





SUDAN CRISIS Risk Analysis

21 March 2024



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Context

On April 15, 2023, fighting broke out between the Sudanese Armed Forces (SAF) and Rapid Support Forces (RSF). Since the October 2021 coup, SAF -led by General Abel-Fattah Al Burhan- and RSF -led by Lieutenant General Mohamed Hamdan Dagalo, better known as Hemedti - ruled Sudan. The unstable alliance between two groups, mostly fractured over the timeline of the dissolution of RSF troops and their integration into the army, ultimately collapse. Another key sticking point was control of economic sectors: SAF invested in large-scale agriculture, weapon and ammunition production, and banking, while the RSF focused on private sector investments, gold mining, and smuggling in Darfur.

In the first six months of the conflict, the Khartoum state was the site of the most intense fighting, with inter-ethnic violence escalating in South Darfur from July 2023. Within this period, three-quarters of the recorded 9,000 casualties were caused by bombings in Khartoum (DFS-iMMAP Inc. 31/10/2023). This conflict has left approximately **25 million people** in need of humanitarian assistance. According to OCHA, over 6.3 million people have been displaced internally, while 1.8 million have crossed the border since April 15, 2023. With no signs of de-escalation, the conflict has spilled into areas previously considered safe. Following the capture of Wad Madani in December 2023, the RSF currently controls areas in both the western and central regions of the country, in addition to four out of five Darfuri states (DFS-iMMAP Inc. 28/02/2024). Soaring food and fuel prices exacerbate the humanitarian crisis, as a shrinking economy plunges many into poverty. Delivering aid remains extraordinarily difficult due to the protracted conflict, ongoing insecurity, theft of aid supplies, attacks on aid workers and responders, fuel shortages, and bureaucratic hurdles. These access constraints severely hamper both cross-line and cross-border humanitarian operations.

Displacement

Sudan's internal displacement crisis has reached a staggering new height. Already grappling with 3.7 million internally displaced people (IDPs) primarily in Greater Darfur before the conflict, the country now holds the grim distinction of hosting **the world's largest internal displacement crisis**. At the end of February, IOM reported that since the conflict erupted between SAF and RSF (15 April 2023), over 6.3 million people have been internally displaced, of whom around 2% (120,266) were foreign nationals. In addition, the conflict has caused nearly 2 million people to cross the border to neighboring Chad, South Sudan, and Egypt. Nearly two-thirds of the people were of Sudanese nationality, while the others were most likely foreign nationals and returnees (IOM 29/02/2024).

By the end of February, the total number of IDPs and cross-border movement continues to increase across all states, except Aj Jazirah. IDPs have been observed in over 6,800 locations (179/189 localities) across all 18 states. The rate of displacement has slowed somewhat, but roughly 230,000 new IDPs were still displaced in the previous two months. Two-thirds of IDPs are sheltering with host communities, usually due to existing tribal ties and social connections. Other common shelters are collective sites such as schools and other public buildings, rented accommodations, and informal shelters in open areas. Almost half of the IDPs expressed their intention to remain in their current location, while 16% of the IDPs expressed their intention to return to their location of origin, and 17% expressed their intention to move to a third location, mainly due to their economic inability to stay in their current location (IOM 29/02/2024).

Overall, South Darfur, River Nile, and East Darfur are the main areas hosting IDPs. Meanwhile, Khartoum (which saw an estimated 3.5 million flee), South Darfur, North Darfur, and Aj Jazirah are the main states of origin. The latest information provided by IOM indicates that, during February, around half of the new IDPs were displaced in the Darfur and Kordofan regions, while the other half were displaced in the eastern and southern areas of Sudan. (IOM 29/02/2024).

Humanitarian Access

The conflict in Sudan has significantly impacted humanitarian access, exacerbating the already acute situation in the country. With widespread violence and instability, delivering aid has become extremely challenging. Access to essential services like healthcare, food, and fuel has been severely restricted due to ongoing conflict, looting, and bureaucratic obstacles. Humanitarian facilities have been targeted, with attacks on health facilities and aid workers hindering relief efforts. Telecommunication and internet blackouts further complicate communication and coordination of aid delivery (Mercy Corps 20/01/2024). Both parties have been accused of preventing the flow of aid to regions controlled by the other, further constraining access (Humanitarian Outcomes 20/12/2023; FEWSNET 12/2023).

The RSF's seizure of key areas, including Wad Madani and Aj Jazirah, displaced hundreds of thousands and severed humanitarian access to the region. RSF restrictions on movement in Aj Jazirah have isolated civilians, leaving them vulnerable to shortages of essential supplies and lacking basic protections (Reuters 15/01/2024). Attacks on markets and looting of medical supplies have compounded the challenges faced by aid organizations.

In Darfur, violence and clashes between armed factions have disrupted humanitarian operations and led to the suspension of assistance in some areas (Ayin 31/12/2023). Airstrikes and conflict-related damage to infrastructure have further impeded access to essential services, heightening the humanitarian crisis. In Khartoum, intense clashes between SAF and RSF have resulted in disruptions to supply routes and shortages of food, water, and electricity. Hospitals and clinics have been forced to close or operate under limited capacity, further compounding the health crisis in the region (Radio Dabanga 23/01/2024).

Despite these challenges, humanitarian organizations are employing cross-border strategies to reach those in need. However, delays in the granting of visas and access permits, along with restrictions of humanitarian flights and disruptions to transportation routes continue to hinder aid delivery efforts.

Humanitarian Conditions

The conflict in Sudan has left around 25 million people currently in need of humanitarian assistance. The UN is seeking \$4.1 billion to support the Sudanese in Sudan (\$2.7 billion) and Sudanese refugees and host communities in neighboring countries (\$1.4 billion) in 2024 (Reuters 08/02/2024, OCHA 12/02/2024).

With 19.3 million people facing emergency food shortages, the conflict further disrupts aid distribution and access to basic necessities due to damaged infrastructure, road closures, and insecurity (HNRP 21/12/2023). This has been further intensified by widespread looting of markets and supply chain disruptions, that fuel the spiraling of basic food prices (FEWSNET 12/2023, FAO 05/12/2023, IOM 05/12/2023, OCHA 08/01/2024, FEWSNET 01/02/2024). Sudan has **one of the world's highest rates of child malnutrition**, with a staggering **4.7 million children** currently in need of nutrition assistance (OCHA 21/01/2024). An estimated 15 million people are currently in need of primary healthcare services, while almost **30 million people** do not have access to healthcare services. The situation is particularly critical for IDPs, as only 2% of them have uninterrupted access to health care and 70% of healthcare facilities in conflict areas are non-operational (OCHA 01/02/2024, UNHRC 05/02/2024, OCHA and UNHCR 07/02/2024).

Millions of displaced people in Sudan face desperate living conditions, with shelter and basic necessities becoming scarce. Massive internal displacement has made shelter a primary concern, with a staggering 8.6 million people currently in need of assistance. Since the conflict began, the number of people needing shelter has tripled within a year. Displaced families endure cramped conditions in overcrowded shelters, often sharing rooms with others. The need for NFIs has also steadily grown with many IDPs living in camps, public buildings, and open shelters citing an increasing demand for NFI kits. Shelter needs continue to be highest in those states with the highest IDP numbers, such as: South Darfur, River Nile, East Darfur, and Aj Jazirah. Nearly 38% of Sudan's population now lacks access to essential WASH services. This critical situation is a result of several converging rising costs that make clean water unaffordable for many, disruptions to water treatment plants and distribution networks, dwindling supplies of safe drinking water, and the strain on resources caused by the influx of internally displaced people. This alarming situation forces a growing number of people to resort to unsafe water sources, putting their health at significant risk.(OCHA 21/12/2023, IOM 02/02/2024). The conflict has also greatly impacted Sudanese children with over 19 million children out of school including 75% of IDP children who continue to have no access to education. Nearly 19,300 schools across the country remain closed with many being made into emergency shelters (OCHA 07/11/2022, OCHA 21/12/2023, Education Cluster KI 12/02/2024).

Sudan's civilians face a terrifying web of protection risks, with an estimated 7.7 million people in dire need of assistance. Continuous clashes between SAF and RSF across the country will likely increase protection risks for people. This may result in increased family separation, trafficking, and kidnapping during displacement, as well as an increased risk of sexual and gender-based violence. Widespread protection issues are leading to the adoption of negative coping mechanisms, such as joining armed groups. Women are particularly vulnerable, with 6.7 million estimated to be at risk of gender-based violence, facing threats of aggression both within their communities and during displacement. The pervasive fear of ethnic cleansing further fuels anxieties, leaving civilians exposed to potential abuse, exploitation, and violence. (Protection Cluster 22/01/2024, HNRP 21/12/2023, OCHA 28/12/2023, OCHA 21/01/2024).

Methodology

The methodology adopted for this risk analysis for Sudan for the outlook period April-December 2024 followed the one shared by United Nations Office for Disaster Risk Reduction (UNDRR) (<u>UNDRR</u> 2023). The goal was the joint identification of potential hazards, their likelihood of occurrence and their expected impact on people, property, infrastructure, services and assets, and the environment on which they depend, based on the evaluation of exposure, vulnerability, and capacities.

The first step consisted of producing a detailed and comprehensive historical list of hazards (using the categories defined in the UNDRR guidance) and attributing a likelihood and expected impact for each risk. This work is captured in an Excel File, with its final version shared with UN OCHA.

The second step was the extrapolation of a narrative for each risk from the Excel file, which represented the basis for discussion during the validating workshops. Two workshops were dedicated to validating the risk list and the risks' severity: on March 12, a half-day in-person workshop in Nairobi with wide attendance by members of the international humanitarian community, while an online workshop, opened to a much larger audience - many of whom connected from Sudan - was held on 14 March 2024. During these workshops the likelihood and impact of each risk were discussed and where necessary adjusted based on expert opinion.

The final step consisted of finalizing each risk in a short document to be publicly shared to be of use to the wider humanitarian community for analytical and planning purposes.

Likelihood and Impact Scales

Likelihood

Likelihood was rated using the following scale:

Description	Scale	Percentage Likelihood (%)	Time period
Very unlikely	1	<10%	In the upcoming 12 months
Unlikely	2	10-33%	In the upcoming 12 months
Moderately likely	3	34-66%	In the upcoming 12 months
Likely	4	67-90%	In the upcoming 12 months
Very likely	5	>90%	In the upcoming 12 months

Impact

The following scale was used as the preliminary Impact scale. However, this was then adjusted based on the severity of the impact (for example it was surmised that the severity is generally lower for communities impacted by malaria than those directly impacted by conflict). Numbers were based on those affected in 2023 and adjusted if the risk was deemed more or less likely in 2024 (for example rainfall and flooding have been projected to be worse in the coming year).

Description	Scale	Number of People Affected
Negligible	1	< 10,000 people affected
Minor	2	10,000 - 100,000 people affected
Moderate	3	100,001 - 250,000 people affected
Severe	4	250,001 - 500,000 people affected
Critical	5	> 500,000 people affected

Risk: Escalating Conflicts for Political Control

Likelihood: 🔵 🔵 🔵 🍏 5/5

Description

In 2024, the Sudanese Armed Forces (SAF) led by General Abdel Fattah al-Burhan, and the paramilitary Rapid Support Forces (RSF) led by Mohamed Hamdan Dagalo, known as 'Hemedti' has deteriorated, expanding to include other militias across the country. What started as a power struggle between rival warlords has since escalated into a nationwide conflict that has drawn in rebel groups, ethnic militias, and international actors.

Likely impact for April - December 2024: All of Sudan will be affected by the conflict Violence against civilians and large-scale displacements are expected to continue, with active hostilities impacting many states throughout the rest of 2024.

Justification and Assumptions

- Fighting in the tri-city area south of Khartoum and Omdurman has continued. After the takeover of Wad Madani, the conflict appears to be escalating and expanding to the heavily contested east. The RSF is closing in on Sennar and is likely preparing for a new offensive on the neighboring Al Gedaref and White Nile states as it continues to move southward and eastward toward SAF bases (ACLED 17/01/2024, ACLED 16/02/2024. ACLED 15/03/2024).
- Conflict events recorded by ACLED are increasing. Political violence events have increased by 8 percentage points in the third week of February 2024, with over 87 events of political violence reported within a week and 37 battle events. There are records of more than 340 conflict incidents around the country, with over 1,800 reported fatalities and more than two-thirds of the clashes have taken place in cities of over 100,000 people (ACLED, accessed 29/02/2024).
- So far, the impact has reached 14,600 fatalities and 7 million displaced with a wide-ranging negative impact on all humanitarian sectors.

Compounding and Mitigating Factors

- There have been repeated, uncoordinated, and failed mediation attempts by several actors. The indefinite halt of peace talks in Jeddah is due to a lack of implementation of confidence-building measures between the SAF and the RSF (<u>ACLED</u>, 17/01/2024)
- External actors have intervened in the conflict, including Chad, Niger, Mali, Central African Republic, Saudi Arabia, and the UAE, with the latter supplying weapons and Libya providing manpower to the RSF (Sudan Tribune 21/01/2024, Capiremov 16/02/2024). The UAE and Saudi Arabia have supported Sudan's Transitional Military Council and acted as mediators, alongside other actors. Egypt has backed Sudan's military to ensure the region's stability, while Russia's involvement is allegedly geared towards establishing a naval base and safeguarding investments through the Wagner Group. Since the 2021 coup, the US has redirected its support in favor of civilian governance (SudanTribune 21/01/2024, Capiremov 16/02/2024, Arab Center Washington DC 11/05/2023).
- There have been recent international sanctions by the US Government as well as the Council of Europe to diverse
 organizations, Sudanese companies, or their affiliates for financing the warring parties (<u>US Government</u> 31/01/2024, <u>Council
 of Europe</u> 22/01/2024).
- Conflict is spilling over into other areas exposing more civilians to hostilities with the RSF movement eastward into Sennar, Al Gedaref, and White Nile states, of particular concern (<u>ACLED</u> 16/02/2024).
- The conflict is driving continued inter-communal clashes, especially in Greater Darfur, which would likely continue even if a higher-level ceasefire was agreed (KI, 12/03/2024).

Humanitarian Conditions

An estimated 6.2 million people have been displaced internally, while 1.8 million have crossed the border since April 15, 2023 (OCHA, 17/02/2024). Most of the displacement has happened from conflict-stricken Khartoum, Darfur, and Kordofan states to other parts of the country and is likely to follow a similar pattern in the coming months. A surge in secondary displacement was

registered after the siege of Wad Madani in Aj Jazirah state at the end of 2023. Hostilities are moving towards newer areas such as IDP hubs like Sennar and White Nile state and fresh rounds of secondary displacement are likely to occur (IOM 02/02/2024). This increase will perpetuate the need for new gathering sites and force people to live in inadequate shelters (IOM 16/01/2024).

Thousands of people are food insecure due to the armed conflict. An estimated 17.7 million people are at high risk of acute food insecurity in February 2024. 12.8 million people are classified as facing crisis-level food insecurity (IPC phase 3) and 4.9 million people are classified as facing emergency-level food insecurity (IPC phase 4). There has been an increase of 18% compared to the previous analysis in June indicating the worsening situation (IPC 12/12/2023). With continued conflict, more people are likely to be pushed to IPC Phase 4 facing emergency-level food insecurity with the possibility of famine in some areas.

In addition to the food security crisis, the ongoing conflict is having a horrific impact on the safety of civilians, particularly women and girls. If fighting continues, the spike in sexual violence and its use as a weapon by armed groups will remain prominent and put thousands of women at risk. Sudan has previously struggled with high Gender-Based Violence (GBV) rates and weaponization of assault against women has happened throughout the previous decades (<u>ACAPS</u> 29/02/2024).

Heavily damaged by the conflict and due to its reliant and centralized nature on the capital Khartoum, Sudan's health system is collapsing. An estimated, two-thirds of Sudan's population lack access to healthcare services and more than 70% of healthcare facilities in conflict areas are non-functional (OCHA 01/02/2024, UNHRC 05/02/2024, OCHA and UNHCR 07/02/2024). An escalation and continuation of the clashes would leave an even larger number of people without access to health care and would cause further damage to health care services. Furthermore, increasing security would also act as a primary barrier obstructing people from accessing emergency care.

The prolonged conflict has also reduced people's access to clean water, sanitation, and hygiene products. People are forced to resort to using unsafe, unclean water and pay increasing costs. In South Darfur, 96% of IDPs identified that NFIs were available but not safe to access. Water needs are critical in parts of Sudan, especially in the Darfur region and an increase in conflict can have disastrous consequences for the population (IOM 02/02/2024, IOM 02/12/2023, IOM 02/06/2023).

Armed conflict and consequent looting have caused widespread damage to residential homes and civilian infrastructure, restricting access to essential goods and hindering authorities from delivering critical services in the country. With the war continuing, these concerns will continue to limit the population's access to basic services (<u>IOM</u> 16/01/2024).

Vulnerable Groups

- All population in Sudan
- Women and children exposed to protection risks
- IDPs.

Subnational Breakdown

- Khartoum and Kordofan to continue heavy fighting
- North & East Darfur likely to increase violence
- Aj Jazirah, Sennar, White Nile and Al Gedaref likely to host new clashes initiated in Aj Jazirah.

Risk: Heightened Risk of Communal / Ethnic Violence

Likelihood: 🔵 🔵 🔵 🔵 5/5

Description

The ongoing conflict has complexified pre-existing tribal and ethnic tensions. Aside from longstanding communal disputes and issues, implicit or explicit allegiance with either side of the main conflict actors as well as ethnic background would increase the risk of ethnic violence. Communal tensions in Greater Darfur remain the most serious concern and will continue to be so even should the major conflict cease.

Justification and Assumptions

- Tribal/ethnic violence has been a recurring phenomenon in Sudan for decades, particularly in Greater Darfur, due to long-standing issues (<u>ACAPS</u> 18/07/2023). During then-president Omar al-Bashir's ethnic cleansing campaign in Darfur that began in 2003, government forces and so-called Janjaweed militias, the precursor to the Rapid Support Forces, frequently attacked non-Arab communities, including the Massalit (<u>HRW</u> 17/08/2023).
- Communities become increasingly militarized due to the proliferation of arms and alignment with the main conflict actors (SAF and RSF) (<u>ACAPs</u> accessed 28/02/2024). The movement has also been restricted in some areas and depending on ethnic group or identity (<u>CRS</u> (confidential) 09/08/2023).
- The reactivation of local militias and recruitment of fighters along tribal lines continues unabated, leading to increased ethnic skirmishes (<u>CSF</u> 20/02/2024).
- Tribal and ethno-religious allegiances are still driving recruitment and support on both sides, posing a threat of igniting broader tribal/ethnic disputes, particularly in the Darfur region. The ongoing conflict could potentially revive ethnic conflict in many localities in the greater Darfur and Kordofan states, especially considering that the two primary mediators (RSF and SAF) are now engaged in fighting each other. (Insecurity Insight 03/07/2023)

Compounding and Mitigating Factors

Likelihood:

- Implicit or explicit allegiance with either side of the main conflict actors. Communal violence has been recurring in the Darfur region in the past decades (<u>ACLED</u> accessed 04/03/2024)
- The ongoing fragmentation of armed groups continues to drive tribal/ethnic violence in various parts of the country (<u>ACAPs</u> accessed 28/02/2024)
- People fleeing to Chad have reported a surge in ethnically driven killings in Sudan's West Darfur as the RSF took over the main army base in the state capital, El Geneina (Reuters 11/11/2023).

Impact:

- Increased hostilities and hate speeches/rhetoric by and against specific ethnic groups are continuing to drive the flare-up of ethnic violence, heightening risks for civilians (<u>ACLED</u> accessed 04/03/2024)
- SAF military intelligence classified the Misseriya tribe as supporters of the RSF in June, leading to increased tensions and targeting of Misseriya (<u>ACLED</u> accessed 04/03/2024)

Humanitarian Conditions

A surge in ethnic/communal violence in Sudan would only worsen the dire situation. The greater Darfur region has had reports of communal violence for decades and as RSF seeks full political control of Sudan, the violence would likely spill into other areas. Even in the case of a ceasefire between the warring parties, the ethnic violence is unlikely to stop as this has been a protracted issue in the country and there is limited central control of local armed groups and militias. The intensification of these events will increase both internal and cross-border displacement, increasing violence against civilians especially sexual violence against women and children. Notably, GBV reports, including sexual violence against women, have increased since the RSF

took over West Darfur State's El Geneina city on November 4, as RSF actors are reportedly targeting Masalit communities and other non-Arab groups based on ethnic identity in West Darfur (<u>USAID</u> 21/11/2023).

Vulnerable Groups

- Masalit and Misseriya tribes
- Non-arab groups: Tama, Eringa, Fur communities
- IDPs exposed to protection risks in camps and open areas
- Women and girls exposed to SGBV.

Subnational Breakdown

- Masalit communities in West Darfur
- Arab and African communities in Central, South and North Darfur
- Nuba and Misseriya communities in Great Kordofan.

Risk: Violence in Border Areas

Description

Violence is expected to continue in some of Sudan's border hotspots, particularly intensifying in the disputed territory of Abyei and the adjacent West Kordofan area, leading to increased cross-border displacement and exacerbated needs amid severely restricted humanitarian access. Low-level violence and sporadic clashes are likely to persist in the Al Fashaga border region with Ethiopia. Instability in Chad has led to an increase in violence on both sides of the Sudan-Chad borders, potentially resulting in a spillover of violence from the Chadian side as rebels cross into Sudan.

Justification and Assumptions

- New outbreak of violence in February 2024, when altercations between youth Ngok, Twic, and Bul Nuer groups escalated (<u>ACLED</u> 09/02/2024, <u>The Conversation</u> 05/03/2024).
- In 2024, around 150 people died in Abyei due to violence between ethnic militias and disputes over border territories (<u>ACLED</u> <u>Conflict Index</u> accessed 29/02/2024).
- The situation in Sudan and the intensification of violence in Ethiopia might ignite old disputes like the Al Fashaga area in Al Gedaref, bordering Amhara (<u>ACLED</u> 29/09/2023).
- Despite UNISFA, historical tensions in Abyei, ethnic conflicts, and the increase in the already large, displaced population result in the triggering of new outbreaks of violence.
- Risk of electoral violence in South Sudan with the 2024 presidential elections, with direct implications on the ethnic and
 political conflict in the area. (<u>ACLED</u> 09/02/2024).
- Low-scale sporadic violent events along the Ethiopia-Sudan border are likely to continue (EPO 13/03/2024).
- Chadian rebels' violence potentially spilling over into Darfur, leading to cross-border violence (KI 12/03/2024).

Compounding and Mitigating Factors

Likelihood:

- Abyei's instability has increased post-South Sudan's 2011 secession, with ethnic and political tensions prevalent. Warrap state, bordering Abyei, is highly unstable (<u>EPO</u> 13/03/2024).
- UNISFA's extension until November 2024 and South Sudan's Green Book aims to reduce tensions and enhance security, though South Sudan's excessive force use could worsen the historical conflict (<u>Sudan Tribune</u> 10/01/2024, <u>The Conversation</u> 05/03/2024).
- Ethiopian Prime Minister Abiy's commitment to peaceful negotiations and hosting talks with Sudanese officials decreases the likelihood of conflict escalation at the Ethiopia-Sudan border (<u>US Government</u> 21/02/2024).

 Recent announcements of ensuring humanitarian access into Sudan from its borders with Chad (into Darfur) and South Sudan (into White Nile) have not mentioned the Abyei area (<u>Government of Sudan</u> 07/03/2024).

Impact:

- Very limited and recently decreased humanitarian presence in Abyei and West Kordofan.
- Obstructions to humanitarian access in Chad-Sudan borders if violence in Chad spills into Sudan (KI 12/03/2024).
- The instability in Kordofan since April 2023 has resulted in over 500,000 internally displaced people, South Sudanese returnees, refugees, and Sudanese asylum seekers fleeing to South Sudan and the Abyei border area (NRC 28/01/2024).

Humanitarian Conditions

Violence in the border areas of Abyei/West Kordofan, Al Fashaga (Al Gedaref), and potentially along the Chad-Sudan border (West and North Darfur) will entail additional restrictions on humanitarian access, which could jeopardize the implementation of government declarations to allow the entry of humanitarian aid through various Sudanese border points (Government of Sudan 07/03/2024).

The intensification of violent events will increase both internal and cross-border displacement, forcing in the case of South Sudanese refugees to an eventual improvised and forced return, hindering durable solutions, especially for these returnees and the re-displaced population (NRC 28/01/2024). As a result of the clashes, mortality will increase among those involved, as well as civilians indirectly affected. Among the sectoral impacts are the loss of homes due to displacement or destruction by clashes, the interruption and loss of production activities and assets, the disruption of markets, and increases in rates of SGBV and child protection risks such as forced recruitment.

Vulnerable Groups

- IDPs, especially re-displaced
- South Sudanese refugees
- Ethnic minorities in hostile territories
- Women and girls exposed to SGBV.

Subnational Breakdown

- Border with South Sudan: Abyei area & West Kordofan
- Border with Chad: North & West Darfur
- Border with Ethiopia: Al Fashaga (Al Gedaref).

Risk: Economic Degradation and Hyperinflation

Likelihood: 5/5

Description

The conflict has delivered a crippling blow to Sudan's fragile economy. The International Monetary Fund (IMF) estimates a 12% economic contraction in 2023, a troubling sign of the conflict's devastating impact. This rapid decline surpasses the pace of economic deterioration witnessed in war-torn countries like Yemen and Syria, whose economies shrank by 50% over a decade (FAO 23/02/2024).

Justification and Assumptions

Ongoing clashes around trade centers and markets hamper business operations, gold mining, oil extraction, industrial and agricultural production, and rising demand for imported foods. These factors, added to high prices, generated a significant decrease in household consumption in 2023 and are posing a major threat to the availability and access to food at the national level (FEWSNET 01/02/2024). The ongoing conflict has led to a significant uptick in inflation. The country's tax revenues and commercial transactions are hindered by the lack of liquidity, the collapse of the national currency and disruptions in bank services, hindering households' purchasing power and constraining people's access to financial means of subsistence (IPC 12/12/2023, FEWSNET 06/01/2024, FEWSNET 01/02/2024).

Compounding and Mitigating Factors

Likelihood:

- Sudan's capacity to face economic deterioration remains extremely low. In October 2023, GDP per capita was estimated at US\$525.73 (IMF accessed 29/02/2024, WB assessed 29/02/2024).
- Attacks on telecommunications and internet shutdowns hinder economic, financial, and mobile banking transactions and services as well as hamper humanitarian operations. As a result, Bankak (a mobile bank application) faces recurrent system disruptions and exacerbates money transfer difficulties (ADRA 26/07/2023, ACAPS 11/08/2023, All Africa 11/02/2024).
- Banks, looted or burnt during clashes, have limited their operations further limiting the availability of liquidity, as available cash reserves are being depleted (OPB 10/05/2023, NRC 24/07/2023, ACAPS 11/08/2023).
- The extreme insecurity deterred FDI from China and the Gulf States in 2023. Moreover, economic international programs such as the IMF Extended Credit Facility program are being canceled or suspended due to the conflict. (AFDB 2023, COFACE 10/2023).

Impact:

- Low state capacity to stem economic deterioration heightens the risk of food insecurity and famine for vulnerable conflict-affected populations.
- Lack of liquidity exacerbates the difficulties of access to healthcare facilities as it limits pharmacies to provision medical stocks and prevents people from buying medicaments. (<u>ACAPS</u> 11/08/2023)
- Humanitarian aid: To date, only 1.7% of food security needs are covered by international funding. Without further international funding, vulnerable populations are at risk of famine (OCHA Financial Tracking Services assessed 29/02/2024).
- International sanctions impact transfers of assets to Sudanese bank accounts from foreign bank accounts and therefore
 increase vulnerability among Sudanese dependent on the targeted entities for livelihood, potentially worsening the
 humanitarian situation (<u>ACAPS</u> 11/08/2023, <u>Panel of Experts</u> 15/01/2024, <u>SCR</u> 31/01/2024).

Humanitarian Conditions

- A deteriorating economy will lead to the loss of livelihoods and impact household incomes.
- Looting of markets and interruption of supply chains of staple foods will further reduce the availability of food and other
 goods driving an increase in acute food insecurity. In addition, the availability of agricultural inputs will also be constrained,
 negatively affecting future harvests.
- As the value of Sudan's currency decreases, wages will lose value further pushing households into poverty.
- As food insecurity increases so will the number of children suffering from malnutrition.
- As supplies dwindle, prices will increase, reducing household purchasing power. This will drive up the use of negative coping
 mechanisms such as the sale of productive assets, reduction in food intake and more serious strategies such as early
 marriage and sexual exploitation.
- As the economic hardship increases this will lead to displacement as people move in search of work, services, and support.
- As liquidity availability remains low, pharmacist companies are unable to maintain medical supplies resulting in an increased number of indirect conflict-related deaths such as deaths of people with chronic disabilities (<u>ACAPS</u> 11/08/2023).

Vulnerable Groups

- Poor and vulnerable households
- Agricultural-dependant households and communities
- Women and girls exposed to exploitation and forced marriage
- Conflict-affected urban households affected by market disruption
- IDPs, especially re-displaced.

Subnational Breakdown

- Greater Darfur: Main roads inaccessible and infrastructures inoperative
- Khartoum: 2/3 of agricultural and industrial infrastructures destroyed, storage facilities nonoperational, disrupted banking services
- Greater Kordofan: lack of seeds for plantation.

Risk: Failure of the Next Harvest Season

Likelihood: 🔵 🔵 🔵 🍏 5/5

Description

Due to the ongoing conflict which heavily harmed Sudan's already weak agriculture production, the 2023-2024 harvest season ended with lower production than expected and aggravated the food crisis in the country in which 17.7M people are facing high acute food insecurity (IPC 12/12/2023, Clingendael 02/2024, FEWS NET 01/02/2024). The continuation and possible escalation of the conflict increases the risk of failure of the next harvest season, usually taking place between October and February.

Justification and Assumptions

Disruption of food and commodity imports, looting and destruction of food infrastructure, and interruption to the planting season have led to the failure of the 2023-2024 harvest season. The recent harvest season, between October 2023 and February 2024, was marked by the highest ever recorded hunger levels with 17.7 million people facing high acute food insecurity (IPC 12/12/2023, Clingendael 02/2024). The 2023-2024 harvest season for cereal in Sudan has ended with disappointing results. Food and Agricultural Agency (FAO) estimated that millet harvest was 50% lower than in 2022 and sorghum harvest was 24% lower than in 2022 (IPC 12/12/2023, Clingendael 02/2024).

With no dramatic improvements, either within the security situation in the country, the humanitarian access, and the capacity of the humanitarian aid, the failure of the next harvest season planned between October 2024 and February 2025 could lead to extreme food insecurity and eventually to famine-like conditions in many areas in the country affecting all population groups, but particularly the most vulnerable such as children, elderly, and IDPs (<u>Clingendael</u> 02/2024).

Compounding and Mitigating Factors

Likelihood:

- Sudan is experiencing the highest hunger levels ever recorded in the country during the harvest season (October 2023 to February 2024)(IPC 12/12/2023, Clingendael 02/2024).
- Interruption of the planting season (traditionally July with the beginning of the rainy season) (Islamic Relief 21/06/2023).
- Disruption of food and commodity imports (<u>Dabanga Sudan</u> 01/06/2023).
- Destroying and looting of food infrastructure (both of humanitarian organizations and Sudanese farmers) (<u>Dabanga Sudan</u> 01/06/2023, <u>Clingendael</u> 02/2024).
- Market systems disruption across Sudan, particularly impacting urban populations who rely heavily on markets to meet their food needs (<u>FAO-WFP</u>, February 2024).
- Many smallholder farmers were forced to leave their land and seed stocks were destroyed (<u>Dabanga Sudan</u> 01/06/2023).
- Increased risk of livestock losses due to unavailable veterinary services (KI 14/03/2024).
- Increased risk of transboundary animal diseases (<u>FAO</u> 2023).

Impact:

- Continuous currency depreciation causes the prices of imported goods such as agricultural inputs to remain very high, leading to a likely severe deterioration of people's purchasing power, further hampering access to food (FAO-WFP 02/2024).
- Low state capacity to stem economic deterioration exacerbates the risk of food insecurity and famine for vulnerable conflict-affected populations.
- The FSL sector is facing critical funding shortages, as so far only 4.9% of the required funding for the sector has been secured (OCHA accessed 13/03/2024).

Humanitarian Conditions

- A failure of the upcoming harvest will aggravate food insecurity in the country among all levels of society and potentially will
 drive people to food insecurity level 3 and 4 and even to level 5 (<u>Clingendael</u> 02/2024, <u>WHO</u> 08/02/2024, <u>OCHA</u> accessed
 01/03/2024).
- In case of food shortage people are expected to use coping mechanisms such as labor migration, consumption of 'wild food', and sale of livestock. However, in the current situation access to coping mechanisms in Sudan is dramatically reduced (Clingendael 02/2024).
- The failure of the next harvest could also drive more displacement (secondary) as people will look for areas where they can find work and food (Clingendael 02/2024).
- A failure of the next harvest could lead to the loss of livelihoods and impact household incomes.
- Hunger could lead to an increase risk of sexual violence against women and girls (<u>Clingendael</u> 02/2024). Hunger and limited access to food could also increase the chances of women resorting to sex labor as a coping mechanism.

Vulnerable Groups

- Agriculture-dependent communities
- 17.7 million people in IPC Phase 3 or above
- Children, pregnant and lactating women
- Elderly
- Population in conflict-affected areas.

Sub-national Breakdown

- Areas with severe humanitarian access restrictions:
 Greater Darfur, Greater Kordofan, Khartoum
- Sorghum and millet productive areas: Greater Darfur, Greater Kordofan, Khartoum
- Aj Jazirah: Winter wheat affected production
- Other agriculture-intensive conflict-affected areas: Sennar, White Nile, South Kordofan
- Food insecure population in West and Central Darfur.

Risk: Floods

Description

Sudan's vulnerability to climate change is particularly concerning, ranking among the world's ten most at-risk nations (ND-GAIN accessed 9/3/2024). This is further amplified by the fact that floods, the most frequent climate hazard in the country between 1980-2020 (World Bank accessed 9/3/2024). In 2020, Sudan witnessed its most severe flooding in a century, affecting over 800,000 individuals, and in 2022, more than 349,000 people were impacted. In 2023, due to the impact of the conflict on reporting mechanisms, the estimated number of people affected by floods is around 90,000. This figure may not fully capture the true scale of the flooding.

Justification and Assumptions

- <u>Glide Number</u> indicates the recurring incidence of flooding in Sudan over the past two decades.
- Sudan scored 8.6 out of 10 in the INFORM Country Risk Profile for flood exposure (INFORM accessed 27/02/2024).
- Think Hazard also categorizes flood hazard as high in 13 states (Think Hazard accessed 05/03/2024).

Compounding and Mitigating Factors

Likelihood:

- Very high likelihood that the persistent phenomenon worsens due to global warming.
- Heavy rainfall in the Ethiopian highlands drives a high volume and flow of water into the Blue Nile River, increasing the chances of flooding.

Impact:

- The rainy season in Sudan from June to September 2024 is expected to exceed the usual levels (<u>FEWSNET</u> 01/2024) and the most affected states by flooding are those with the highest number of political violence events, potentially representing a serious aggravating factor.
- Reduced state facilities and civil society resilience facing additional natural disasters.
- Lack of DRR official policy and limited engagement of the public (Abdel et al 10/01/2024)
- Disruptions to supply chains, from Blue Nile to Wad Madani can hinder delivery of aid in case of a flood, thereby worsening impacts (KI 12/03/2024).
- Moreover, flooding can result in increased displacement, which will increase the number of total Humanitarian Conditions

Humanitarian Conditions

- Floods will likely trigger secondary displacement, forcing people who have already fled conflict to move again. These doubly
 displaced individuals will face extreme hardship, living in exposed conditions with limited access to food, shelter, and
 essential belongings.
- People's access to safe drinking water will decrease further and safe sanitation practices will likely decrease.
- 65% of people in Sudan already lack access to healthcare. Flooding would likely drive an increase in waterborne illnesses that will go untreated due to limited access to healthcare and limited medical supplies.
- Heavy flooding will destroy crops, exacerbating food insecurity and pushing communities to the brink of famine (WFP 19/02/2024).

Vulnerable Groups

- IDPs in improvised shelters, camps and informal settlements
- Population in Need of WASH, Nutrition, Shelter and NFI assistance
- Women without access to sanitation and hygiene items

Subnational Breakdown

- States historically affected by floods (last 5 years): Great Darfur, Al Gedaref, White Nile, Blue Nile, Khartoum, Aj Jazirah, North Kordofan, River Nile, Northern, Sennar and Kassala.
- States most affected by floods in 2023: Northern, River Nile, North Darfur, South Darfur.

Risk: Drought

Likelihood: 3/5

Impact: **3 3 5**

Description

Sudan's inherent dryness with rainfall concentrated in a few months creates uneven rainfall distribution across the country. The country faces recurring challenges of localized drought, particularly in regions like Darfur and Kordofan. Reliance on seasonal rainfall for agriculture makes these communities highly vulnerable to water scarcity. Sudan's inherent dryness is exacerbated by climate change, potentially leading to more frequent and severe droughts.

Justification and Assumptions

- The rainy season in Sudan from June to September 2024 is expected to exceed the usual levels (<u>FEWSNET</u> 01/2024) which makes flooding more likely, however, no analysis in terms of the impact on localized droughts is available.
- Low capacity and conflict-related supply chain disruptions will create a perfect storm, heightening the vulnerability of populations already at risk from drought.
- A dam project in Wada'a, North Darfur, has recently been completed to alleviate water scarcity for the village's 17,000 residents, who have been dealing with persistent drought (<u>UNEP</u> 12/10/2023).

Compounding and Mitigating Factors

Likelihood:

• Higher probability of above-average surface temperatures across the Greater Horn of Africa, with a high likelihood of experiencing warmer-than-normal temperatures in Sudan (ICPAC 21/02/2024).

Impact:

- Specific regions, like Darfur, have experienced increased droughts since the 1970s (<u>UNEP</u> 12/10/2023). Northern Kordofan state, North states, and Red Sea and White Nile states have also experienced significant droughts in the past decades (<u>UN Water</u> 12/11/2014).
- Sudan has a low INFORM score (3.9/10) for exposure to drought (INFORM accessed 27/02/2024).
- With the negative impact on agriculture and economy, the already serious food security situation for many will worsen driving households into IPC levels 3 4 and possibly 5 if already vulnerable areas are affected for a prolonged period.
- In several Sudanese states, a notable scarcity of drinking water is already apparent, stemming from the shutdown of water
 plants due to fuel shortages (<u>Dabanga Sudan</u> 10/01/2024). This will further intensify the repercussions of drought,
 diminishing the capacity of vulnerable communities to cope.

Humanitarian Conditions

- The agricultural sector, reliant on water, will face substantial impacts from droughts, resulting in economic losses from poor harvests and livestock deaths.
- With the negative impact on agriculture and economy, the already serious food security situation for many will worsen driving households into IPC levels 3 4 and possibly 5 if already vulnerable areas are affected for a prolonged period.
- Households may have to rely on unsafe water sources increasing issues of diarrheal diseases, which combined with increased food insecurity will increase malnutrition rates.
- Water scarcity and crop failures can contribute to further displacements.

Vulnerable Groups

- Farmers and pastoral communities
- Displaced people living in tents and open areas<.

Subnational Breakdown

- Drought-prone states: Darfur, North and West Kordofan, Aj Jazirah, Kassala, Khartoum, Northern, Al Gedaref, Sennar, River Nile, and White Nile
- Localized drought in specific localities or areas.

Risk: Locust

Description

Since the outbreak of the conflict, the country's already fragile economy has collapsed. The IMF estimates that the economy shrunk by 12% in 2023 due to the conflict. By comparison, both Yemen's and Syria's economies have shrunk by around 50% in ten years, illustrating the rapid decline of the Sudanese economy (FAO 23/02/2024). Desert locusts threaten Sudan's coastal agriculture, particularly in Red Sea and Kassala states, known for summer breeding. These locusts can devastate crops, impacting food security and livelihoods, especially for those reliant on agriculture in the coastal regions.

Justification and Assumptions

- Desert Locust Infestation in Sudan has been a concern in the past, especially in the Red Sea and Kassala states which have become summer breeding belts over the years. As these locusts can attack crops, this can severely impact the food security and livelihoods of the people, especially those reliant on agriculture in the coastal states.
- While in 2023 the situation was mainly calm in most parts of Sudan, a fresh round of breeding during the rainy season could change the situation for the worse (<u>HNO 2021</u> 22/02/2021, <u>FAO</u> 22/01/2024).
- However, Sudan has taken control of operations actively and is reportedly monitoring the swarms which can minimize the impact in case of a widespread infestation.

Compounding and Mitigating Factors

Likelihood:

- The Desert Locust situation was mainly calm during October 2023. Summer breeding continued where small hopper and adult groups, bands, and swarms occurred in the interior of Sudan while adults appeared on the Red Sea coast. Locusts' breeding will continue until about March or April if more rain falls. Locusts will increase with some small groups developing (FAO 22/01/2024).
- Locusts are likely to decrease because of control operations, diminished rainfall, and drying vegetation in March. Sudan has also performed aerial control to control and monitor the swarms (FAO 05/02/2024)

Impact:

An increase in rainfall in March and April can lead to more breeding of locusts which can affect the coastal areas.

Humanitarian Conditions

- In Sudan, an estimated 17.7 million people are at high risk of acute food insecurity in February 2024 (<u>IPC 12/12/2023</u>). An infestation would destroy crops, trees and pastureland which will heighten the food insecurity in the country (<u>World Bank</u> accessed 05/03/2024).
- 19.3 million people in need of food and livelihoods (<u>HNRP</u> 2024) in Sudan. The conflict has affected the livelihoods of millions
 of Sudanese people. An infestation would worsen this situation, particularly affecting the livelihoods of those involved in
 agriculture.

Vulnerable Groups

• People involved in agricultural activities.

Sub-national Breakdown

- Red Sea and Kassala states prone to locust infestation
- Darfur states vulnerable to the impact of infestations amidst low capacity.

Risk: Waterborne Diseases

Likelihood:

4/5

Description

Due to the ongoing situation which damaged heavily WASH infrastructure, poor sanitation and hygiene practices and a poorly functioning health system, there is an increased risk of disease outbreaks including waterborne diseases which are transmitted through microbiologically contaminated water or by direct contact with feces (<u>Life Water</u> 23/05/2019, <u>WHO</u> 13/09/2023, <u>OCHA</u> 04/02/2024).

Justification and Assumptions

The ongoing conflict has resulted in a huge mass of displacement, a collapsing health system, and poor water and sanitation services. Those factors together with persistent flooding increase the risk of waterborne diseases (IPC 12/12/2023, OCHA 21/01/2024, OCHA 01/02/2024, UNHRC 05/02/2024, OCHA and UNHCR 07/02/2024, Nutrition Cluster accessed 01/03/2024, OCHA accessed 01/03/2024).

Diarrheal diseases are among the top causes of death in Sudan (<u>WHO</u> accessed 01/03/2024). Recent Cholera outbreaks in Sudan have occurred in 2017, 2019, and 2023-now (<u>OCHA</u> 04/02/2024). The current cholera outbreak has spread to 63 localities in 11 states with more than 10,000 cholera cases and 292 associated deaths. While some mitigation measures are being taken in coordination between Sudan's authorities, WHO and other health partners (<u>ACAPS</u> 29/02/2024, <u>WHO</u> 03/03/2024), disruption to the health system including vaccination campaigns and gaps in Sudan's epidemiological tracking, as well as access barriers, it is safe to assume that the numbers are higher.

Compounding and Mitigating Factors

Likelihood:

- Outbreaks of cholera, measles, dengue fever, and malaria are underway (<u>ACAPS</u> 27/02/2024).
- 18.9 million people require WASH assistance which could drive and increase the spread of the disease (<u>Nutrition Cluster</u> accessed 01/03/2024, <u>OCHA</u> accessed 01/03/2024).
- The situation has heavily damaged Sudan's ability to conduct complete epidemiological tracking. Two-thirds of Sudan's population lack access to healthcare services and more than 70% of healthcare facilities in conflict areas are non-functional (OCHA 01/02/2024, UNHRC 05/02/2024, OCHA and UNHCR 07/02/2024).
- In recent years, Sudan has experienced flooding in multiple states (Glide Number accessed 27/02/2024).

Impact:

- The health sector is facing funding shortages, so far only 11.3% of the required funding for the health sector has been reached (<u>OCHA</u> accessed 01/03/2024).
- Sudan is among the top four countries in the world with the highest prevalence of global acute malnutrition (GAM), it is estimated that 17.7 million people are experiencing high levels of acute food insecurity (OCHA accessed 01/03/2024).

Mitigation:

• During November and December and later on in February, oral cholera vaccination campaigns were carried out across the country in 14 localities in six states reaching around 4M people (<u>WHO through Twitter</u> 13/02/2024).

Humanitarian Conditions

Although the number of cases of cholera and similar diseases is small compared to the total population, a large cholera can lead to hundreds or even thousands of fatalities. Cholera impacts health service provision if health centers are not properly resourced for identification, prevention and control of the disease they can amplify disease transmission. This puts increased pressure on an already barely functional health system. Diarrhea can lead to malnutrition, while malnutrition aggravates the course of the disease, posing an increased risk for malnourished children. Widespread malnutrition in Sudan combined with the number of cases is likely to increase leading to further child fatalities.

Vulnerable Groups

- Children under 5 and elderly at risk of waterborne diseases
- People living in cramped conditions with limited resources
- Persons with existing medical conditions

Sub-national Breakdown

- Entirety of Sudan
- Eastern Sudan
- Greater Darfur and Kordofan states with access barriers

Risk: Vector-borne Diseases

Description

Poor living conditions, rainfall and flooding along with high changing temperatures and humidity are creating a fertile ground for the outbreak of vector-borne diseases which are caused by parasites, bacteria or viruses transmitted either between humans or from animals to humans (<u>WHO</u> 02/03/2020, <u>WHO</u> 09/02/2023).

Justification and Assumptions

Sudan is the Eastern Mediterranean country with the highest proportion of vector-borne diseases in the region, with the entire population at high risk of two or more vector-borne diseases (<u>WHO</u> 09/02/2023). The ongoing conflict has resulted in mass displacement and overcrowded camps, together with the collapsing health system and annual flooding events which increase the breeding sites (stagnant water pools) resulting in a significant risk of a high incidence of vector diseases. In 2019, malaria breached the epidemic threshold in Sudan with more than 1.8 million cases across Sudan (<u>OCHA</u> 12/12/2019, <u>WHO</u> 09/02/2023, <u>OCHA</u> 07/10/2023). As of February 2024, there are 1.2 million cases of malaria in Sudan. It is likely similar case numbers (between 1 and 2 million) will be seen in the course of the year. In addition, according to WHO, in 2022 dengue outbreak expanded beyond the known geospatial distribution reaching new areas especially areas which are heavily infested with Aedes mosquito, in the same year 5,212 cases in 11 states and 70 localities (<u>WHO</u> 09/02/2023).

Compounding and Mitigating Factors

Likelihood:

- Poor shelter conditions and large numbers of displaced persons living in temporary or makeshift shelters increase the risk of catching malaria.
- Sudan has experienced flooding in multiple states every year in the past 20 years (<u>Glide Number</u> accessed 27/02/2024).
 Extensive flooding would likely increase the numbers of mosquitos and with it cases of malaria and dengue.
- The situation has heavily damaged Sudan's ability to conduct complete epidemiological tracking. Two-thirds of Sudan's population lack access to healthcare services and more than 70% of healthcare facilities in conflict areas are non-functional (OCHA 01/02/2024, UNHRC 05/02/2024, OCHA and UNHCR 07/02/2024).
- Outbreaks of cholera, measles, dengue fever, and malaria are underway (ACAPS 27/02/2024).

Impact:

- Sudan is rated 6.6/10 in exposure to epidemics (<u>INFORM</u> accessed 04/03/2024). As of 13 February 2024, Sudan is suffering various and significant disease outbreaks, including cholera, measles, dengue fever, and malaria (<u>ACAPS</u> 27/02/2024).
- The health sector is facing funding shortages and according to 2024 HNRP, so far only 11.3% of the required funding for the
 health sector has been reached (OCHA 21/12/2023, OCHA accessed 01/03/2024). However, even before the conflict, Sudan's
 response to vector-borne diseases has been impacted by low funding and has relied on the support of WHO (WHO
 09/02/2023).

Humanitarian Conditions

An increasing number of malaria cases will lead to the deaths of more children aged 5 or under as well as increasing the risk of complications for pregnant women. With the reduced functionality of health services, the impact will be even higher than usual.

Vulnerable Groups

- Children under 5 and pregnant women vulnerable to malaria complications
- IDPs, returnees, and refugees vulnerable to contracting malaria due to limited access to prevention and treatment
- People living in flood-prone and dry areas.

Subnational Breakdown

- Entirey of Sudan due to above-average expected rains in 2024
- Eastern Sudan especially vulnerable to Dengue and Malaria outbreaks.

Risk: Preventable and Communicable Diseases

Likelihood: 3/5

Description

Several conflict-related factors increase the risk of disease outbreaks including communicable diseases which are caused by microorganisms such as bacteria, viruses, parasites and fungi that can be spread, directly or indirectly, from one person to another. Some would be preventable through vaccination, but any mass vaccination remains challenging (WHO accessed 07/03/2024, National Library of Medicine 24/10/2022).

Justification and Assumptions

Even before April 2023, communicable diseases were common in Sudan. Overcrowded camps with IDPs, a collapsing health system, poor water and sanitation services, and acute food insecurity increase the risk of disease outbreaks including preventable and communicable diseases (IPC 12/12/2023, OCHA 21/01/2024, OCHA 01/02/2024, UNHRC 05/02/2024, OCHA and UNHCR 07/02/2024, Nutrition Cluster accessed 01/03/2024, UNICEF accessed 07/03/2024). Measles outbreaks have been reported, which have severe outcomes in children due to a "deadly combination" of suspected measles outbreaks and malnutrition (UNHCR 19/09/2024). Sudan's ability to cope with epidemics has been severely compromised. However, in accessible areas, with cooperation between Sudan's authority, WHO and other organizations, mitigation measures, such as vaccination campaigns, are taking place and will most likely reduce negative outcomes (OCHA 07/11/2022, WHO 21/12/2023).

Compounding and Mitigating Factors

Likelihood:

- The situation has heavily damaged Sudan's ability to conduct complete epidemiological tracking. Two-thirds of Sudan's population lack access to healthcare services and more than 70% of healthcare facilities in conflict areas are non-functional (OCHA 01/02/2024, UNHRC 05/02/2024, OCHA and UNHCR 07/02/2024).
- Outbreaks of cholera, measles, dengue fever, and malaria are underway (<u>ACAPS</u> 27/02/2024).
- According to information provided by WHO in 2019, measles is one of the top causes of death for women and men in Sudan (WHO accessed 01/03/2024).
- A lack of access to appropriate hygiene products can also drive disease and infections for women and young children (KI 12/03/2024).
- The health sector is facing funding shortages, so far only 11.3% of the required funding for the health sector has been reached (OCHA 21/12/2023, OCHA accessed 01/03/2024).

Mitigation:

More than 50,000 children under five years old were reached in a measles vaccination campaign conducted by UNICEF and
other organizations carried out in July and August (<u>OCHA</u> 26/09/2023). Moreover, by the end of November, UNICEF reported
the arrival of 7.5 million doses of rubella and measles vaccines in Port Sudan (<u>WHO</u> 21/12/2023).

Humanitarian Conditions

Disruption of immunization services increases the threat of outbreaks of preventable diseases such as measles. An outbreak of avoidable diseases would put more weight on the collapsing health system, which would lead to an even higher impact than usual (Conflict and Health 27/09/2023).

Vulnerable Groups

- Children under 5 and pregnant women vulnerable to malaria complications
- IDPs, refugees, and returnees vulnerable to measles and diseases including infections due poor living conditions and lack of hygiene products.

Subnational Breakdown

- Greater Darfur, Greater Kordofan, and Aj Jazirah states have limited access to treatment and vaccinations
- South and East Darfur, River, and White Nile states face high outbreak risks.

Additional Risks Beyond the Scope of This Paper

Several additional risks were identified during the review workshops on 12th and 14th March. There was not enough time to fully incorporate them into the paper, but a brief description and impact are outlined below for consideration.

1. A Major Dam in Sudan at Risk of Destruction

Destruction of one of the dams would result in widespread flooding (see <u>Risk: Flood</u>) and could be caused either by accidental or deliberate actions as part of the conflict. As well as flooding there would also be an impact on the availability of both drinking water and water for irrigation (<u>The Niles</u> 19/03/2021).

2. Attacks on the Greater Nile Oil Pipeline to Port Sudan

Accidental or intentional damage to the Greater Nile Oil Pipeline would be a further blow to Sudan's already struggling economy. If fighting erupted for control of the pipeline that would also impact the communities that live adjacent to the route. The impact would also be felt in South Sudan and may draw Sudan's neighbor into the conflict to protect South Sudan's sizeable revenue stream from the pipeline (<u>Sudan Tribune</u> 24/01/2024, <u>S&P Global</u> 02/05/2023).

3. Direct military intervention by a Foreign Power

As described in the conflict section (see <u>Risk: Clashes and conflict events for political control</u>) a number of other countries have political reasons for supporting one or other of the conflict's protagonists. Whilst not viewed as likely, there is a possibility of foreign military intervention, especially if the conflict is heading in the wrong direction. This would likely drive a continued escalation of the conflict and its subsequent humanitarian consequences.

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