavily depends on the montane forests and highland areas in the west where a humid climate zone is more prevalent
- Challenges water managers face involves the choice of water supply interventions, environmental destabilization and degradation of catchments, inadequate funding of the water sector, poor management of water supplies, low ability and willingness to pay by the population, low stakeholder involvement during water resources development, competing water uses, and ethnic differences and unequal development of water resources
- The two management concepts that have been put forward in addressing the challenges faced in the water sector include the Integrated Water Resource Management (IWRM) and Adaptive Management (AM).
- IWRM is concerned with the structure of approach to water management while AM is designed to deal with uncertainties that come from the complex nature of issues faced in resource management.
- The Kenyan water sector management should continuously review the performance of the sector and base national planning on research, monitoring, and evaluation of the sector

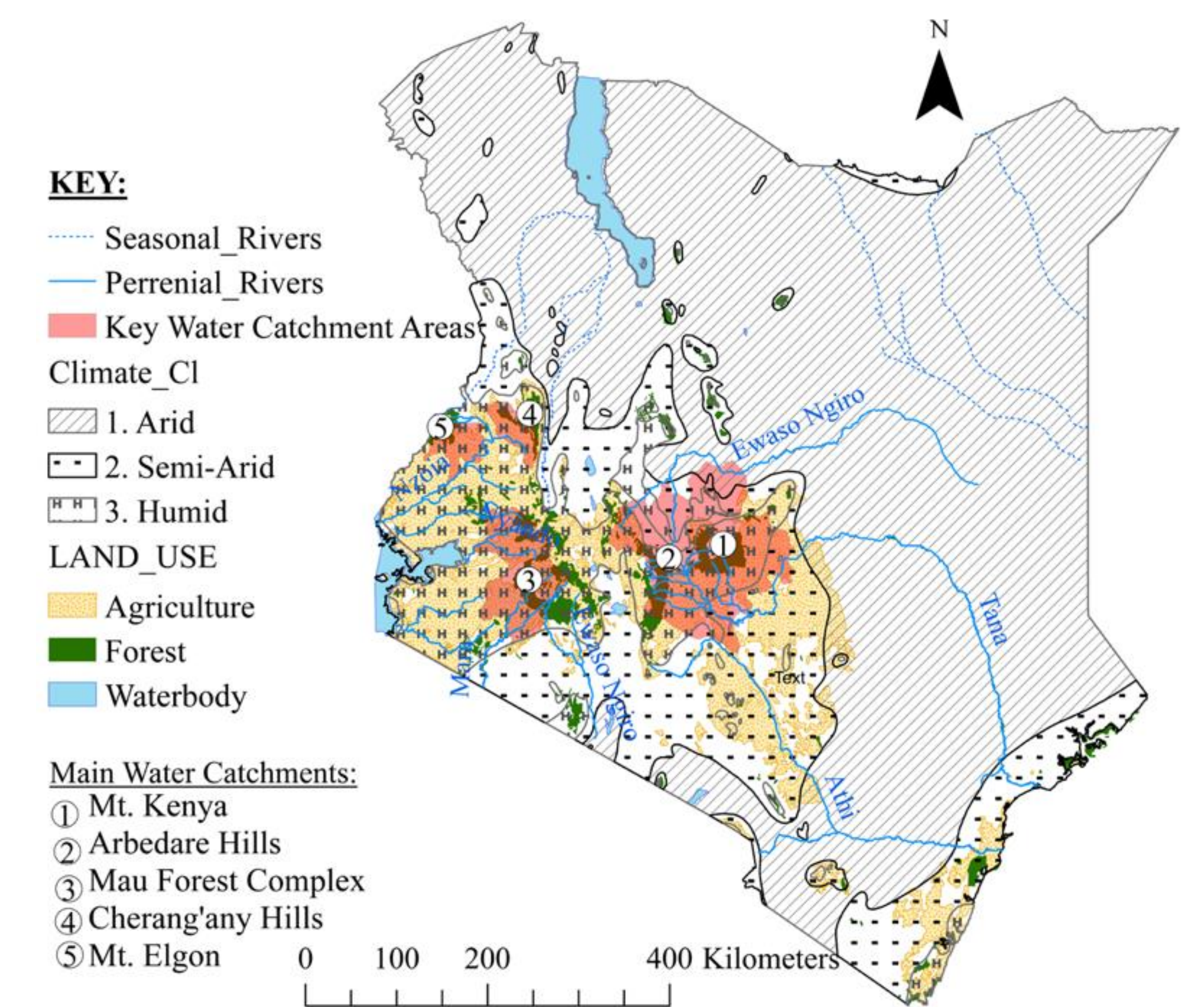


Figure 3: Main water catchment areas in Kenya (Chepyegon et al. 2018)

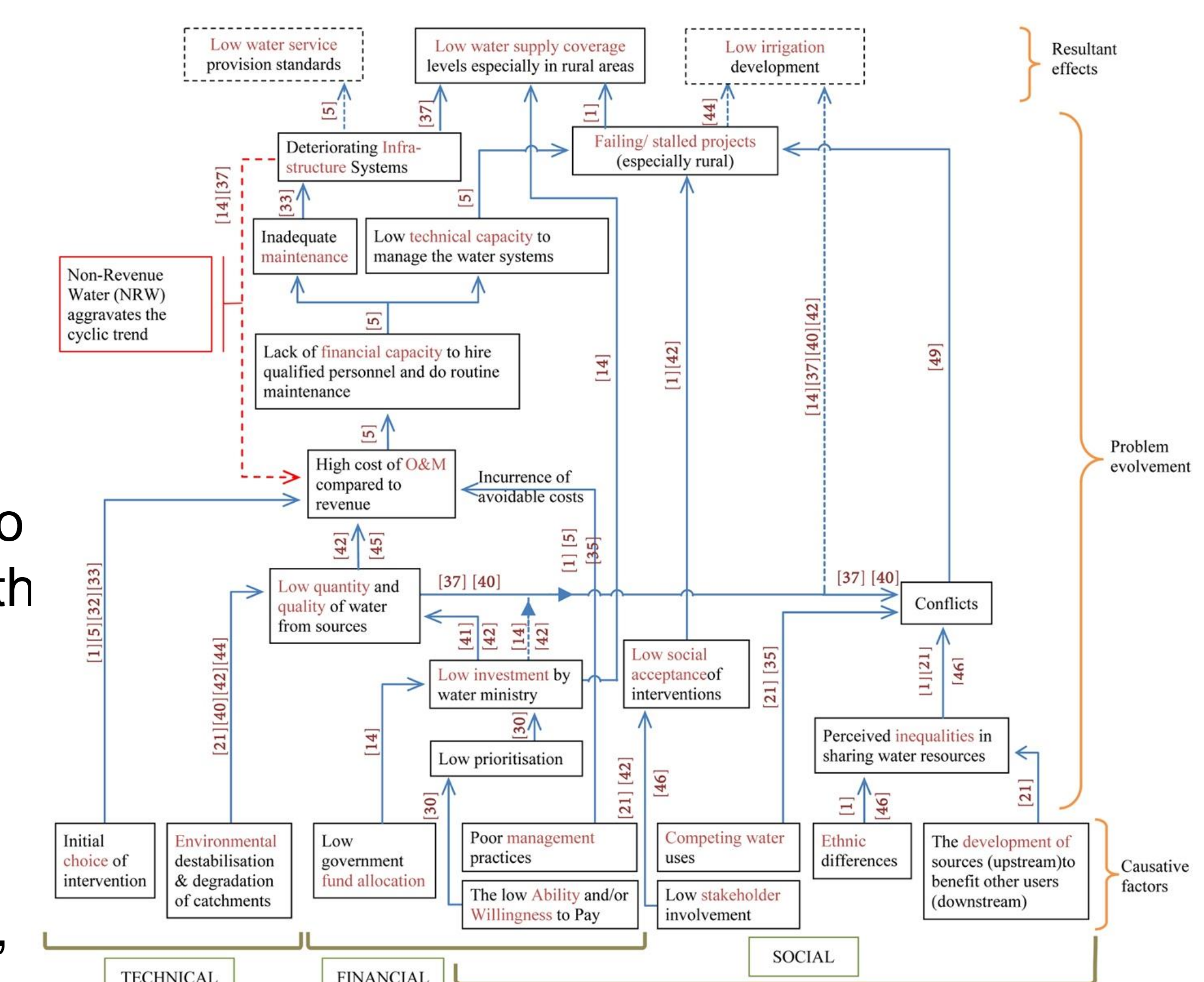


Figure 4: Diagram representing the challenges faced by Kenyan water management in improving the water (Chepyegon et al. 2018)

Conclusions

- Kenya has been suffering from a severe water crisis for decades due to droughts, forest degradation, floods, a lack of water supply management, water contamination, and population growth
- As Kenya's population is anticipated to grow and their water crisis to only be further exacerbated, Kenya will need to address the causes of this dilemma to mitigate its effects on the health and livelihoods of their population.

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