



CASSANDRA

CASSANDRA LOCAL CLIMATE FORUM FACTSHEET

SUDAN





CASSANDRA TOPICS IN SUDAN: HEALTH, GENDER, MIGRATION AND CONFLICT

The Sudanese Cassandra Local Climate Forum (SCLCF) which is composed of Sudanese youth dedicated to addressing issues related to climate change, water, and the environment, are actively working to bring about positive change in Sudan. Their efforts are particularly focused on tackling the challenges facing the country, including the effects of war and displacement. They collaborate with young people and community leaders in Dongola, the capital of the northern state, and its surrounding areas. The group is further seeking to begin an initiative in Al-Makaylab, situated south of Berber in the Nile River State.

The group are organising training workshops that target youth and community leaders, particularly those aged between 20 and 40. These participants include university students, community activists, local leaders, members of disability groups, business leaders, and representatives from NGOs. The group has identified a number of specific issues that have been exacerbated by climate change and which are related to the objectives of the CASSANDRA programme. The northern provinces regularly suffer from torrents and floods during the rainy season, which causes widespread damage to infrastructures, homes and crops. Often these disasters have a devastating effect on local communities, leading to displacement, loss of property and even death. Diseases that are transmitted by water, such as diarrhoea and cholera, are among the main health problems. These diseases are often associated with polluted water and the lack of access to appropriate sanitation services. The conflict and violence in Sudan has forced many people to leave their homes and seek safety in other areas of the country. Communities which host large numbers of displaced people suffer increased pressures on local resources.

The training workshop, the first of a series of actions to be developed by the SCLCF, will be designed to increase local awareness of climate change and its effects on water, health, migration and armed conflict. The medium-term objective is to enhance skills in climate adaptation and mitigation strategies to address the effects of climate change. Furthermore, a principal aim of the initiative is to strengthen a capacity for effective community participation and leadership, allowing participants to contribute more meaningfully to their communities. Through these efforts, they aim to foster resilience and promote sustainable solutions to the pressing environmental and social challenges identified at the pilot locations of the SCLCF.

HEALTH

The health situation in Sudan faces significant challenges, exacerbated by decades of political instability, economic struggles, and ongoing conflict. The country's health system has been severely weakened, leading to inadequate healthcare infrastructure, insufficient medical personnel, and limited access to essential services, particularly in rural and conflict-affected areas.

Sudan's healthcare infrastructure is underdeveloped and poorly equipped to meet the needs of its population. Many health facilities lack basic resources such as clean water, electricity, and essential medical supplies. The availability of healthcare is concentrated in urban areas, leaving rural communities with limited or no access to proper care. The country's health workforce is also inadequate, with shortages of doctors, nurses, and trained health professionals.



Sudan continues to struggle with the burden of communicable diseases, which are widespread due to poor sanitation, lack of clean drinking water, and inadequate healthcare services. Some of the most pressing issues include malaria, waterborne diseases such as cholera, dysentery, and diarrhoea which disproportionately affect children, whilst tuberculosis and HIV/AIDS remain public health concerns.

Sudan has high maternal and infant mortality rates, which reflect the broader weaknesses in the healthcare system. Factors contributing to these high mortality rates include lack of access to prenatal, postnatal, and emergency obstetric care, poor nutrition and widespread anaemia among pregnant women, inadequate family planning services, leading to high fertility rates and complications during childbirth. This situation is further exacerbated by malnutrition and preventable diseases such as pneumonia and diarrhoea. Immunisation coverage is low in some areas due to conflict and poor infrastructure, making children more vulnerable to infectious diseases.



Non-communicable diseases such as diabetes, hypertension, and cardiovascular diseases are on the rise in Sudan, especially in urban areas. The healthcare system is ill-prepared to manage these chronic conditions due to a lack of diagnostic tools, medications, and trained professionals. As lifestyles change and urbanisation increases, the prevalence of these diseases is expected to grow.

The ongoing conflicts in Sudan, especially in regions such as Darfur, Blue Nile, and South Kordofan, have severely impacted the health of the population. Conflict leads to the displacement of millions of people, forcing them into overcrowded camps where disease outbreaks are common, and access to healthcare is extremely limited. In conflict zones, health services are often disrupted, with facilities destroyed or abandoned and healthcare workers fleeing for safety. This situation worsens already dire public health conditions and hinders efforts to deliver humanitarian aid.



Sudan faces a high prevalence of malnutrition, particularly in children under five. Food insecurity, driven by conflict, economic instability, and climate change (e.g., droughts and floods), has left many families unable to access sufficient or nutritious food. Malnutrition weakens immune systems, making children more vulnerable to infections and diseases, and is a leading contributor to the high child mortality rate.

MIGRATION AND CONFLICT

Sudan has been marked by prolonged conflict and significant internal displacement, deeply rooted in its complex history and socio-political dynamics. From civil wars to ethnic violence, the humanitarian consequences have been severe, resulting in millions of displaced individuals and ongoing human rights abuses.

The Darfur conflict, which began in 2003, has been one of the most devastating conflicts in Sudan. It involved the Sudanese government and allied militia, known as the Janjaweed, fighting against various rebel groups. The conflict has been characterised by widespread atrocities, including ethnic cleansing, mass killings, and severe human rights violations, leading to a humanitarian crisis and mass displacement.

All over Sudan, conflicts continue to simmer in various regions, fuelled by competition for resources, ethnic rivalries, and struggles for political power. The humanitarian impact of the conflicts has been devastating, with millions displaced from their homes. According to recent estimates, over 12 million people are internally displaced due to violence, often living in overcrowded and under-resourced camps. These camps frequently lack access to basic necessities, leading to dire living conditions.



Displaced populations face severe human rights abuses, including violence, sexual assault, and exploitation. The insecurity prevalent in many regions leaves vulnerable communities at risk, and humanitarian assistance is often insufficient to meet their needs. Access to food, clean water, and healthcare remains critically limited.



While many individuals have been internally displaced, others have fled to neighbouring countries, including Chad and South Sudan, creating a regional refugee crisis. These refugees face additional challenges, including integration into host communities and access to resources.

The situation in Sudan remains volatile, with recent escalations in violence following the military coup in 2021. Clashes between military factions and various armed groups have led to further displacement and insecurity, exacerbating the humanitarian crisis.

The situation in Sudan regarding conflict and internal displacement is dire and multifaceted. Addressing the root causes of conflict and aiding affected populations require comprehensive humanitarian, political, and economic strategies. Continued monitoring and support from the international community are crucial for improving conditions, promoting peace, and ensuring the protection of vulnerable individuals in Sudan.

GENDER EQUALITY

Sudan faces significant gender equality challenges, many of which have been exacerbated by climate change. The intersection of environmental degradation and social inequalities has had a profound impact on women and girls.

Climate change has led to droughts, erratic rainfall, and resource scarcity. Climate-induced displacement leaves women in refugee camps vulnerable to gender-based violence (GBV) and economic dependency, stripping them of traditional livelihoods.

Climate impacts have led to school dropouts, especially for girls, as many families rely on their help during crises. Women are particularly affected by land disputes and insecurity caused by climate-induced conflicts, limiting their access to essential resources.

Traditional gender roles exacerbate women's vulnerability to climate impacts, and a lack of property rights hampers their recovery from climate shocks. Therefore, one can state that climate change amplifies gender inequalities in Sudan, particularly in agriculture, education and health. Addressing these disparities requires inclusive climate policies that recognise women's roles in building resilience.

CASSANDRA PILOT LOCAL CLIMATE FORUMS IN SUDAN

AL-MAKAYLAB

The village of Al-Makaylab, situated south of Berber in Nile River State, northern Sudan, is home to over 9,000 residents. These inhabitants belong to long-established extended families. Most of the villagers own agricultural land along the Nile River or in its vicinity, relying on farming as their principal source of income. In late 1988, the village was devastated by severe floods, resulting in the collapse of most homes and causing substantial losses. This catastrophic event became part of the village's oral history, until a



similar disaster struck again in August 2022. The floods once more led to the collapse of more than 1,700 homes, displacing thousands, with significant property loss and numerous health complications. Historically, Northern Sudan experienced minimal rainfall; however, in recent years, there has been a marked increase in precipitation, particularly in areas previously characterised by dry conditions. Like many other villages in Sudan, the construction of homes in Al-Makaylab reflects the local climate, with most houses traditionally built from mud and sand. Consequently, these structures were particularly vulnerable, leading to their total or partial destruction during the floods.



The disaster was accompanied by several health-related issues: 1. The floodwaters originated from distant regions known for gold mining activities, conducted by both local communities and companies. Artisanal gold mining involves the use of chemicals such as cyanide to process raw gold. The floodwaters, contaminated with these toxic substances and natural pests such as scorpions and snakes, inundated arable land, thereby disrupting the agricultural season. 2. The floodwaters contaminated the Nile River, the primary drinking water source for the village, exacerbating the health crisis. 3. The floods also caused the collapse of traditionally constructed latrines, creating hazardous conditions with the potential for fatal accidents. Although the government, along with local and international organisations, provided substantial aid, it was insufficient to compensate for the extensive losses. As of the time of writing, many families have been unable to rebuild their homes, as the limited income of the villagers and the inadequacy of aid have prolonged their suffering.

Currently, the residents of Al-Makaylab live in a state of anxiety, as the threat of flooding looms with each rainfall. Despite local efforts to implement precautionary measures, these are unlikely to be sufficient to mitigate the impact of a potential disaster. Northern Sudan is confronting numerous calamities this year. Flooding has led to the destruction of entire villages, resulting in the loss of lives and property. The health situation is dire, with the widespread occurrence of diseases such as diarrhoea, blindness, and cholera, with over 200 confirmed cases (October 2024). The security situation, exacerbated by ongoing war,



has further intensified these disasters, leaving the people of Sudan to endure these hardships with little or no local or international assistance.

DONGOLA

In Dongola, an agricultural hub situated in the northern part of the country along the Nile River, climate change intensifies existing socio-political vulnerabilities, aggravating water and resource scarcity, increasing migration, and sparking conflict over land and water. The local and national government face challenges in addressing these issues, further destabilising an already fragile political environment. Without adaptive strategies, the region risks further political instability, economic decline, and social unrest.

Dongola's economy and livelihood are heavily dependent on the Nile for irrigation, particularly for date palms, wheat, peanuts and vegetables. Climate change is leading to erratic rainfall, prolonged droughts, and rising temperatures, causing reduced water levels in the Nile. This impacts food production, increases water scarcity, and creates resource competition. Agricultural disruptions push local farmers into economic distress. As their crops fail, many migrate to urban areas or neighbouring countries in search of better opportunities, leading to rural depopulation and increasing pressure on urban infrastructure.



The scarcity of resources, particularly land and water, heightens tribal conflicts. The northern region has historically been dominated by Arab tribes, and the movement of other ethnic groups (especially those displaced by climate change) into Dongola can exacerbate social and ethnic tensions. The effects of climate change exacerbate Sudan's existing governance challenges. The government, already weakened by decades of conflict and economic instability, struggles to provide basic services in regions like Dongola. This weakens public trust in the government, which in turn can fuel dissent and rebellion.

The reduction in agricultural productivity in Dongola has broader effects on the region's economy. Sudan relies heavily on agriculture for employment and export earnings, and climate change-induced crop failures increase food prices, exacerbate poverty, and fuel



economic instability. This situation pushes people, particularly youth, to migrate to larger cities or abroad, primarily to Gulf countries. This not only leads to a *brain drain* but also strains the social fabric as remittances become crucial for local economies.

Sudan is an essential player in regional water politics. Climate change affects the Nile's flow, potentially intensifying disputes between upstream and downstream countries (particularly Egypt and Ethiopia, with the Grand Ethiopian Renaissance Dam project). Political tensions over water sharing agreements will heighten as climate change alters the river's dynamics. Any perceived threat to water security (due to changing river flows caused by climate change) may spark diplomatic or even military conflicts.

Although Dongola is more prone to droughts, occasional extreme weather events (such as flooding) damage infrastructure, further crippling the region's economic stability. Flooding, soil erosion, and riverbank collapse can damage agricultural land and transport networks, isolating rural communities and limiting access to markets. The changing climatic conditions exacerbate health issues such as waterborne diseases. The local government's capacity to handle these challenges is limited, leading to a deterioration in public health and increasing mortality rates, especially among vulnerable populations.

As climate change undermines traditional agriculture, there is a loss of cultural identity among farming communities in Dongola. Date palms, a vital cultural and economic asset, are particularly vulnerable to climate change, and their decline impacts local customs and social cohesion. The migration caused by climate change leads to the breakdown of traditional family structures and community networks. As people leave their ancestral lands in search of better opportunities, social ties weaken, leading to increased alienation and a sense of loss among the displaced.

CASSANDRA LEADERS IN SUDAN

The Sudanese Cassandra Local Climate Forum is led by:

Alaa Almakki in Al Makaylab,

Abotaleb Seedahmed in Dongola

Mohamed Fadelseed based in Cairo

IF YOU WANT TO BECOME INVOLVED IN CASSANDRA

- 1: Cassandra extends an invitation to all interested parties, be they governmental agencies, NGOs, research entities, cultural actors, interest groups or concerned members of the public to participate in the establishment of Local Climate Forums and /or become involved in the initial observation and monitoring of the progress of the actions of the programme.
2. Cassandra invites any interested stakeholder to attend and actively participate in the online forums organised by Eurecat which will take place in December 2024 and June 2025.
3. Cassandra invites participation in the third Cassandra Conference coordinated by Eurecat which will be held in November 2025.



FURTHER INFORMATION

For a detailed explanation of CASSANDRA see:

https://cdn.eurecat.org/PDF/Cassandra2023/Cassandra_conclusions.pdf

All sessions of the Cassandra Conference 2021 and 2023 are available on YOUTUBE and can be accessed at the following link: <https://cassandraconference.org/>

For any further information, suggestions or enquiries please contact: Dr Richard Elelman
richard.elelman@eurecat.org