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Case Study Submission 3 from [Climate Refugees](#) to the Warsaw International Mechanism for Loss and Damage to Update the Technical Paper on Non-Economic Losses in the Context of Loss and Damage Associated with Climate Change Impacts

Provided by [Climate Refugees](#) based on excerpts derived from our August 2023 report "[Climate Change is Controlling Everything. Let Them Compensate Us](#)": *Stories of Loss and Damage in Kenya*, by Amali Tower and Ryan Plano

Human Rights Losses and Development Setbacks

Location: Baringo and Turkana Counties, Rift Valley, Kenya

Climate Change Events: Slow-Onset Flooding and Drought

Loss of Education

Kokwa Island, Lake Baringo, Baringo County

The rising lake waters submerged large sections of the only school on Kokwa island, including its teachers' quarters and toilets from 2012 to 2021. For many school-goers, this was the only latrine accessible for their use. Teachers were secured for the school through the provision of living quarters. Thus when those facilities were submerged, the teachers were displaced and education was disrupted for nearly 10 years. While the school dormitory was almost submerged, large parts of it became inaccessible due to the drop in temperatures and wildlife intrusion of crocodiles and hippopotamus. The school serves 240 boys and girls. The girls dormitory was particularly affected, therefore impacting girls education more acutely.

Rugus, Lake Baringo, Baringo County

On the mainland of Baringo, Rugus residents were quick to point out that the school where our group discussion was held had been flooded multiple times by rising Lake Baringo. In 2007, the lake's shores were two kilometers away, they said, but by 2013, the water had started reaching the school. In 2019, it got much worse, the water went well beyond the school. During this time, children could not reach the school, let alone attend school.

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Atalokamusio Village, Lokiriama, Turkana County

“We have not taken our children to school. Drought has destroyed all livestock,” one woman in this remote Lokiriama village told us. “We used to sell livestock to afford education. But now we can’t afford the school fees to send our children to school because there are no livestock to sell.” This undermining of [educational opportunities](#) due to the impacts of climate change is unfortunately seen well beyond the communities we visited.

Kaekoroe-Akwaan Village, Lokiriama, Turkana County

Kaekoroe-Akwaan Village is incredibly remote, poor and underdeveloped. Residents here say they have only one early education school but lack teachers to ensure robust and consistent attendance. There are no provisions for primary or high school education. Now scarcity of water and food has diminished attendance in the early education school since the feeding programs that so many village children depend upon is not guaranteed. We observed many children fetching water - traveling great distances to water points or water holes that are increasingly drying.

Lake Turkana, Turkana County

Having borne the brunt of historical injustices, the rise of Lake Turkana water levels have caused a further challenge to school-going children in the El Molo community, who would previously walk to school but now have to use boats to cross the lake, an expense that is not only financially difficult but also dangerous. Hundreds of homesteads have been submerged including their loved ones’ graves as a result. The extreme marginalization of this community is evident as no hospital is built on either Komote island or Laiyeni village. The community reported high cases of water borne diseases and malnutrition among children. It is extremely challenging to access services on the mainland, a financial burden for the residents of Komote and Laiyeni. There are about 2,500 residents of Komote and Laiyeni island recording high food insecurity.

Loss of Healthcare

Kokwa Island, Lake Baringo, Baringo County

The only medical dispensary on Kokwa Island was submerged in 2012 by flooding. Construction for a new facility began in 2018. In the interim, the community had no access to medicines. When the dispensary submerged, medical professionals who ran the facility stopped coming and/or left the island.

Beyond the losses caused by inundated fields and buildings, flooding has [other impacts](#), such as making it more difficult to access basic health services when roads are flooded or washed

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out. [Six healthcare facilities](#) have been submerged, which reduces the availability of healthcare, and exacerbates other health-related impacts of flooding. Inundated infrastructure has led to electricity outages, increasing the risk of water-borne diseases and respiratory conditions due to dampness and cold. In 2020, flooding in this area inundated sanitation facilities, which led to a surge of water-borne illness.

For a while the community managed by traveling across the lake to the mainland hospital, but then that was disrupted as well when the hospital was submerged for a period. Today, community members are mostly reliant on a mobile clinic called “Beyond Zero” housed within a container on the island, but access to the clinic via motorbike is cost-prohibitive. Reflecting on this barrier to access, many members said the limitation can “even cause death.”

Water-borne diseases are frequent and rising, according to community members. Typhoid, dysentery and cholera have been documented. Accounts exist of submerged Lake Baringo hotel latrines’ wastewater flowing into and polluting the lake. In addition, community members noted a major uptick in incidents of malaria.

These stories, while specific to Kokwa Island, are not unfamiliar to other marginalized groups and populations vulnerable to the climate crisis. They demonstrate setbacks in efforts to advance the UN SDG Goal 3 to “ensure healthy lives and promote well-being,” and growing evidence of the risks climate change poses to human health.

Endorois People, Lake Bogoria

Many of the Endorois People, the elders told us, feel climate change is their fault. As a result, the increasing health problems they face, like mosquito borne illnesses, water-borne diseases and even water insecurity, they think is a result of their own actions.

Medical clinics and hospitals the community once accessed around Lake Bogoria are now lost. The loss of maternity services is particularly acute with maternal mortality rates rising and young girls bearing children at earlier ages. The community representative for women and children shared, “it’s even taboo for us to report deaths, like that of a child to the chief in our culture, so many such issues are going underreported, especially now that we are all scattered from displacement.”

Minority Rights Group International is supporting the Endorois community with healthcare services. Their community health workers confirm the submerged clinics have now forced “our people to have to walk several kilometers elsewhere to access even basic medicines.” Government promises to build another health facility have not yet come to fruition. “Since the water submerged several villages, people moved to temporary settlements and many have not built new latrines.” As a result, there is open defecation, putting the Endorois at increased risk to

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waterborne diseases. The submersion of clean water springs and pit latrines by lake expansion has now [exposed](#) locals to water-borne diseases such as cholera.

With one voice, the community elders told us they are suffering “psychological torture” - trauma from the many climate change-induced losses their people are facing. “We are landless, our living standards are greatly reduced, and all this has affected the lives and health of old and young people.”

Atalokamusio Village, Lokiriama, Turkana County

In the underdeveloped and harsh terrain of Turkana, communities in Atalokamusio Village say deaths resulting from drought stricken malnutrition are rising, and also because the nearest medical dispensary is 6 kilometers away by foot. The nearest hospital is 50 kilometers away in Lorgum. They say sick residents who are too weak from hunger cannot make the journey by foot. Young people told us they have accompanied people who have died along the way from weakness and lack of water.

Sadly, these residents’ plights are representative of the long standing drought plaguing Turkana, where hunger reached Emergency levels of food insecurity (IPC 4) between March and June earlier this year.

The Intergovernmental Panel on Climate Change (IPCC) [points out](#) that food insecurity, malnourishment, and chronic hunger due to failed crops are often overlooked losses of human assets as a result of climate events. This situation was made worse by Russia’s decision to pull out of a grain deal that allowed the export of Ukrainian agricultural goods which Horn of Africa countries are wholly dependent upon. Ayan Mahamoud, a climate resilience expert with the East Africa Intergovernmental Authority on Development (IGAD) trade bloc [said](#), “ending the Black Sea Grain Initiative is adding challenges for countries already experiencing the effects of a changing climate.”

Diminished Access to Clean Water

In many of Kenya’s most vulnerable communities, long-standing marginalization and underdevelopment are converging with climate shocks to exacerbate drought conditions for populations who have never had safe, sustainable access to clean water. Now climate change is making that vulnerability downright deadly for some communities we met. In Turkana, 90% of the population lives below the poverty line, and [only 40%](#) of the population has access to clean water.

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Loss of Life

Lorengippi Village, Loima sub-county, Turkana County

Residents in Lorengippi village echoed many of the same challenges shared by other Turkana pastoralists, as well as alarming details of several community members who have died in recent years at community water holes. With increasing water scarcity, residents have had to repeatedly dig new, deeper and wider water holes in Lorengippi, requiring several people to create an assembly line of water collection. During these collections, several water holes have collapsed, killing multiple people. Deaths resulting from collapsed water holes even inform the name of the village. In Turkana, “Lorengippi” literally translates to “red water.”

Another water hole, “Akinpipu” means “girls”, so named because the water point is used by many young girls who fetch water for their families, and who lost their lives in the process. People here depend on shallow wells they dig themselves. As pictured here, for many, this is their only source of water. This is certainly reflective of failed development in this region, but now also the increasing effects of climate change.

“Water holes are increasingly dry,” Lorengippi residents say, creating situations where multiple holes need to be dug ever deeper, where once the water runs dry, another hole, even deeper, is dug again. This process has led to further deaths.

Nakanjakal water point is one such where three people died in 2021 when the water hole collapsed upon them. Kapesa water hole collapsed in 2020, killing eight people. At Lowsobani water hole, two people were killed in 2014.

The World Meteorological Organization’s State of the Climate in Africa report [warned](#) “water stress and hazards like withering droughts and devastating floods are hitting African communities, economies and ecosystems hard.” Focusing specifically on water, scientists [concluded](#) that four out of five African nations are unlikely to have sustainably managed water resources by the end of this decade.

All of these deaths have been reported to the Kenyan federal government, who have retrieved the bodies. The high risk of increasing deaths in this manner are a deep concern for community members, who are experiencing increasingly treacherous conditions in Kenya’s current drought. Unfortunately, water holes are vulnerable to more than just collapse and drying out. Flooding events often destroy boreholes too, such as in 2020 when at least [32 boreholes](#) around Lake Turkana were submerged or otherwise destroyed, including several that supplied Lodwar, northwestern Kenya’s largest town. As more boreholes are destroyed, residents are forced to keep drilling, which can weaken the land and lead to [sinkholes](#), further reducing the utility of remaining land. The result is a vicious cycle that will only worsen as water scarcity increases.

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In the absence of adequate development initiatives to meet this most basic human need - which is also enshrined in the Sustainable Development Goals - in a way that is sustainable and safe, communities in the region will continue to rely on boreholes, whether government-dug or self-dug, even if they become less reliable and more dangerous with worsening climate conditions.