

“Water is life. Only those who have water can survive”

***Situation of access to safe
and clean water for Uganda***

Presented by:

Uganda Kolping Society

Background and location

Uganda, officially the Republic of Uganda, is a landlocked country in East Africa. The country is bordered to the east by Kenya, to the north by South Sudan, to the west by the Democratic Republic of the Congo, to the south-west by Rwanda, and to the south by Tanzania.



Economic Background

- We are a developing country with one of the highest population growth in the world (3% per year). We majorly depend on Agriculture but are also making some strides towards developing ICT, industries and service sector.
- However, industrialization is chocking the water sources as we shall see later on.



Background continued

- Uganda is also a touristic country, rich in fauna and flora.
- We boast of the source of the Nile; the longest river in the world and a home to lake Victoria the world's largest tropical lake, and the world's second-largest fresh water lake by surface area after Lake Superior in North America.



UGANDA KOLPING SOCIETY(UKS) BACKGROUND AND HISTORY



Uganda Kolping Society (UKS) was officially founded on 4th December 1977, at Munteme Parish, Hoima Catholic Diocese. She is a Catholic Social Action Organization and part of the Kolping International (KI).

Background of UKS continued



- UKS renders a contribution to the reduction of poverty through the promotion of Integral Development of Self Help Organizations (SHOs), Individuals, Households, Families and Communities in Uganda through integrated self-help activities with the aim of making the world a better place to live in

“Water is life. Only those who have water can survive”

- Water is a basic natural resource that is very critical to industrial, agricultural and household activities.
- Access to water is a global human right. On 28 July 2010, the United Nations General Assembly adopted a historical resolution recognizing “the right to safe and clean drinking water and sanitation as a human right that is essential for the full enjoyment of life and all human rights”.

Water is naturally drawn from the water cycle



Water cycle explained

- The water cycle shows the continuous movement of water within the earth and atmosphere. It is a complex system that includes many different processes.
- Liquid water evaporates into water vapor, condenses to form clouds, and precipitates back to earth in the form of rain and snow.
- Water in different phases moves through the atmosphere (transportation). Liquid water flows across land (runoff), into the ground (infiltration and percolation), and through the ground (groundwater).
- Groundwater moves into plants (plant uptake) and evaporates from plants into the atmosphere (transpiration). Solid ice and snow can turn directly into gas (sublimation). The opposite can also take place when water vapor becomes solid (deposition).

The water cycle clearly relates to life.

- The climate is significantly influenced by the water cycle.
- If the evaporative cooling effect of the water cycle did not exist, Earth's temperature would increase significantly.
- The water cycle has an impact on other **biogeochemical cycles**.
- Every living thing on Earth is impacted by the water cycle.
- The potential of the water cycle to filter the air is also well-known. For instance, in order to precipitate, water vapours must adhere to dust particles.

How water is necessary for life?

- Water makes up 60-75% of human body weight
- A loss of just 4% of total body water leads to dehydration.
- A loss of 15% can be fatal.
- Likewise, a person could survive a month without food but wouldn't survive 3 days without water.

Clearly water is vital for survival, but what makes it so necessary?

- Water keeps your organs healthy(Your kidneys, which are responsible for detoxing the body, need water to remove toxins through urine.)
- Water is necessary for washing and sanitation.
- You need water for cooking.
- Water is necessary for growing food.
- Raising animals requires water

Source: Molly Sargen & Daniel Utter 2019 Biological Roles of Water

Global Access to water

- Access to safe and clean water is a global concern. According to the SDG number 6, the World should ensure access to water and sanitation for all.
- Between 2015 and 2022, the proportion of the world's population with access to safely managed drinking water services increased from 69 to 73 per cent; safely managed sanitation services increased from 49 to 57 percent; and basic hygiene services increased from 67 to 75 per cent.
- This progress signifies an additional 687 million, 911 million and 637 million people gaining access to these essential services, respectively.

Global Access to water continued

- On the other hand, According to the latest figures from 2020, 26% of the world's population (2 billion people) did not have access to safely managed drinking water services people), and an estimated 46% (3.6 billion) lacked access to safely managed sanitation.
- Approximately 60% of the world's reported water bodies were categorized as having 'good' ambient water quality. However, the poorest 20 countries are grossly under-represented in this global estimate.
- In 2020, 2.4 billion people lived in water-stressed countries. The challenges are compounded by conflicts and climate change.

How access to clean water affects human survival

- Contaminated water and poor sanitation are linked to transmission of diseases such as cholera, diarrhea, dysentery, hepatitis A, typhoid and polio. Absent, inadequate, or inappropriately managed water and sanitation services expose individuals to preventable health risks.
- According to WHO, some 1 million people are estimated to die each year from diarrhea as a result of unsafe drinking-water, sanitation and hand hygiene.
- Yet diarrhea is largely preventable, and the deaths of 395 000 children aged under 5 years could be avoided each year if these risk factors were addressed.
- Where water is not readily available, people may decide hand washing is not a priority, thereby adding to the likelihood of diarrhea and other diseases.

Access to clean water and human survival

- Notable is, that reduced water volumes affects flora and fauna.
- In agricultural ecosystems, inadequate water especially contributed by drought has a detrimental effect on crop production, affecting the growth rate and development of the economically important portions of the plant, such as fruits, grains and leaves.
- Without irrigation, production in crops such as coffee can be reduced by as much as 80% in dry years (DaMatta FM, Ramalho JDC 2006).
- The animals are not spared either. Inadequate water affects pasture volumes, leads to stress, weight loss and eventually death of animals.
- Every year, hundreds of animals have died especially in the horn of Africa due excessive drought.

Access to clean water and human survival

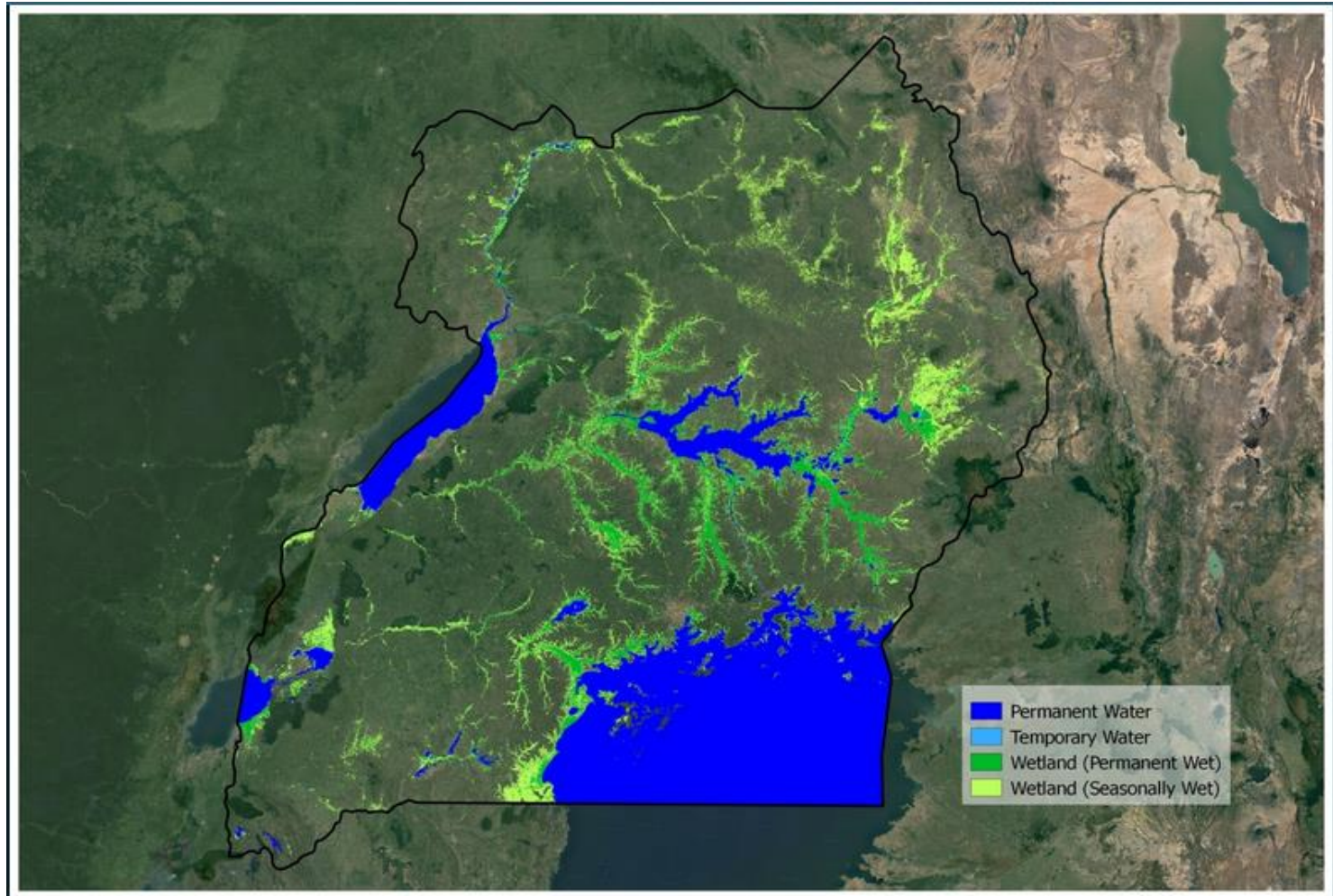


Rangers trying to feed water to elephant calves as they struggle to survive the drought. (Reuters: WWF Kenya).

Water supply in Uganda

- Uganda amazes with fascinating landscapes and variety of nature. Lake Victoria, Bwindi National Park, Murchison Falls or Rwenzori mountains – all of these popular locations are home to rich water reservoirs. Numerous rivers and lakes, including the Nile, accommodate the Ugandan population with water. In sum, roughly 15% of Uganda's surface is covered by freshwater. Additionally, Uganda experiences strong rainfall during the two rainy seasons.
- Even though the country encompasses extensive water resources, it suffers from discrepancies of its distribution, which is partially a result of being highly dependent on precipitation. In this, seasonal rainfall causes immense differences in the available amounts of water, so that shortages can occur especially during the dry season. In addition, rainfall and sources of water are unevenly distributed across the country.

Water and wetland map of Uganda



The mainwater sources Ugandans draw from.

- Approximately 10% of Ugandans have access to streams, ponds and unprotected hand-dug wells as sources of drinking water.
- As of 2020, 51% of Ugandans lived without access to safe drinking water, and a further 32% had only limited access (such as from a water source 30 minutes or more away from the home).
- A total of 27.6% of surveyed households used water from shallow wells, a source exposed to high risk of contamination and also dries-up easily.
- 5.6% used water from springs.
- 4.7% harvested rainwater.

Access to safe water remains a big challenge in most rural areas of Uganda.

- Out of its population of 45 million people, 38 million people (83% of the population) lack access to a reliable, safely managed source of water, and 7 million people (17%) lack access to improved sanitation solutions.
- Further, urban people living in poverty pay as much as 22 percent of their income to access water from water vendors.
- Spending such a high percentage of earnings on water reduces overall household income, limiting opportunities to build savings and break the cycle of poverty.
- And many families living in rural areas spend more than 30 minutes walking to collect the water their families need, taking time away from work and school.

Source: [water.org](https://www.water.org) / Uganda's water crisis

Access to safe water remains a big challenge in most rural areas of Uganda.

- The National Water and Sewerage Corporation (NWSC) is one of the key actors in treating and supplying water for public use. Water provided by the NWSC does actually fulfil high quality standards, with 99.6% of the provided water meeting national standards for drinking water. In addition, WHO standards for bacterial contamination are reliably met and in 98% of cases the requirements for pH values, chlorine residual and coloring are met.
- In fact, a quarter of Uganda's population obtains their drinking water from unsafe sources. In 2012, as many as 10% of the population obtained their drinking water from surface water (from rivers, lakes, unsecured ponds, etc.).
- Women and girls bear the greatest burden of the water crisis because in Uganda they're most likely to be responsible for fetching water to their homes.

Photos showing some of the water sources for people in Uganda









Access to safe water for Agriculture remains a big challenge in most rural areas of Uganda

- Agriculture is the lifeblood of Uganda's economy. It employs 70% of the population and contributes a quarter of the country's gross domestic product (GDP).
- But while Uganda possesses abundant freshwater resources, a lack of water infrastructure and increasingly erratic rainfall due to climate change are just two of the challenges faced by its farmers.

Water for Agricultural Production/Development in Uganda

- Water for agricultural production refers to the availability of water within reach of farmers for crop and animal husbandry among others.
- Globally Water for Production accounts for over 80% of water withdrawn for use. However, in Uganda, less than 2% of water is used in production but there is a sharp increase in demand primarily due to climate change and degradation of natural resources (MWE, 2020).
- The country is increasingly facing a major challenge of prolonged droughts and unexpected floods due to climatic change and variability. It is predicted that the country will be water stressed by 2025 (UBOS, 2022).

Why small holders have not adopted irrigation in Uganda?

- The available irrigation systems are expensive.
- Limited access to financing.
- Lack of information about irrigation.
- Lack of reliable water sources for farmers above the natural free flowing water.

Interventions by Uganda Kolping Society

Uganda Kolping Society has played a role to enable access to clean water to households. With Support from **KOLPING INTERNATIONAL**, and other Partners on the following interventions;

- Provision of water tanks
- Construction of shallow wells
- Construction of solar powered community water source.
- Provision of affordable revolving fund (credit) to members to connect to National grid
- Sensitization on gender equality. Men help out their spouses and children and draw water for their families.
- Training on water laws and best agricultural practices.
- Provision of affordable irrigation kits to farmers (This has been done on a very small scale).

Interventions by Uganda Kolping Society



Proposed interventions

- Scaling up on the provision small-scale irrigation kits to the small-holder farmers.
- Creating partnerships with the players involved in irrigation(Financial institutions, suppliers of irrigation kits, and research institutes).
- Excavation of valley dams to harvest rain water for both irrigation of crops and for livestock.

Recommendations For Further Action To Enhance Access To Clean Water

- The United Nations notes that; water is in constant motion. It is part of a cycle that ignores all borders created by humans. As such, it is a common good, which requires common management.
- For what happens up stream always has an impact downstream: extracting water from rivers directly concerns all the populations that depend on them.
- Therefore, there is need to protect water sources across the globe.
- As Kolping brothers, and sisters we need to spearhead campaigns to stop water pollution that is mainly done through indiscriminate throwing of plastic bottles, washing cars from rivers and streams, throwing of industrial waste into lakes among others.

Recommendations For Further Action To Enhance Access To Clean Water

- The recent UN World Water Development Report 2023 recommends partnerships and cooperation to safeguard, water food and energy. As the Kolping fraternity, we need to continue building partnerships to get funding for water projects.
- Partnering with media houses like Radio Maria, we can sensitize the masses about importance of proper disposal of plastic material and protection of the water sources.
- Partnerships for financing e.g. through banks are also worthwhile.

Recommendations For Further Action To Enhance Access To Clean Water

- In conclusion, as the Kolping Society, we have the power of numbers and we can greatly influence enhanced access to clean water and mitigate the negative effects that come with contaminated water. Let everyone make an effort to protect the water sources and build a better eco system as we make the World a better place to live in.