BREAKING BARRIERS

Examining the digital exclusion of women
and online gender-based violence in Sudan

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The Feminist Internet Research Network focuses on the making of a feminist internet, seeing this as critical to bringing about transformation in gendered structures of power that exist online and offline. Members of the network undertake data-driven research that provides substantial evidence to drive change in policy and law, and in the discourse around internet rights. The network's broader objective is to ensure that the needs of women and gender-diverse and queer people are taken into account in internet policy discussions and decision making.

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1.
Executive summary

In a globalised world where the internet transformed our earth into a small village, the global South is left lagging. Internet accessibility remains a major hurdle facing a large proportion of people in the global South. The situation in Sudan is no exception. In the light of the economic instability, political turmoil and the United States-led economic sanctions imposed on Sudan, internet accessibility and making beneficial use of the internet are a real challenge, especially for women. This research explores the barriers to women's access to and use of the internet in Sudan. It examines how intersectional discrimination against women resulted in their digital exclusion in the four regions of Khartoum, Port Sudan, North Darfur and South Kordofan. The interplay of economic deterioration, political instability, economic sanctions, gender dynamics and power dynamics has widened the gender digital divide in the country. Digital inequality is further amplified by limited access to digital technologies, lack of skills, and affordability. The research also draws attention to the online gender-based violence (OGBV) experienced by the women as a significant barrier to internet access as also unrecognised and unaccounted for violence and hate speech against them.

Key findings

1. Among the various barriers to women's access and use of the internet, our research findings reveal that the following are noxious and prominent – social construct of gender norms, power dynamics, personal status law, government regulations, lack of gender-sensitive regulations, OGBV, and US sanctions against Sudan.

2. Connected to the above, particularly in the private sphere, access to the internet mostly involves domestic violence which can sometimes entail murder. Young girls are forced to be supervised by family members, who in most cases are males. Married women are also being watched by their husbands online, which often results in divorce, beatings, and/or other types of abuse.

3. All the four regions mentioned above reported the prevailing culture of men's control over women over owning technological devices and accessing the internet. A majority of the research participants pointed out that women of different ages, social classes, ethnicities, marital status, and locations (urban and rural) are challenged by men's control over their lives to access and use the internet. In some rural areas in Khartoum, South Kordofan and North Darfur, it was reported that women are prevented from having a smartphone or accessing the internet because men believe it changes the behaviour and attitudes of women and girls in a way that does not conform to the community culture.

4. A majority of women do not feel safe in online spaces, according to the focus group discussions (FGDs). The data collected through the FGDs shows that many women are not allowed to freely express their opinions on social media or share their photos. To circumvent this, they create accounts with nicknames or pseudonyms to avoid recognition by their family members online. Furthermore, the research participants reflected that women experience different types of OGBV, including bullying, sexual harassment, blackmail and threats. These acts have limited the activities of some women in online spaces, and driving others to discontinue their online presence. Moreover, women's struggles with OGBV in Sudan usually extend offline also.

5. In South Kordofan (Kadugli, capital city), the problem women face is internet shutdown due to the ongoing intercommunal conflicts. FGD participants said they were neophytes when it came to the internet and its usage and that they struggled to create content due to government surveillance and restrictions on freedom of expression across the country; and there were women who have been imprisoned for expressing their opinion online.

6. The research also shows that certain groups of women are more targeted on social media. Intersecting factors including age, ethnicity, socioeconomic class, occupation, physical appearance, physical/mental ability, and nature of activities on social media were recorded as playing a role in how they are more vulnerable to OGBV and less likely to obtain justice. For instance, younger women political activists who come from marginalised ethnic groups are more vulnerable to OGBV. Furthermore, a majority of the victims refrain from filing a formal complaint for various reasons, including, primarily, social stigma as well as lack of awareness about their rights and lack of trust in the juridical system. Exacerbated by the sanctions, the variety of settings and tools to address online abuse are not always easy to access.

7. The US trade embargo on Sudan has affected mobile network operators' access to crucial technologies to maintain telecom infrastructure. This leads telecom operators to buy equipment and software through third-party companies, which directly increases cost of operation because these entities in turn inflate their prices by two times, impacting the internet bundle cost in a country that sees a high rate of poverty among women.

8. Although the Berman Amendment (which stipulates that transactions involving information and informational materials are generally exempt from the purview of the US presidential regulation) offered individuals the right to access information and informational materials, still some educational websites block sanctioned countries from accessing their educational materials. Most edutech services do not accept payment through Visa or Mastercard issued in Sudan. This has exacerbated the restrictions and control women endure to access education online, as well as decreasing livelihood opportunities through finding jobs online.

9. Sanctions are directly affecting Sudanese women in STEM (science, technology, engineering and mathematics), and marginalising them professionally. Getting access to certifications is not easy and is very costly as Sudanese must travel abroad to sit for exams, and this is not always affordable and/or permissible to many pursuing STEM-related professions. Additionally, sometimes training centres and examiners may refuse to allow them to sit for the exams as Sudan is under sanctions.

Key recommendations

The lack of accessibility to the internet and the phenomenon of OGBV against women in Sudan require collective effort at the community, national, and international levels. This research proposes several recommendations based on evidence that emerged during the focus group discussions (FGDs), where data was collected and analysed. However, in order to increase the literacy rate and digital literacy in Sudan, the Sudanese Government must end the military regime and the ongoing conflicts, establish a citizen-led government and introduce policies that stabilise the falling economy with the support of regional and international communities. The judiciary, on its part, must work on drafting and updating laws, including 1) reforming all laws that discriminate against women, including the Criminal Act, Evidence Act, Cybercrime Law, Personal Status Law, and Labour Code, among others, 2) enacting a law criminalising both offline and online GBV, and 3) streamlining the filing of complaints against OGBV to encourage victims to report and ensure they have access to free legal representation.

The telecom authority needs to work collaboratively with legal institutions to support in the development of electronic evidence guidelines that allow the juridical system to follow the digital footprints of online crimes. The Ministry of Social Affairs must appoint a gender focal point in all entities, especially at the telecom authority. Gender focal points must collaborate with the telecom authority to develop policies and strategies that can close the gender digital divide, and create a safe environment for women online. The gender focal point must also work closely with the juridical system in collecting electronic evidence of OGBV cases and follow up on the implementation of policies developed to close the gender digital divide.

Social media companies must be governed by a law that forces them to activate reporting mechanisms against online perpetrators, as well as provide reports as per judicial orders to serve as evidence in courts of law to help victims get justice. It is worth noting that all major social media platforms, such as Facebook, Twitter, Instagram, LinkedIn, etc., are US-based – and Sudan, like the rest of the world, has problems with the way data is handled, along with censorship and privacy concerns. Sudan has an added layer of grievance against the US and that is the sanctions, and the international community must work on ending this sanctions regime as soon as possible. The US must work on revising how targeted sanctions are implemented without hindering the process of due diligence followed by American companies to grant access to services and products. Research suggests that these companies usually get overwhelmed by the due diligence process, and end up either terminating services provided or not granting them to individuals or institutions in the first place. Thus, the international community must also work on introducing a binding international mechanism to govern the internet in terms of access and usage without political interference that would restrict citizens' access to technologies used for meaningful use of the internet. Finally, further research must be conducted in Sudan and other countries affected by the sanctions to analyse the impact of sanctions on the gender digital divide and women's digital rights.

Study limitations

The FGDs were covered only in four states due to the limited resources and the time frame of the project. However, sampling was adjusted based on existing and emerging circumstances; some localities with high numbers of women in need remained inaccessible due to outbreaks of dengue fever at the time of data collection, armed conflict in the Blue Nile State, and inaccessibility of non-government-controlled areas. Furthermore, researchers faced challenges to physically accessing South Kordofan and Port Sudan, as such visits could risk exposure by the authorities represented by the Humanitarian Aid Commission or the General Intelligence Service on the ground.

Let alone OGBV, GBV itself is underreported and rarely discussed openly. Several GBV issues are normalised in Sudan, such as female genital mutilation (FGM), domestic violence and marital rape; so FGDs addressing OGBV may fail to bring to light many cases and underlying concerns. It would be very difficult for women to speak openly about their personal experiences with GBV and OGBV for fear of social stigma and shame and that they might be reported to their families. Reporting and tracking OGBV has many challenges such as safety and protection upon disclosure, capacity to collect and analyse data, and identifying and accounting for bias in data sources, etc. It was difficult to find survivors of OGBV who were able to raise a legal case; this is because many women are unaware of the nature of the crime and cybercrime law, and not encouraged to seek justice due social pressure, financial burden, or the fear of not getting justice at all. Therefore, this study comes with the limitation on how women were able to seek justice against OGBV perpetrators.

Although the literature review has discussed the impact of the sanctions on women, it had limitations on the discussion about the impact of these sanctions on women's digital rights. Women's lack of understanding of the topic also would have impeded their ability to participate and reflect during the FGDs. Findings in this report and of the frequency analysis must be read keeping these factors in mind. This research explored opportunities and challenges in a limited way, due to continuous changes in the political scene. It was conducted prior to the ongoing war, and does not reflecting the exacerbated challenges women face in accessing their digital rights during this conflict.

2.

Introduction

Accessibility to online information is one of the main challenges that forces women into vulnerable situations and puts them at risk of falling into poverty and experiencing GBV. Sudanese women are digitally marginalised. The structural and intersectional discrimination they experience is reinforced in the digital world. Previous studies have shown that income and education are the main determinants of internet access and use. Women's illiteracy rates are higher than men's in Sudan due to many factors, including child marriage. Women must obey their husbands, and get permission to seek employment and even go outside the house.

The high rate of poverty and illiteracy among women, the absence of gender-sensitive policies, in addition to the US sanctions, have contributed to depriving women of accessing online information and acquiring digital skills to be able to lead a life free of violence and where their human rights are met. They face persistent and systematic online targeting due to the poor digital rights policy and regulations. This research, the first of its kind in Sudan, attempts to examine and analyse women's online experiences and suggests how to remove the status quo so that they are able to enjoy their digital rights.

Contextual background

Sudan, since its independence from British colonisation in 1956, has struggled to achieve economic and political stability. Similar to other postcolonial African states, its political history has been caught in a vicious circle of short democratic rule, followed by long military regimes that have led to political instability, diffusion of armed conflicts across various regions, and economic failure.[1]

Primarily, conflict in Sudan is driven by a lack of access to resources among tribes in rural areas, who have experienced marginalisation by successive governments.

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1   Bertelsmann Stiftung's Transformation Index. (2022). *Sudan Country Report 2022*.
     https://bti-project.org/en/reports/country-report/SDN

In Darfur, armed movements emerged from certain tribes who have fought against the government since 2003, which resulted in displacement, ethnic cleansing and genocide.[2] In 2011, South Sudan split from Sudan because of a long, bloody civil war between the government and the rebel movement since 1983, when then Sudanese President Gaafar Nimeiry declared the country an Islamic state and revoked the right to autonomy of the majority Christian population. Following this, the southern Sudanese people voted to secede, with nationals casting votes from around the world.[3]

According to the World Bank:

> The split of South Sudan led to multiple economic shocks, including the loss of the oil revenue which accounted for more than half of Sudan's government revenue and 95% of its exports. This has reduced economic growth and resulted in double-digit consumer price inflation, which, together with increased fuel prices, triggered protests across the country in September 2013.[4]

For over two and a half decades, Sudan was ruled by the dictator Omar al-Bashir, who led a military coup in 1989. His regime encouraged allies and supporters to infiltrate sectors, including the telecom, civil service and General Intelligence Service (GIS) previously known as the National Security and Intelligence Service (NISS).[5] In addition, the army became politicised and subordinated to the regime, controlling the state economy.[6] However, in December 2018, demonstrations started in all cities around the country, resulting in al-Bashir's overthrow in April 2019.[7]

In August 2019, a transitional government was formed by Prime Minister Abdallah Hamdok with a new constitutional charter to achieve a certain mandate in three years. In 2020, the United Nations Security Council established the UN Integrated Transition Assistance Mission (UNITAMS), a nationwide mission tasked to support Sudan's political transition but with no mandate to provide physical protection. However, the military leaders of the transitional government carried out a coup, arrested civilian officials and dissolved the transitional government on 25 October 2021.

2   ReliefWeb. (2005, 19 January). Understanding Darfur Conflict.
     https://reliefweb.int/report/sudan/understanding-darfur-conflict

3   Concern Worldwide. (2022). *South Sudan's history at a glance.*
     https://www.concern.net/story/south-sudan-history-timeline

4   https://www.worldbank.org/en/country/sudan/overview

5   Mohammed, W. (2020). *COVID-19 exposes the damage of the ex-regime's empowerment policy on ICTs and the impact of US sanctions against Sudan.* African Declaration on Internet Rights and Freedoms Coalition.
     https://africaninternetrights.org/sites/default/files/Wala%20Mohammed.pdf

6   Ibid.

7   BBC. (2019, 15 April). Sudan coup: Why Omar al-Bashir was overthrown.
     https://www.bbc.com/news/world-africa-47852496

Following this, protesters took to the streets again, rejecting the coup. Security forces responded violently with lethal force, detaining them and political leaders, as well as cutting off the internet for almost three weeks.[8] At the time of preparing this report, conflicts erupted on 15 April 2023 between the Rapid Support Forces (RSF) and Sudanese Armed Forces across the majority of states, including the capital city Khartoum.[9]

It is in this politically volatile context that this research tries to understand and make sense of technological advancement in Sudan, with particular focus on access to the internet. It is also important to set this background so that we can understand the struggles of Sudanese women from an intersectional perspective, beyond an infrastructural one. We have to also keep in mind the social, political and cultural contexts that play a role in their access to the internet, freedom of expression, and active involvement in technology.

ICT infrastructure, policy and gender dynamics in Sudan

I. ICT infrastructure and policy

In August 2019, as part of the transitional government institutional reform, the Ministry of Information and Communications Technology was dissolved, exposing the regulatory body to political interference by the Sovereign Council which was ruled by General Abdel Fattah Al-Burhan. Some institutions that were working under the ministry were moved: the National Telecommunication and Post Regulatory Authority to work under the Sovereign Council, the National Information Centre under the Council of Ministers, and the Nile Center for Technology Research under the General Intelligence Service.[10] However, the ICT groups advocated forming a telecom ministry, which led to the establishment of the Ministry of Telecommunication and Digital Transformation in February 2021.[11]

Furthermore, in 2020, the chairman of the Sudanese Sovereign Council introduced an amendment to the Cybercrime Act, allowing security forces to track and file lawsuits against political activists, journalists and women's rights groups who oppose military rule. The lawsuit has sparked controversy over the nature of Sudan's current cybercrime law, and the potential abuse of the law to limit freedom of expression. The amended law was an extension to the 2018 law legislated during Bashir's rule in order to increase the penalties. Article 7 criminalises network shutdown if a citizen is responsible but does not mention what happens if the government cuts off network access.

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8   Human Rights Watch. (2022). *World Report 2022. Sudan: Events of 2021*.
    https://www.hrw.org/world-report/2022/country-chapters/sudan

9   ReliefWeb. (2023, 21 April). Sudan: Clashes between SAF & RSF - Flash Update No. 03.
    https://bit.ly/41Kpepe

10 Mohammed, W. (2020). Op. cit.

11 https://mcit.gov.eg/en/Media_Center/Press_Room/Press_Releases/63400

This law includes many articles that are against the global cybercrime standards and criminalises activists and journalists.[12] Article 19 of this law is considered a threat to women; it says anyone who "produces, shares or promotes content online that is a breach of modesty or public morals, will be detained for five years, or will be beaten, or will have both penalties; while anyone who saves content on their phone that is against public morals will be detained for six months, or beaten, or will have both penalties." This view of morality and public order will be examined in this paper.

II. Gender dynamics

Women in Sudan are still suffering despite the significant role they played in society and during the December revolution that brought down the Islamists' regime. Following the revolution, one of the issues raised by women is the need to abolish or amend the 1991 Muslim Personal Status Law, viewed as discriminatory. This law has victimised many women as they found themselves without protection from violence, and fighting legal battles for decades against an entire ideology that subjugates them; and from lawyers to judges who use this law to punish them for daring to demand justice. Article 40 of the law, for instance, states that girls as young as 10 years old can marry with the permission of a judge. Moreover, the oppression continues in the articles on obedience and divorce. Obedience, in this 1991 law, means everything from not being able to work or travel without a husband's permission. One of the problematic sections in the law is Article 119 (A), which states that children cannot travel without the consent of their guardians. Since men are considered the only guardians, in many cases, they kidnap children taking advantage of their position as guardians, and the mother is left without any recourse.[13]

During the revolution, women activists were targeted online to deter them from taking a political stance that could influence public opinion. Moreover, the Sudanese version of the #MeToo movement (#ExposeAHarasser campaign) sparked a wave of rage and attacks against the women who experienced sexual and GBV. Women have limited to no chances of protecting themselves in online spaces against stalking, harassment and hacking. The "out a harasser" hashtag started in 2019 when a women's rights activist shared a story using it to encourage others to share their stories and shame harassers who often feel protected. She identified a young politician as a sexual harasser and shared her own experience with him. She took her complaint to his political party and was told they would only take action once the court takes action on the case, which was unfortunate because women rarely get justice in the courthouse in Sudan.[14]

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12   Hammad, K. (2021, 4 March). Sudan's revised cybercrime law falls short on its promise. *Global Voices.* https://advox.globalvoices.org/2021/03/04/sudans-revised-cybercrime-law-falls-short-on-its-promise/

13   Abbas, R. (2020, 14 April). The Year We Change Sudan's Personal Status Act. *African Feminism.* https://africanfeminism.com/the-year-we-change-sudans-personal-status-act/

14   Abbas, R. (2020). *Sudan's Me Too moment needs its own revolution.* CMI. https://www.cmi.no/publications/7390-sudans-me-too-moment-needs-its-own-revolution

While the digitalisation of the world represents a significant opportunity, it is also a space through which harm may be perpetrated. Previous research indicates that at least 38% of women globally have experienced online violence and this rate is rising.[15] Certain groups of women are at a higher risk because of what they do, who they are, or if they access certain information and services. This includes women journalists, politicians, activists, feminists, academics and young people.[16]

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15   UN Women (2022). *Accelerating efforts to tackle online and technology-facilitated violence against women and girls.* https://www.unwomen.org/sites/default/files/2022-10/Accelerating-efforts-to-tackle-online-and-technology-facilitated-violence-against-women-and-girls-en_0.pdf

16   https://www.amnesty.org/en/latest/news/2018/03/online-violence-against-women-chapter-1/

3.

Research purpose:

Background on the study, research problem and key research question

In Sudan, the poverty rate is rapidly rising and is fuelled by political tension, inflation and unemployment, particularly among women and young people. The political and economic situations are forcing women into vulnerable circumstances both online and offline. The country's legal framework has no law to criminalise domestic violence, GBV or OBGV. During the revolution in 2019, women activists were targeted online to deter them from having a political stance that could influence public opinion. Women have limited to no chances of protecting themselves in online spaces against stalking, harassment and hacking, and this can force them out of social media.

ICT infrastructure is significantly poor in rural areas, depriving women of accessing the internet in different geographical locations across Sudan. Additionally, all regulations and laws related to ICT are not gender-sensitive and contribute to the exclusion of women from getting easy access to the internet. The poor digital rights in Sudan, digital marginalisation of women and their systematic targeting in online spaces have led this research to examine and analyse the barriers women face in accessing and making beneficial use of the internet. We also examine how to alter this situation so that women are able to enjoy digital rights in Sudan.

Main research question

What are the challenges that hinder women in Sudan from enjoying their digital rights and having safe online spaces?

Sub-questions

- Why do women in Sudan have significantly limited access to the internet?

- How does the lack of access to digital rights in Sudan influence the lives of women and their presence in online spaces?

- How are women experiencing OGBV in Sudan?

- How to increase women's safe access in Sudan?

4.
Literature review

Attention to bridging the gender digital divide has recently increased worldwide, with the focus on connecting the unconnected in the global South. Sudan is not excluded from this conundrum, considering the country has been convulsed by prolonged internal conflicts and international isolation. This literature review will discuss the barriers facing women to accessing and profiting from internet use. Additionally, it will also explore OGBV, which poses threats to their online experiences and participation due to the absence of protective laws and regulations.

Meaningful access to the internet

Research on gender digital divide does not have to entirely depend on statistics and percentages, as there are different methodologies and approaches behind these numbers, which sometimes they do not tell the entire story. However, according to a survey conducted by Afrobarometer in 2021, women in Sudan are 9% less likely to own a mobile phone than men, and 5% less likely to use the internet regularly.[17] Meanwhile, the Digital 2021 report indicated that mobile internet penetration remains low, with 30.9% of the population – representing 13.38 million people – using the internet as of January 2021, a 2.4% increase from 2020.[18] The Freedom House report in 2021 says that these figures may be inflated by individuals who have multiple SIM cards.[19]

Internet access comes with many barriers for women in Sudan, from owning phones, registering a SIM card, and getting the digital skills to use the device. In 2021, GSMA conducted a Digital Identity Mobile Network Operator Survey in which various mobile network operators participated from different countries, including Sudan. The survey revealed that as an ID is a prerequisite to owning a SIM card, not having one is a barrier to accessing mobile services in one's own name.

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17   https://www.afrobarometer.org/wp-content/uploads/2022/02/sudan-sdg_scorecard-afrobarometer-7july21_1.pdf

18   Kemp, S. (2021, 12 February). Digital 2021: Sudan. *DataReportal.*
       https://datareportal.com/reports/digital-2021-sudan

19   Freedom House. (2022). *Freedom on the Net 2021.*
       https://freedomhouse.org/country/sudan/freedom-net/2021#A

And for women, there are also other barriers; for example, when they use a SIM card registered in the name of a family member or friend instead. In more conservative settings, husbands and other family members often influence what women are permitted to do and possess.[20]

Impact of US sanctions on women's digital rights

Although Sudan was under UN/EU sanctions, it had not affected the population in the way the US sanctions did. The European Union first adopted an arms embargo with respect to Sudan by way of a council decision in 1994. These were travel ban, assets freeze and an arms embargo.[21] The United Nations Security Council (UNSC) first imposed an arms embargo on all non-governmental entities and individuals operating in Darfur on 30 July 2004. The sanctions regime was modified and strengthened with the adoption of Resolution 1591 (2005), which expanded the scope of the arms embargo and imposed additional measures, including travel ban and assets freeze on individuals designated by the UNSC.[22]

However, Sudan has been isolated from the international community from 1993, ever since the United States designated it as a state sponsor of terrorism.[23] In 1997, the US issued an executive order to impose comprehensive economic sanctions against the Sudanese government support for international terrorism, ongoing destabilisation of neighbouring countries and the prevalence of human rights violations.[24]

Economic and trade sanctions enacted by one government against another often have detrimental effects on the free flow of digital communications and communications technologies that activists, innovators and ordinary users of technologies desperately need.[25] Sudan compares to Iran when it comes to sanctions' impact on women; it has affected the women's rights defenders' movement, and their opportunities to access funding to mobilise and participate in international events with their foreign counterparts. International groups tend not to fund and support the participation of activists from sanctioned countries in their events. Many also believe that this kind of support would run contrary to US sanctions policies.[26]

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20   GSMA. (2021). *Access to Mobile Services and Proof of Identity 2021.*
     https://www.gsma.com/mobilefordevelopment/resources/access-to-mobile-services-and-proof-of-identity-2021

21   https://www.legislation.gov.uk/uksi/2020/753/pdfs/uksiem_20200753_en.pdf

22   https://www.skuld.com/topics/legal/sanctions/sudan/insight-sudan-sanctions

23   https://www.govinfo.gov/content/pkg/CDOC-116hdoc161/pdf/CDOC-116hdoc161.pdf

24   https://www.govinfo.gov/content/pkg/CFR-2011-title31-vol3/pdf/CFR-2011-title31-vol3-part538.pdf

25   https://www.eff.org/issues/export-controls

26   Tahmasebi, S. (2018, 10 August). How US Sanctions Impede the Women's Movement in Iran. *Atlantic Council.*
     https://www.atlanticcouncil.org/blogs/iransource/how-us-sanctions-impede-the-women-s-movement-in-iran/

Sanctions can deteriorate economic conditions and affect the most vulnerable groups, including women and children. These groups require the priorities of the women's movement to shift in favour of serving those most in need. For a sector that does not have financial support from the government or the private sector, it places a big burden on women's rights defenders. Furthermore, this will require the sector to shift its priorities, to address basic and fundamental needs, rather than focus on the more progressive issues for the promotion of women's digital rights.[27] In this increasingly digital age, the US sanctions restrict people's ability to access digital platforms and resources, which have become even more crucial tools for international cooperation, communication and knowledge exchange.[28]

Online gender-based violence (OGBV)

OGBV is a relatively new phenomenon that has been increasing world over. It is an extension of the violence experienced by women in offline spaces, including both private and public spheres. The United Nations Special Rapporteur on violence against women, its causes and consequences defines online violence against women and girls as:

> [A]ny act of gender-based violence against women that is committed, assisted or aggravated in part or fully by the use of ICT, such as mobile phones and smartphones, the Internet, social media platforms or email, against a woman because she is a woman, or affects women disproportionately.[29]

There is a dearth of information regarding OGBV in Sudan; while on the other hand, the types and patterns of GBV in the offline realm have been discussed, explored and advocated against by the women's movement in the country. According to a recent and first nationwide qualitative study by the United Nations Population Fund (UNFPA) and the Combating Violence against Women Unit of the Ministry of Social Development in Sudan, domestic violence against women and girls is widespread, accepted and justified by communities. Women and girls (single ones in particular) are often subject to physical abuse when they violate the extreme restriction of movement imposed on them by their male relatives (mainly brothers and husbands).[30] The study's respondents also reported domestic sexual violence (marital rape in particular) and rape and sexual assault in the public sphere, which is often perpetrated against women working in the informal sector of the economy such as street vending and domestic work, as well as internally displaced women and women with disabilities, especially those with mental disabilities.

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27   Ibid.

28   Oxfam. (2021). Right to Live Without a Blockade: The impact of US sanctions on the Cuban population and women's lives. https://bit.ly/41Qz4pL

29   Simonovic, D. (2018). *Report of the Special Rapporteur on violence against women, its causes and consequences on online violence against women and girls from a human rights perspective.* https://digitallibrary.un.org/record/1641160?ln=en

30   Ibid.

Social stigma prevents victims from reporting incidents of rape or sexual assault; the community puts the blame on survivors and their family for such incidents, and in some cases, survivors are forced to get married.[31] The study also revealed that verbal and psychological violence is used against women and girls to force them to adhere to social and gender norms. Furthermore, economic violence and denial of education are common and most girls are taken out of school at puberty. This is tightly linked to child marriage. Women's access to resources is severely restricted, with financial resources being controlled by men (whether earned by men or women).[32]

Women's experiences with GBV are not homogeneous. In order to examine these different experiences, one must apply an intersectional lens to understand the multifaceted nature of discrimination and violence. Intersectionality analyses the interplay of gender, class, ethnicity, age, ability, religion and sexuality that "shapes complex social inequalities."[33] Therefore, while women may be subject to discrimination based on their gender, other identity characteristics play a significant role in aggravating discrimination such as race and socioeconomic class. Accordingly, all women do not experience violence the same way; their multiple layers of identity dictate their level of vulnerability to discrimination and violence as well as their access to remedies. Having said that, in Sudan, women human rights defenders, as well as women lawyers and journalists, have been experiencing an increased level of violence since the military coup that took place in October 2021.[34] The violence involves beating, smear campaigns, false legal accusations in the context of the ongoing resistance movement in the country and women's participation in public life in general.[35]

Research conducted in 31 countries around the world, including Sudan, revealed that 50% of the 14,071 girls and young women who participated in the study stated that they have experienced some level of violence in online spaces.[36] However, the study did not delve into the experiences of girls with OGBV in Sudan in particular. Our study is aimed at bringing to light the issue of OGBV in Sudan, exploring its types and patterns and the stories of Sudanese women's experiences with it.

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31 Ibid.

32 Ibid.

33 Collins, P. H. (2015, 23 March). *Intersectionality's Definitional Dilemmas. Annual Review of Sociology, 41*, 1-20. https://doi.org/10.1146/annurev-soc-073014-112142

34 International Service for Human Rights. (2022, 29 November). Sudan, Stop escalation of violence against women - protect them! https://ishr.ch/latest-updates/sudan-stop-escalation-of-violence-against-women

35 Ibid.

36 Goulds, S., Gauer, M., Corr, A., & Gallinetti, J. (2020). *State of the World's Girls 2020: Free to be Online?* Plan International. https://plan-international.org/publications/free-to-be-online

5.
Methodology

This research takes a participatory and intersectional approach to explore women's barriers to digital accessibility and usage in Sudan. Using the feminist theory of intersectionality, the research collected and analysed data to examine how the intersection of gender, ethnicity, socio-economic class, religion, age, disability and rural/urban location shapes the experiences of women with OGBV, their marginalisation as well as their level of access to the internet in Sudan. Our study followed a contributory approach, in which the main researchers were responsible for the project design, data analysis and report writing, where research assistants and transcription assistants from local communities were involved mainly to conduct and facilitate the focus group discussions (FGDs).

The research is grounded in the commitment to do no harm and follows transparent processes to ensure ethical engagement with participants. It analyses the diversity of women's experiences, explores the gendered manifestation of power in the technology era, questions the operation of gender norms and the root causes of women's digital illiteracy. This research adopts qualitative methods for data collection and analysis. The data collection methods are as follows:

Focus group discussions (FGDs) with women

Four FGDs[37] were conducted, each with 10 to18 participants, one in each of the states of Khartoum, North Darfur, South Kordofan and Port Sudan. Due to the limited resources available, these four states were selected to represent four regions in Sudan. This is also why in some large and highly diverse regions like Darfur, the number of participants was higher in order to have different voices heard. However, it was observed that some women were more outspoken than others and some uncomfortable to speak about such topics. Khartoum represents the central region, North Darfur the Darfur region, South Kordofan the Kordofan region and Port Sudan the Eastern region. In total, 60 women took part in the FGDs.

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[37]   The questions were developed based on the Worldwide Web Foundation's report, *Advancing Women's Rights Online: Gaps and Opportunities in Policy and Research*, and were conducted in Arabic.
http://webfoundation.org/docs/2018/08/Advancing-Womens-Rights-Online_Gaps-and-Opportunities-in-Policy-and-Research.pdf

The sampling criteria for selecting the participants were based on age, socioeconomic class, profession, level of education, ethnic group, religion, disability and geographical location to explore the different experiences of women. Based on these criteria, those who took part in the FGDs also included women from minority ethnic groups such as Nuba and Fur. Also included were university students, street vendors, housewives, political/women activists, teachers, journalists and civil servants of different ages (between 19 and 60 years old). Some were women with disabilities. Women from the heart of the previously mentioned cities were present, along with others from the outskirts of these cities.

Research assistants were selected from targeted communities based on previous experience in researching on women's rights. Three research assistants and four transcription assistants were trained on the research tools as well as on confidentiality and to abide by do-no-harm principles. Each FGD involved one research assistant to facilitate the discussion, while transcription assistants were responsible for taking notes of the session. To keep the discussions confidential, research assistants requested participants not to disclose names or identifiable characteristics in their answers, and informed participants of the use of their answers. As the topics of digital rights and OGBV were new to both the research assistants and participants, examples of both topics came with the questions, and were discussed and explained to the research assistants as part of the training.

Key informant interviews

Indeed, interviews were conducted with five key informants who were selected from the researchers' network, based on the gaps of information identified following the FGDs. The five women interviewed comprised two managers in mobile network companies, a lawyer, an expat IT expert working in the US, and a woman activist who experienced OGBV. The women in the technology sector helped in explaining the impact of sanctions on the ICT infrastructure in Sudan. The interview with the lawyer focused on understanding the cybercrime law and the barriers faced by victims in seeking justice. Lastly, the woman activist talked about her experience with OGBV and her observations and opinions regarding such violence against women in social media.

Desk review of secondary data sources

We conducted a desk review of secondary data sources and available literature on GBV in Sudan. It prioritised sources published after 2018, due to the profound changes that have occurred in Sudan since the revolution. Secondary data was also considered to examine the impact of US sanctions and government policies on the gender digital divide.

This research analysed the impact of the gender digital divide on the ability of women to utilise digital platforms to promote their socioeconomic status. In addition, it analysed their experiences with OGBV and its relation to national legislation.

Data analysis

The input was studied using a mix of thematic and discourse analyses, where patterns were drawn from the data collected in light of the complex political, economic and social contexts in Sudan. Here, gender inequality, economic deterioration and political unrest are a lived reality, and these methods have proven to be particularly effective in examining how women experience and navigate these dynamics and how they impact their positions when it comes to internet accessibility and vulnerability to OGBV. Thematic analysis, for instance, allowed the researchers to identify and analyse patterns of meaning in the data, while discourse analysis helped examine the social and linguistic practices that shape these patterns. Together, these methods provided a comprehensive understanding of women's different experiences in Sudan and the ways in which they are affected by broader political and economic conditions.

Limitations

Field work: The distribution of FGDs covered only four states due to the limited resources and the time frame of the project. However, sampling was adjusted based on existing and emerging circumstances; some localities with high numbers of women in need remained inaccessible due to outbreaks of dengue fever at the time of data collection, armed conflict in the Blue Nile State, and inaccessibility of non-government-controlled areas. Because the FGDs were conducted before the current, ongoing war, the findings do not reflect exacerbated challenges women are facing to access their digital rights today.

Inability of researchers to participate directly in the qualitative fieldwork: Researchers faced challenges to physically access South Kordofan and Port Sudan as usually such visits are accompanied by the risk of exposure by the government, represented by the Humanitarian Aid Commission or the General Intelligence Service on the ground. FGDs require approval from these authorities who could not only interfere with the prepared questions but also even attend these discussions, affecting women's participation and freedom to share their stories.

Lack of awareness about research topic: Let alone OBV, even GBV is underreported and rarely discussed openly. Many GBV issues in Sudan are normalised, such as female genital mutilation (FGM), domestic violence and marital rape. Therefore FGDs that address OGBV may not bring to light many cases or underlying issues. So it was difficult to find survivors of OGBV who were able to raise a legal case; this is because many women are unaware

of the topic and cybercrime law, not encouraged to seek justice due to fear of stigma, potential financial burden, or the fear of not getting justice at all. Similarly, women were reluctant to talk about their personal experience with both GBV and OGBV fearing social stigma and shame even among women, or fearing that their families might know about it. It was observed that the participants were more open to discussing incidents in the comfort zone of their own surroundings. Even though some did share personal stories, the researchers believe that only part of their stories emerged. Reporting and tracking OGBV has many challenges such as safety and protection upon disclosure, capacity to collect and analyse data, identify and account for bias in data sources, etc. Although the literature review has discussed the impact of sanctions on women, it had limitations in terms of the discussion about the impact of sanctions on women's digital rights. Findings in this report and of the frequency analysis must be read keeping this in mind. FGD facilitators were trained on the questions, but they have limited technical knowledge on the research topics and participants.

6.
Research findings and discussion

Barriers to women's access to the internet and ownership of an internet-connected device

The issue of accessibility is significantly interlinked with how women are positioned within the Sudanese society. Women are considered third-class citizens in Sudan, where gender inequality is entrenched in the economic, political and legal systems.[38] The core of these systems is the discriminatory Islamic interpretation which confines women to the private sphere and puts restrictions on their lives.[39] This research frames the issue of accessibility to the internet at the centre of these discriminatory and patriarchal structures. The broad barrier to women's accessibility is power dynamic, gender roles and violence. This violence is not only limited to physical violence – which is indeed integral to this broad barrier – but also the economic violence against women and the impact of the US sanctions as a form of violence to women's access to the internet and to information as well.

I.   Silenced by society - the struggle of women to access technology

The FGDs showed that the reproductive role of women in urban and rural areas limits the time they have to access and use the internet. One participant shared that she only uses the internet once a week as she is often busy with her "full-time job and domestic work". The majority of the women participating in the FGDs stated that men in their community use the internet more often than women due to different reasons, one of which is they have less responsibility towards the household, hence more time to go online for leisure or other purposes.

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38   Strategic Initiative for Women in the Horn of Africa Network. (2015, 1 March). Third class citizens: Women and citizenship in Sudan.
      https://bit.ly/3nYuR4E

39   Ibid.

Some participants cited women's lack of knowledge about internet usage and the stereotypical perceptions even among their own in the community as shaping their interest to access the internet.

The high cost of smartphones and internet packages also affected women's access to the internet. The initial investment in a device is a financial burden for many people so, to deal with this, students in a college in Khartoum established a credit association through which they saved money to buy a mobile phone for each member in turn.[40] The FGD participants agreed that only women with high-paying professions could afford to buy smartphones and internet packages. A majority of women with low income said that their income is "often spent on house needs, while men have the luxury to use their income to buy smartphones and internet packages." Additionally, FGD participants from Khartoum slums stated that "poverty and risk of devices' robbery" affected their ownership of smartphones. Poverty in Sudan continues to rise with a rising unemployed population, particularly among women and young people. Some 60% of the population are below the age of 25 and are less likely to find employment opportunities, compared to older age groups, due to the shrinking economic activity.[41] Males, irrespective of their age, geographic location, or education level, have better employment opportunities than females. In 2021, Sudan was placed at the bottom of the Global Women, Business and the Law index, as it showed that Sudanese women have fewer legal rights than men.[42] In 2019, the female labour force represented 30.6% of Sudan's total labour force.[43] The 1997 Labour Code included protections and restrictions to the detriment of women's equal participation in the workforce. For example, the Labour Code limits the hours and occupations in which women may work. Land and property rights are governed by both the Statutory Legal System and the Customary System. Women's access to land titles and inheritance of land is restricted in both. Family roles are defined in the 1991 Muslim Personal Status Law. Most employed women (60%) are in the agriculture sector, with the great majority of women in rural areas (80%) working in agriculture.[44]

The predominant culture of men's control over women's access to the internet was reported across the four regions of Sudan during our research. A majority of the participants pointed out that women of different ages, social classes, ethnicities, marital status and locations (urban and rural) are challenged by men's control over their lives, including access to and use of the internet. It was mentioned that their fathers, brothers and husbands control how they use the internet due to social norms.

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40   Brinkman, I., Bruijn. M, & Bilal. H. (2007). *The mobile phone, 'modernity' and change in Khartoum, Sudan.* https://bit.ly/3KX3e59

41   Ndip, A. E., Lundwall, J., Osman, E., & Wistrand, J. (2021, 17 August). Sudan's women and youth are severely economically deprived: A study on Sudanese market trends. *World Bank.* https://blogs.worldbank.org/africacan/sudans-women-and-youth-are-severely-economically-deprived-study-sudanese-market-trends

42   Ibid.

43   Bertelsmann Stiftung's Transformation Index. (2022). Op. cit.

44   https://wbl.worldbank.org/en/wbl

For instance, in some rural areas in Khartoum, South Kordofan and North Darfur, it was reported that women were prevented from having a smartphone or accessing the internet because men believe internet usage negatively changes the behaviour and attitude of women and girls in a way that does not conform to the community culture. A first-of-its-kind qualitative study on GBV across Sudan in 2020 showed that domestic violence against women, physical violence in particular, is "very common" in Sudan.[45] The study also revealed that women and girls do not have autonomy and need their guardians' approval to leave their homes.[46] Participants also shared stories of the consequences women face as a result of using the internet. These mostly involve domestic violence and, in some cases, killing of women. Tellingly, during the FGDs, most of the women were reluctant to share their own stories, preferring to cite the experiences of women who were either close to them, others in their community, or well-publicised incidents. In Kadugli, one participant mentioned "an accident happened to me before I enrolled at the university; I was beaten by my brother because I had a GSM phone."[47] She added, "There was no internet available at that time, and until today the beating scar remains on my face near my eye." In North Darfur, participants shared a story of two girls killed by their brothers and cousins because they were found to possess a smartphone without the family's knowledge. The killings took place in a public square to terrorise other women and girls. The Ministry of Social Affairs submitted a recommendation to the state government to direct the prosecution not to allow civil settlements regarding the murders to prevent the perpetrators from escaping due punishment. There have been many cases were reported in the Darfur region of girls killed by their family members merely because they used the internet or owned a mobile device without their family's consent.[48]

The FGDs showed that married women who have access to the internet are often supervised by their husbands, which has resulted in divorce, and beatings and other types of abuse. In one case in Darfur, a man divorced and then burned his ex-wife to death because she was using the internet without his knowledge. A married woman from the participants said, "I have to hide from my husband while using the internet and he doesn't allow me to block my phone with a security pattern or a fingerprint so he can check it regularly." Women from Khartoum and Kadugli shared other stories of killings related to women's and girls' use of the internet. There is a common pattern of violence against women related to their digital access in the four locations South Kordofan, North Darfur, Port Sudan and Khartoum in that it is perpetrated mostly by male family members.

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45   UNFPA Sudan. (2021). Voices from Sudan 2020: *A qualitative assessment of gender-based violence in Sudan.*
     https://sudan.unfpa.org/en/publications/voices-sudan-2020-qualitative-assessment-gender-based-violence-sudan

46   Ibid.

47   A device used for making and receiving phone calls only.

48   Darfur 24. (2022, 22 October). A girl killed in Darfur for talking on the phone with a stranger.
     https://www.darfur24.com/en/2022/10/22/a-girl-killed-in-darfur-for-talking-on-the-phone-with-a-stranger

There is a widespread perception among these communities that women's access to the internet will only bring shame and dishonour to the family, which for them justifies restricting women from accessing the internet or bearing the consequences for their lack of conformity. According to one participant, "the majority of such violent crimes are concealed and the victims are silenced for the fear of shame among the community."

II. The impact of political instability and government regulations on women's access to the internet

Since 2017, mobile service providers have been forced to mandatorily register SIM cards to keep a complete record of their customers' data, as per Article 9 of the NTC's General Regulations 2012.[49] Throughout its history, ruling regimes used to systematically deny women their equal citizenship rights by enforcing laws and policies that undermine their rights and entitlements of citizenship in Sudan. Sudan has committed to several international and regional human rights obligations. It has ratified the International Convention on Civil and Political Rights, International Convention on Economic, Social, and Cultural Rights, and has regionally committed to the African Union Charter on Human and People's Rights and the protocol on the Prevention and Suppression of Violence against Women and Children. However, the country has not taken practical steps to implement these legal instruments to ensure equal citizenship and protection of the rights of women and girls in the country.

The 1994 Nationality law was amended in 2005 to allow a child born to a Sudanese mother to acquire nationality by following an application process. Article 4 of the Act states that a person is entitled to acquire Sudanese nationality if s/he has a Sudanese father, but when it comes to the mother, a clause provides that the person acquire it "whenever s/he applies for it." The mention of "application" here stands with no clear procedures, and it is unclear why citizenship is not also automatic with a Sudanese mother. This restriction can be taken as evidence that despite the considerable progress in amending the law in favour of women's citizenship rights, the status quo of gender and racial discrimination in the mind of legislators and law enforcers still exists. People born outside Khartoum generally face greater difficulties in obtaining nationality documents. As a result, large numbers living in the marginalised and peripheral areas have no nationality documents or access to such papers.[50] This is particularly of concern for internally displaced (IDP) women, especially in Western Sudan who cannot obtain a SIM card because they do not have identification papers.

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49   Freedom House. (2022). Op. cit.

50   Strategic Initiative for Women in the Horn of Africa Network. (2015, 1 March). Op. cit.

The GSM Association (GSMA), an organisation that works for advancing the interests of mobile network operators globally, along with the Norwegian Refugee Council in Sudan, conducted a research and shared the findings on the barriers to access and use of mobile technology among communities affected by displacement in West Darfur and the White Nile States in Sudan.[51] In West Darfur, the research found that women, including both the internally displaced and women from the hosting community, were 11% less likely to own a phone, and 57% less likely to own a smartphone than men. Out of 1,547 surveyed, 73% of the survey respondents stated that they could not afford a mobile phone, 12% did not have network coverage, and 12% depended on a household member or a friend for SIM card registration.[52] While in White Nile, out of 1,662 survey participants, women from the hosting community were 38% less likely to own a phone, 67% less likely to own a smartphone, and 3.2 times more likely to rely on borrowing someone else's phone.[53] Some 19% stated they do not have network coverage in their areas, 81% were refugees, while 70% of the hosting community members said they could not afford to buy a phone. About 10% of hosting community members and 17% of refugees did not have ID documents for SIM card registration. The results showed that host community members in White Nile rely on other household members to register their SIM cards while refugees rely more on agents or merchants, who may not always be formal agents of the mobile network operators (MNO) but likely have bulk-registered SIM cards.[54] In an interview on the impact of these regulations on women who do not have ID documents, one of the key informants working as an MNO manager mentioned that "the only workaround that is possible is that an individual can register up to 10 SIM cards under his/her name." However, this might not be a concrete solution as men or individuals within the community with ID documents might refuse to buy SIM cards for women as they control women's lives. Thus, it is critically important to address this dilemma, where women can freely access SIM cards and online services. Currently, the MNO must work to facilitate the process of SIM card registration and accept any form of ID, as many people have fled their homes and lost their original ID documents.

Furthermore, the political instability and previous conflicts have led successive governments to shut down the internet across different regions and localities and at different events in Sudan. Internet shutdown has affected women differently in various locations, whether in rural or urban settings. Participants mentioned missing job opportunities that could have increased their income, completed online degrees, as well as communicated with relatives abroad who in some cases are the family providers. Shutdowns have also affected people's access to information about protests and their ability to mobilise protests as well. A participant responsible for one of the global disability unions used to conduct all her work online said following the internet shutdown,

51   GSMA. (2022). *Digital Access and Barriers in Displacement-Affected Communities in Sudan (White Nile & West Darfur)*. https://bit.ly/43vej4C

52   Ibid.

53   Ibid.

54   Ibid.

"I was not able to do my work online, which resulted in giving the position to someone else in another country." Another woman said, "I depend on the internet to market and sell products; therefore, the internet shutdown led to losing my livelihood opportunities."

In Kadugli, participants pointed out that the state government shuts down the internet across the 17 localities in South Kordofan on a regular basis due to the ongoing intercommunal conflicts and political instability (clashes between armed movements and government). However, one mentioned that the internet is not a priority in their life and the network being not always available due to the security situation, they do not depend on it. Other participants have had similar reflections and perspectives. Another participant (a woman with a disability) stated that she was not able to communicate with one of her close relatives who lives abroad and who is her main financial provider.

Most of the participants mentioned they accessed the internet on their smartphones, while very few of them have Wi-Fi in their offices and homes. The lack of mobile network coverage and electricity has also affected citizens' access to the internet, but the impact was higher on women. The participants talked about the inconsistent availability of network coverage in some areas and the necessity of often availing themselves of more than one SIM card because of patchy network coverage. One participant from Khartoum, who regularly visits rural areas for work, said:

> In rural areas, I had to keep looking for a location where I can access the internet. Meanwhile, women living in rural areas do not usually have the chance to go outside their homes to connect to the internet due to the lack of time and permission to do so.

In Blue Nile State, an FGD participant said:

> Damazin is the only city where I have an internet connection; whenever I move to other localities, I lose connection. In the northern side of the country, the three MNOs have very poor internet connectivity. You need to keep moving from one location to another searching for a spot to access the internet, which is easier for men to do so. Men are driving, while women are not, and men can go to locations that are forbidden for women.

Women lack the freedom of mobility, and their economic situation has affected their access to the internet.

The MNO manager, a key informant interviewed, also added that the economic and political instability in the country affects the provision of services:

> The telecom authority sometimes orders companies to shut down certain towers for national security reasons. The budget set for expanding the towers was

reallocated to provide power and security for equipment in conflict zones, 15% of the budget was allocated for safety instead of 3%. After the coup, the company HQ decreased the investment in Sudan in terms of expansion and quality of services. The overall issue of power infrastructure affects operations, hence the increase in prices of services will continue so the companies can manage their operations. Complications increased because of the coup and the overall instability. When telecom companies face safety issues in some places, they pay the military and police to enter insecure locations so they can maintain towers and ensure access to telecom services in conflict zones.

At the time of submitting this research report, on the 15 April 2023, a war erupted in Sudan, killed and injured thousands of citizens and exposed others to forced displacement.[55] Hundreds of thousands of people have fled to find safer places inside and outside Sudan, whereas millions are still trapped inside their homes due to heavy weaponry, shelling and air strikes.[56] The war is between the Sudanese Army Forces (SAF) led by General Abdel Fattah Al-Burhan, which is the main country's military forces, and the RSF, led by the former warlord General Mohamed Hamdan Dagalo, known as Hemedti.[57] The two generals cooperated to oust Bashir in 2019, during the Sudanese uprising.[58] Following this, a peaceful sit-in by people in front of the army headquarters in Khartoum was dispersed by government forces who ended up killing and injuring hundreds of protestors and raping women.[59] Those two leaders staged the military coup that took place in October 2021, overthrowing the transitional government and putting to an end the power-sharing agreement signed between the military and civilians in 2019.[60] Then tension between the SAF and RSF leaders started to exacerbate, as the RSF's Hemedti started to plan for a new transition that brought tensions with Al-Burhan to the surface.[61]

The RSF is separate from the Sudan's regular military and has been competing for power and resources for years, and its Janjaweed militias trace their roots to armed nomadic groups in western Sudan.[62] The RSF evolved over more than four decades from one of

55   ReliefWeb. (2023, 14 May). Sudan: Clashes between SAF and RSF - Flash Update No. 12.
      https://reliefweb.int/report/sudan/sudan-clashes-between-saf-and-rsf-flash-update-no-12-14-may-2023-enar

56   United Nations. (2023, 28 April). Sudan: Plight of civilians amid hostilities.
      https://www.ohchr.org/en/press-briefing-notes/2023/04/sudan-plight-civilians-amid-hostilities

57   Copnall, J. (2023, 17 April). Sudan crisis: Burhan and Hemedti - the two generals at the heart of the conflict. *BBC*.
      https://www.bbc.com/news/world-africa-65297714

58   Ibid.

59   Human Rights Watch. (2019,17 November). "They Were Shouting 'Kill Them".
      https://www.hrw.org/report/2019/11/18/they-were-shouting-kill-them/sudans-violent-crackdown-protesters-khartoum

60   Salih, Z. M., & Beaumont, P. (2021, 25 October), Sudan's army seizes power in coup and detains prime minister.
      The Guardian.
      https://www.theguardian.com/world/2021/oct/25/sudan-coup-fears-amid-claims-military-have-arrested-senior-government-officials

61   Fulton. A, & Holmes. O. (2023, 27 April). Sudan conflict: why is there fighting and what is at stake in the region?
      The Guardian.
      https://www.theguardian.com/world/2023/apr/27/sudan-conflict-why-is-there-fighting-what-is-at-stake

62   Barber, H. (2023, 15 April). 'Men with no mercy': The vicious history of Sudan's Rapid Support Forces. *The Telegraph*.
      https://www.telegraph.co.uk/global-health/terror-and-security/sudan-unrest-militia-rapid-support-forces-janjaweed/

the most notorious militias in Africa: the Janjaweed. The Janjaweed were accused of conducting ethnic cleansing of the Fur, Masalit and Zaghawa people in western Sudan.[63] Former president Omar al-Bashir organised the Janjaweed into the Rapid Support Forces as a separate unit in 2013, initially to fight rebels in the Nuba Mountains.[64] RSF uses one of the most sophisticated spyware in the world.[65] It was revealed on 30 November 2022 by Haaretz and The LightHouse Report that Israeli surveillance technology was exported to Sudan between April and August 2022 via an undeclared Cessna jet flying from the EU to Sudan, through which Sudan's junta received high-tech surveillance equipment illegally.[66]

Due to the ongoing war, the human rights situation in Sudan continues to deteriorate, while women are paying the higher price. Rape cases have been reported, and confirmed by Suliema Ishaq, the director of the unit combating violence against women at the Ministry of Social Affairs in Sudan. "I believe that the cases are way more than reported, but because of what has been going on, not all the victims can reach us and get the support needed," she said.[67] Most of the women confirmed that they were raped by RSF members.[68] Based on observations on social media, psychological support to rape victims is offered online, including information about access to rape medical treatment protocols. Yet, due to the barrier that women face in owning mobile devices, and access the internet, chances are that the victims might not have access to psychological support or medical treatment at all.

In a statement, the Sudanese Doctors Trade Union (SDTU) said it would "remain committed to the values and traditions of the medical profession, and the protocols to be followed in situations of armed conflict, to continue to provide health and treatment services amidst a semi-complete collapse of the health sector, which has become a battlefield."[69] This has left hundreds of thousands of pregnant women without a place to access reproductive health services, according to UNFPA, the United Nations' sexual and reproductive health agency.[70] The few functioning hospitals are understaffed, under-resourced, and, sometimes, under attack. This is when the healthcare providers have taken to social media platforms, particularly Facebook and Twitter, to coordinate.[71]

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63   Ibid.

64   Ibid.

65   SMEX. (2022, 21 December). Sudan: "Men With No Mercy" Now Armed With EU-Linked Spyware. https://smex.org/sudan-men-with-no-mercy-now-armed-with-eu-linked-spyware

66   Ibid.

67   Salih, Z. M. (2023, 16 May). Sudan: Reports of women being raped in Khartoum by armed men. *The Guardian*. https://www.theguardian.com/global-development/2023/may/16/sudan-reports-of-women-being-raped-in-khartoum-by-armed-men

68   Ibid.

69   Ndebele, L. (2023, 11 May). Sudan conflict: Doctors, children and pregnant women bear brunt of violence between warring factions. *News24*. https://www.news24.com/news24/africa/news/sudan-conflict-doctors-children-and-pregnant-women-bear-brunt-of-violence-between-warring-factions-20230511

70   https://www.unfpa.org/sites/default/files/resource-pdf/UNFPA%20-%20Sudan%20Emergency%20Situation%20Report%20No.1.pdf

71   Ibid.

However, due to the ongoing conflict, internet blackout has been witnessed in different localities across Sudan, due to the war affecting power infrastructure. According to NetBlocks, on 30 April 2023, shortage of electricity caused a brief collapse in connectivity for MTN, one of the main telecom companies operating in Sudan. On 5 May, MTN Sudan announced that all its systems were down due to power outages and difficulties in transporting fuel for generators.[72] On 23 April, the SAF announced that the RSF had occupied Sudatel Center, the oldest telecom exchange building in Sudan housing the data centres of the government-owned Sudatel (Sudani). This resulted in the company's telecom and internet services going down, isolating its users from the rest of the world.[73]

III. OGBV as a barrier to women's access to the internet

Discussions about OGBV among the women's movement in Sudan, in general, are uncommon. For decades, political, economic and social conditions have severely limited women's access to political, civil, economic and social rights. The women's movement in Sudan focused, and continues to focus, on granting women adequate political representation, economic justice, protection from sexual and gender-based violence (SGBV), especially in the context of conflicts and post-conflict situations, and access to justice. Therefore, online violence is not widely discussed, especially considering the fact that two-thirds of the population does not have access to the internet. Our research participants reflected that women experience different types of OGBV, including bullying, sexual harassment, blackmail and threats. These acts have limited the activities of some women in online spaces, driven others to discontinue their online presence indefinitely, and also prevented them accessing and using the internet to protect themselves. Furthermore, OGBV has deeply impacted the social, economic, physical and psychological well-being of many women in Sudan. The manifestation of this violence will be unpacked in this section and the following section, which will explain the economic sanctions as well. This section will also position online GBV in Sudan as hate speech and will highlight the issue of accountability for online violence against women.

Some authors posit that "TFGBV [technology-facilitated gender-based violence] is rooted in racism, misogyny, homophobia, transphobia and other forms of discrimination."[74] Hence, attacks on women would be based on their "intersecting identity factors" such as race, disability, religion, gender identity among others.[75]

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72   SMEX. (2023, 8 May). Internet And Telecom Shutdowns In Sudan: Who Is Responsible? *SMEX*.
      https://smex.org/internet-and-telecom-shutdowns-in-sudan-who-is-responsible/

73   Ibid.

74   Dunn, S. (2020). *Technology-Facilitated Gender-Based Violence: An Overview. Centre for International Governance Innovation*.
      https://www.cigionline.org/publications/technology-facilitated-gender-based-violence-overview

75   Ibid.

Women's struggle with OGBV in Sudan showed a link between challenging the status quo and experiencing offline violence as a result of these actions. The FGDs showed that offline violence in such cases can be divided into two, domestic violence, and violence by community members whose actions of violence are either justified by the social norms or these actions may or may not be incited by the digital campaign against the victims. The justification of violence against women using social norms and the possible incitement could amount to gender-based hate speech.

There are different definitions for hate speech. The Council of Europe's definition of hate speech is:

> [A]ll forms of expression which spread, incite, promote or justify racial hatred, xenophobia, anti-Semitism or other forms of hatred based on intolerance, including intolerance expressed by aggressive nationalism and ethnocentrism, discrimination and hostility against minorities, migrants and people of immigrant origin.[76]

The Council of Europe Commissioner for Human Rights stated that the definition is open to recognising other forms of discrimination in the context of hate speech such as gender and sex.[77] The United Nations Special Rapporteur on violence against women, its causes and consequences also noted that forms of violence against women include hate speech, where she also mentioned that trolling, sharing of pictures, videos or hashtags to trigger, provoke or incite is used to create and spread hate speech against women and girls.[78] Hence, OGBV has been recognised as hate speech against women, despite the fact that it is not yet widely agreed upon. However, documenting and analysing women's experiences in Sudan and other countries helps to better situate OGBV within the global hate speech discourses. In Sudan, and considering the fact that the country is heading towards a new transitional period where the processes and mechanisms for democracy and justice should be laid out, these discussions are much needed to pave the way for regulations and policies against all forms of offline and OGBV, including and gender-based hate speech.

A majority of women do not feel safe in online spaces according to our FGDs. One participant said, "I had a personal page in 2018; a random person posted bad pictures on the page and my cousin alerted me, I closed the page and since then I stopped using social media." She told the cousin that it was not her and he believed her. She said she might need a couple of years to feel safe and return to Facebook again. The data collected through the FGDs show that many women are not allowed to freely express their opinions on different topics on social media or share their photos.

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76   https://search.coe.int/cm/Pages/result_details.aspx?ObjectID=0900001680505d5b

77   https://rm.coe.int/168059ad42

78   Simonovic, D. (2018). *Report of the Special Rapporteur on violence against women, its causes and consequences on online violence against women and girls from a human rights perspective.* United Nations. https://digitallibrary.un.org/record/1641160

To circumvent this, they create accounts with nicknames or pseudonyms so they cannot be identified by their family members. Alternatively, they block their family members on their social media accounts. It is important to note these techniques are not enough to protect women and that the fear of consequences remains a barrier to women's access to and use of the internet. In Kadugli, South Kordofan, one of the experiences shared entailed a girl student who committed suicide because she feared that her family would find out she was being blackmailed with a photo. In Port Sudan, one of the participants stated that her guardian[79] prohibited her from using the internet because she used to write and share poems on social media and he felt the poems were about him. The participants also noted that "active women on social media are often labelled as 'undisciplined' and 'have no guardian'." In Kordofan, participants discussed and agreed that "the main slogans of the revolution, 'Freedom, Peace and Justice', include women's rights and freedom; however, the community excludes women from the popular call for freedom." They added that "the community perceives violence against women and control over them as part of the culture that is untouchable and any attempts for change put the person (mostly women) under attack." In Kadugli, women are hesitant to share content online, due to the state government's surveillance online. One of the participants shared her experience with creating content related to environmental pollution resulting from mining waste in the state, only to be threatened by the state's intelligence forces. FGD participants agreed that "the only barrier for women to participate in creating content is government agencies, because there is no freedom of expression in the country, and there are those who have been imprisoned for expressing their opinion." Another participant shared a story of a local singers who posted a video of her expressing her opinion through traditional poetry about the tribal wars taking place in the country "because of the government."

The research also shows that certain groups of women are more targeted on social media. Intersecting factors including age, ethnicity, socioeconomic class, occupation, physical appearance, physical/mental ability and nature of activities on social media were recorded as playing a role in how certain groups of women are more vulnerable to OGBV and are less likely to obtain justice. Political activists, especially young women, mostly experience *ad hominem* attacks, mockery based on their looks, and insults for not dressing "conservatively". Moreover, activists who challenge the status quo and speak about gender-based violence, human rights that are considered controversial, or matters related to the current volatile political and security situation in the country, face an increased level of attacks. For instance, feminists, in particular feminists from marginalised ethnic groups, or who do not meet the culturally-approved dress code (e.g. hair not covered and/or short haircuts) are targeted more. Women with disabilities experience bullying and mockery, deeming them incapable of having a role in public life. Singers from marginalised ethnic groups are often insulted, body-shamed and bullied. The majority of the OGBV victims refrain from filing a legal complaint for various reasons.

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79   The guardian is a male relative, often father, brother or a husband, who has the legal authority over women by Sharia law in Muslim countries.

Participants cited social stigma as one of the main challenges, as well as a lack of knowledge on the part of women about their rights and a trust deficit in the justice system.

Some of the participants also stated that OBGV has "increased following the resolution in 2019 due to the increased level of awareness among women, increased access of women and men to online space to obtain information about the revolution, in addition to the atmosphere of freedom that came after the revolution when people were able to openly talk on social media." On the contrary, other participants felt the level of OGBV remained the same for the last four years. An FGD participant, who is a journalist in Khartoum, spoke of her close colleague who was covering the 2022 FIFA World Cup in Qatar. She said, "Men journalists were furious that a woman went to cover such an event. When the journalist posted a photo of her in Qatar, she received racist comments and insults related to her clothes and hair from men." One of the online "resistance tools", as called by some of the participants to fight online GBV, is the bloc. When a woman is abused by someone, other women in her circle converge against the abuser. Often, the women victims post the account of the abuser in one of the women's groups on Facebook, for instance, where some groups have not less than 30,000 members. These members either report the page/account of the abuser in order to shut it down, share his profile to warn other members about him, or pile up posts on his page/account. The participants in Khartoum noted that they find this tactic useful since there is no other way for justice.

In an interview conducted with a young feminist and activist who has been experiencing OGBV, she stated that women are more vulnerable to OGBV "because this violence is a mere reflection of the day-to-day life of women where patriarchy is the norm." She believes that lack of accountability is aggravating the online attacks against women. When she started challenging the system, speaking about sexual violence, domestic violence, and LGBTQIA+ rights among other controversial and taboo topics, she was aware of the consequences. She fully expected a backlash and that helped her to keep going. Due to her active presence, on Twitter specifically, advocating these rights, this woman faced massive and prolonged attacks that ranged from bullying (calling her stupid and making demeaning memes with her photos), body shaming, insults (calling her slut, prostitute, etc.) to receiving rape and death threats. She added that when she started using Curious Cat,[80] it was more of a social experiment to understand how people think and respond to the controversial topics she raises. She categorised the motives behind the attacks into three groups. The first sees these topics as socially unacceptable and that they threaten their culture and identity. The second group comes with a religious perspective, where they label these rights as "forbidden". The third group, which she believes are the most virulent, are the middle class, educated and privileged men, who do not want to compromise their status and privileges. According to her statement, this group is the most organised and they succeeded in initiating a smear campaign against her where they were able to report

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80   Curious Cat is an anonymous question-and-answer social networking tool that allows people to connect with their
      followers on social media platforms.

and close her Twitter account four times since 2019, one of which had 7,000 followers. She did not think of legally pursuing any of the harassers because she says the system is biased against women and dominated by men. She also added that women can be exposed to more harassment by the judicial system during the legal process. Moreover, litigation being expensive is seen as one of the main barriers. Lastly, she expressed that the sense of sisterhood coming from other women around her helped her to overcome these vigorous online attacks.

Regarding the issue of accountability and laws in Sudan, the 2018 Cybercrime Law itself is one of the tools that discriminate against women and aggravate violence against them. Chapter 4 of the law criminalises acts what it labels as "immoral or against public order".[81] The articles of this chapter could be used against women, activists and journalists and "to censor dissent".[82] The concept of public order was introduced by the previous Islamic regime, where it enacted a law, the 1996 Khartoum Public Order Act, and included similar articles in the 1991 Criminal Act, by which women in the public sphere were targeted, arrested, tried and punished (with fines and/or flogging) in less than 24 hours, often with no access to legal counsel.[83] The purpose of the public order regime was to push women out of the public arena.[84] Though the 1996 Khartoum Public Order Act was repealed and corporal punishments were removed, the moral and public order articles remain in the Criminal Act and Cybercrime Law. The Islamic regime that ruled Sudan for 30 years has left a legacy of structural and systemic discrimination against women. The public order regime is the single-most facade of this legacy which continues to exist and oppresses women through the law and practices of the justice system. Furthermore, the Cybercrime Law could also be used by the authorities to censor activists and journalists from any content that criticises the army in Sudan. In July 2020, the army declared that a commissioner was appointed to file legal complaints against people insulting the army.[85] It was reported that a woman protester was threatened by army officers for a video shared on social media in which she was chanting revolutionary slogans against the military.[86]

While the national legislations and practices prevent women seeking justice, the absence of international law or mechanisms to govern the internet in general and OGBV, in particular, is considered as another layer dissuading women from seeking justice. The reporting process of social media platforms is one of the most challenging aspects in online abuse redressal. To report abuse, women must fit their experience into categories defined by the platforms, and these definitions frequently vary across platforms.

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81 ARTICLE 19 (2021, 10 November). Sudan: Cybercrime Law can restrict vital information during the pandemic. https://bit.ly/43sxk7T

82 Ibid.

83 Ibid.

84 Strategic Initiative for Women in the Horn of Africa Network. (2015, 1 March). Op. cit.

85 Osman, M. (2020, 24 July). Sudan's Army Threatens Activists, Journalists with Lawsuits - Many Problematic Laws Still Need Reform. *Human Rights Watch.* https://www.hrw.org/news/2020/07/24/sudans-army-threatens-activists-journalists-lawsuits

86 Ibid.

Content moderators do not always understand or have access to the context and language surrounding the abuse. This means that moderators might not have a full understanding of the abuse, which in turn means that marginalised communities do not get adequate support from tech platforms' teams. Platforms must provide users with the tools to effectively manage and track the progress of their reports. On a broader level, improving reporting processes and related policies is an opportunity to normalise the idea that any form of online abuse is unacceptable and that reports of abuse made to the platform will be managed adequately.[87] In an interview, a woman lawyer stated:

> There are several challenges in prosecuting cybercrimes. The Cybercrime Law of 2018 does not stipulate the type of evidence required for each offense. The 1994 Evidence Act governs the admissibility of evidence in the court of law for all criminal offenses. The Evidence Act is silent about the issue of cybercrimes; hence, there is a massive gap in the applicability of the cybercrime law. Victims must provide evidence for the alleged abuse. The process of acquiring evidence is tedious and sometimes ineffective. The victim must obtain a closed letter from the prosecution office and provide the letter to the Telecommunication and Post Regulatory Authority (TPRA). Subsequently, the victim must collect the report of the TPRA in the form of a closed letter and submit it to the court as evidence. This process often takes time and could also be costly for victims. Additionally, telecommunication companies might not have the information required (reports of the internet sessions) to prove the incident if it took place months before the request is made according to an expert working in a telecommunication company in Sudan.

Information collected from another source who worked previously at the TPRA stated that the TPRA usually can use the victim's phone as part of the forensic investigation process:

> TPRA is equipped with forensic investigation software to investigate crimes that happened, yet they cannot do that if the crime happened a while ago. However, TPRA sometimes refers to social media platforms to provide information about the perpetrator.[88]

The Citizen Lab reported in 2014:

> Sudan is one of 21 governments that are currently using or have used Hacking Team's RCS [remote control system] spyware. […] Hacking Team distinguishes RCS from traditional surveillance solutions (e.g. wiretapping) by emphasising that RCS can capture data that is stored on a target's computer, even if the target

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87   Walker, C. (2021). *Tech Policy Design Lab: Online Gender-Based Violence and Abuse.* World Wide Web Foundation. https://assets.website-files.com/617a5f094309b93ce9ab25b9/618c03493db5a4df42017dc8_OGBV_Report_ June2021.pdf

88   Information collected from a credible source who prefers to remain anonymous.

never sends the information over the internet. RCS's capabilities include the ability to copy files from a computer's hard disk and record Skype calls, emails, instant messages, and passwords typed into a web browser. Furthermore, RCS can turn on a device's webcam and microphone to spy on the target.[89]

Taking all this into consideration the investigation procedure followed by the Cybercrime Law, and Evidence Law to investigate OGBV cases is not clear, which sometimes can put the victim at further risk of surveillance by the government. The lawyer interviewed also added:

> Women refrain from filing legal complaints against their online perpetrators. It is either because they are not aware of the cybercrime law, afraid of social stigma, or they are unable to afford a lawyer and other financial expenses needed to pursue a case. In cases where victims did report the incidents, justice is far from being. In a very recent incident, a journalist received threats of beheading and captivity from extremist Islamic groups on Facebook for writing about a woman in a Quran memorisation centre who stated that they were receiving combat training in the centre.[90] The journalist reported the incident to the cybercrime prosecution office. However, the response of the prosecution was that the TPRA was unable to identify the owner of the account due to Facebook privacy policies.[91]

Reflecting on the Feminist Principles of the Internet, women have resisted and continue to resist the laws and social norms which limit their ability to enjoy their rights. Starting with claiming their right to vote, education and employment following Sudan's independence in 1956, and they have been vocal about issues such as violence against women, sexual violence, legal reforms, citizenship rights, capacity-building, women's political participation/ quota during the 1990s.[92] Since the December 2018 revolution, women have constituted the majority of the protesters on the street, fighting against the previous regime which brutally oppressed them.[93] The security forces targeted them and an officer once said, "Break the girls; because if you break the girls, you break the men."[94]

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89 Marczak, B., Guarnieri, C., Marquis-Boire, M., & Scott-Railton, J. (2014, 17 February). Mapping Hacking Team's "Untraceable" Spyware. *The Citizen Lab.*
https://www.citizenlab.ca/2014/02/mapping-hacking-teams-untraceable-spyware

90 https://rb.gy/nt0snr

91 Information obtained from a credible source who prefers to remain anonymous.

92 Hashim, F. (2018). *Political Economy of Violence Against Women in Sudan.* Development Alternatives with Women for a New Era.
https://dawnnet.org/wp-content/uploads/2021/01/Political-Economy-of-Violence-Against-Women-in-Sudan_DAWN-discussion-paper12.pdf

93 Tonnessen, L. (2020). *Sudanese women's revolution for freedom, dignity and justice continues.* CMI.
https://bit.ly/3KyhIa9

94 Young, S. (2020, 25 May). The Women's Revolution: Female Activism in Sudan. *Harvard International Review.*
https://hir.harvard.edu/the-womens-revolution-female-activism-in-sudan/

In 2021, they organised a march against the sexual violence perpetrated against women by the Sudanese security forces.[95] In 2022 in Khartoum, they marched in support of the women experiencing GBV in conflict and post-conflict settings and demanded justice.[96] These marches are among various and continuous efforts by women to fight against violence and oppression across the country. While the fight against GBV in the offline realm became part of the nationwide women's movement, OGBV remains largely unrecognised. It remains an individual fight for women's activists who either have experienced it or witnessed it in their close circles. Social media platforms currently offer a variety of settings to address online abuse, but these tools are not always easy to find or use. For journalists and politicians, verification, like the blue checkmark on Twitter, can provide credibility and be important for their safety. But verification process can be cumbersome, and exacerbated by the sanctions, this feature is now making women actively participating in public life more vulnerable.[97]

Sanctions as a form of Cold War strategy on the internet

Establishing access to the internet as a human right was first proposed at the United Nations by the Special Rapporteur on the promotion and protection of the right to freedom of opinion and expression in 2011.[98] However, debates around the standards of internet access continue among the technical community, private sector, governments and civil society, with varying and often competing interests, in connecting the remaining four billion people (60% of the global population) to the internet. Amidst these debates, women in developing countries are often instrumentalised as a vulnerable target group (as often happens in global development debates) rather than stakeholders with a crucial say in the kind of internet access that guarantees rights rather than restricts them.[99]

Perry Bechky, an international lawyer who has represented clients from over 50 countries, describes sanctions as "a political tool – but a political tool that operates through economic regulation."[100] He continues:

95   BBC. (2021, 23 December). Sudan women protest against 'rape by security forces'.
     https://www.bbc.com/news/world-africa-59755684

96   Atit, M. (2021, 28 November). Sudanese Activist Call for Protection of Women in Conflict Areas. *VOA*.
     https://www.voanews.com/a/sudanese-activists-call-for-protection-of-women-in-conflict-areas-/6853075.html

97   World Wide Web Foundation. (2020, 25 November). The impact of online gender-based violence on women in public life.
     https://webfoundation.org/2020/11/the-impact-of-online-gender-based-violence-on-women-in-public-life

98   LaRue, F. (2011). *Report of the Special Rapporteur on the promotion and protection of the right to freedom of opinion and expression.* United Nations.
     https://digitallibrary.un.org/record/706331?ln=en#record-files-collapse-header

99   https://feministinternet.org/en/principle/access

100 Bechky, P. (2018). Sanctions and the Blurred Boundaries of International Economic Law. *Missouri Law Review, 83*(1).
     https://scholarship.law.missouri.edu/cgi/viewcontent.cgi?article=4311&context=mlr

According to *the European Journal of Political Economy*, regimes targeted by sanctions often exaggerate the negative effect of sanctions on the economy to prevent the population from revolting against them.[101] States have also been found to intentionally deteriorate economic growth in order to increase the economic hardship of the population so that any revolt proves costly for citizens.[102] The economic sanctions by the United States are used as a strategic mechanism to influence the state and non-state actors' behaviours and decisions that are recognized as national security threats or against U.S. interests. The International Emergency Economic Powers Act (IEEPA) is the primary law used to enforce economic sanctions, and it regulates the Office of Foreign Asset Control operations.[103] Taking this, IEEPA is not the only law that U.S. presidents rely on to impose economic sanctions, also the Trading With the Enemy Act (TWEA) is enacted by Congress to grant the U.S. President broad power to take control of private property for public use during times of war.[104] The TWEA has become the central means to impose sanctions as part of the U.S. Cold War strategy.[105]

According to the data collected, a majority of women in Sudan are not aware of the impact of the US sanctions on their life, or that sanctions are a different form of war. In Kadugli, for instance, they did not know about the impact of sanctions on their accessibility to different websites and services online. Women living in Khartoum, Elfashir and Port Sudan revealed they could not access a website or online service at some point in their life, whether to access information, an online publication, or one of the services provided online. While the majority of websites are only accessible using a VPN (virtual private network), some other websites and online services are totally blocked even after the sanctions were lifted and restrictions on access to technologies eased. During the discussion, inaccessible websites and services due to the sanctions were documented and will be unpacked in the following sections.

The use of IEEPA by US presidents has expanded over time in terms of length and subject matter. In the case of Sudan, IEEPA has been used to respond to the prevalence of denial of religious freedom, human rights abuses and slavery. In 1993, the US designated Sudan as a state sponsor of terrorism for its support of international terrorist groups and organisations.[106] In 1997, the US issued an executive order that imposed a comprehensive

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101 Oechslin, M. (2014). Targeting autocrats: Economic sanctions and regime change. *European Journal of Political Economy, 36*(4), 24-40.
https://www.sciencedirect.com/science/article/abs/pii/S0176268014000676?via%3Dihub

102 Ibid.

103 Bechky, P. (2018). Op. cit.

104 Elsea, J., Rennack, D., Fergusson, I., & Casey, C. (2020). *The International Emergency Economic Powers Act: Origins, Evolution, and Use.* Congressional Research Service.
https://sgp.fas.org/crs/natsec/R45618.pdf

105 Ibid.

106 https://www.state.gov/u-s-relations-with-sudan/#:~:text=After%20Brigadier%20General%20Omar%20al,U.S.%20Embassy%20operations%20in%201996

trade embargo on Sudan and froze its government's assets in the US.[107] In 2006, the US Department of the Treasury blocked the assets of Sudanese individuals involved in the violence and imposed sanctions on companies owned or controlled by the government of Sudan.[108] However, in 1988, Congress excluded from the US president's TWEA and IEEPA powers the ability to regulate the importation or exportation of certain types of information and informational materials. Its first attempt was the Berman Amendment, which specified that:

> The President's powers under those acts do not include the authority to regulate or prohibit, directly or indirectly, the importation from any country, or the exportation to any country, whether commercial or otherwise, of publications, films, posters, phonograph records, photographs, microfilms, microfiche, tapes, or other informational materials.

However, this is not the case for educational platforms such as Coursera, Udemy and Water CAD for Students, besides investigative journalism websites. The FGD participant who is a journalist also stated that she was affected by the sanctions and could not get easy access to resources that could support her in her investigative work:

> Investigative journalism resources are not accessible to Sudanese journalists. This is something that makes international journalists stand out more than Sudanese journalists because they have resources that are ready for them to use with a simple search.

Another participant said:

> I am a photographer; I needed to use an application called Lightroom that would help me in my photography work. But this application is not available for Sudanese because it doesn't include Sudan in the region list at the registration stage. I asked my friend who is living abroad to create an account and share his account details with me to use it in Sudan so that I could continue my work.

Participants in Darfur had a chorus of complaints. "Many applications are available to Sudan in Google Play. While some mobile applications are available with limited features, apps such as the WPS Office has features that are not available to Sudanese users." Payment apps are also problematic. Online payment systems such as PayPal are not supported in Sudan. Credit card and other financial companies may not provide services to entities that have members from sanctioned countries and might therefore refuse to provide service to those members directly.[109]

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107 https://www.bis.doc.gov/index.php/documents/pdfs/2709-sudan-ssot-rescission-faqs/file

108 https://www.federalregister.gov/documents/2006/05/01/06-4121/blocking-property-of-persons-in-connection-with-the-conflict-in-sudans-darfur-region

109 Badiei, F. (2022, 28, November). How Do Sanctions Impact the Internet? *RIPE Labs*. https://labs.ripe.net/author/

One participant pointed out:

> Sudanese cannot access information materials or services that are available online, as the American markets are not open to Sudanese who have Visa cards or Mastercards that are issued in Sudan.

Sudanese are challenged to access information online because of the sanctions, which can be considered as against the freedom granted by the Berman Amendment to people worldwide to access information and information materials, whether commercial or not. The Berman Amendment may have overlooked technology advancements that allow users to access information and informational materials online. Hence, the United States must review the Sudan Sanctions Regime to allow Sudanese users to access information and informational materials online. Although the Berman Amendment list included informational materials, it does not support information produced, stored and transmitted only online. Because of the tectonic shifts in technological advancement, it is crucial for the US to further amend the Berman Amendment to safeguard sanctioned countries' citizens' digital rights to access information even online.

I.   Impact of sanctions on the ICT infrastructure

Sanctions can deny internet access when people need it the most.[110] Restrictions on access to technologies are against the Feminist Principles of the Internet, where women enjoy their digital rights to access, produce and disseminate information online, as well as foster their movement online.[111] On the export of technology to Sudan, US sanctions have impeded access to a wide range of technologies including telecommunication equipment as well as a long list of important hardware software, online services and other tools that are crucial to Sudanese exercising their human right to freedom of expression online.[112] The sanctions have affected sanctioned countries' ability to create national content, as the Internet Corporation for Assigned Names and Numbers (ICANN) is based in the US. Thus, both ICANN and other domain registrars located outside the US are subject to American law because of their contract with ICANN. Sanctioned and embargoed countries face unpredictable cancellation of their domain names by some registrars. Some registrars, based both inside or outside the US, might stop providing services to countries sanctioned under the OFAC (Office of Foreign Assets Control) regime, even without prior notice.[113]

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110 El Saadany, M., & Campbell, N. (2022, 28 September). Sanctions Can Deny Internet Access When People Need It Most. *Internet Society.*
https://www.internetsociety.org/blog/2022/09/sanctions-can-deny-internet-access-when-people-need-it-most

111 https://feministinternet.org/en/principle/usage

112 Kenyanito, E. P. (2023, 13 January). U.S. eases sanctions on tech exports to Sudan. *Access Now.*
https://www.accessnow.org/us-eases-sanctions-tech-exports-sudan

113 Badiei, F. (2017, 13 January). ICANN's Jurisdiction: Sanctions and Domain Names. *Internet Governance Project.*
https://www.internetgovernance.org/2017/01/13/icanns-jurisdiction-sanctions-and-domain-names

In October 2013, ResellerClub became a US-based entity and this move resulted in a change in its legal jurisdiction. Consequently, the company stopped supporting partners and clients from Cuba, Iran, North Korea, Sudan and Syria and their respective domain and hosting packages have been suspended.[114]

The OFAC issued a general licence in March 2010 that authorised the exportation of certain services and software for the exchange of personal communications over the Internet which included instant messaging, chat email, social networking, sharing of photos and movies, web browsing and blogging.[115] According to the US Department of Treasury's definition, "a general license authorizes a particular type of transaction for a class of persons without the need to apply for a license."[116] However, for many years, Sudan's citizens were denied a Twitter account as the social media company blocked the feature where Sudanese can authenticate their account registration using their local numbers. This forced many to rely on friends and family members outside the country to help them authenticate their accounts using non-Sudanese numbers.[117] One of the FGDs participants pointed out that "the sanctions divided people into two groups: one group has families outside that [created] Twitter accounts and iPhone cloud accounts for them, and others couldn't." Many export attorneys agree that US export regulations cover foreign access to social media tools and advise their clients to block users in embargoed countries.[118] Another participant mentioned that to date, she "is unable to able to use LinkedIn job postings, as this feature is not available for sanctioned countries for trade reasons."[119]

Again in 2015, the US issued a general licence pertaining to certain software, hardware and services incident to personal communications. The general licence also authorised a foreign branch of a US company to export to Sudan, from a location outside the United States, certain hardware or software that is not subject to the Export Administration Regulations (EAR) (including foreign-origin hardware or software containing less than a *de minimis* amount of US-controlled content). The licence allowed the export and re-export of no-cost software and services incident to the exchange of personal communications that are widely available to the public to the government of Sudan, except whose property and interests in property are blocked solely pursuant to Executive Order 13067 and Executive Order 13412.[120] Following this, service providers pointed out that these specific licences

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114 Luthria, S. (2013, 10 November). Changes to ResellerClub's Countries of Operation. *ResellerClub.* https://blog.resellerclub.com/important-changes-in-resellerclubs-countries-of-operation

115 https://s3.amazonaws.com/public-inspection.federalregister.gov/2015-03330.pdf

116 https://ofac.treasury.gov/faqs/74#:~:text=A%20general%20license%20authorizes%20a,to%20a%20written%20 license%20application.

117 Sudan Tribune. (2022, 8 February). Twitter quietly unblocks phone authentication for Sudan. *Sudan Tribune.* https://sudantribune.com/article255059/

118 Taylor, J. O. (2012). Information Wants to be Free (of Sanctions): Why the President Cannot Prohibit Foreign Access to Social Media Under U.S. Export Regulations. *William & Mary Law Review, 54*(1). https://scholarship.law.wm.edu/cgi/viewcontent.cgi?article=3452&context=wmlr

119 https://www.linkedin.com/help/linkedin/answer/a414493/job-posts-in-countries-sanctioned-by-ofac?lang=en

120 https://s3.amazonaws.com/public-inspection.federalregister.gov/2015-03330.pdf

can be difficult to obtain and must be renewed periodically in a process that can be slow, leaving some to choose not to go through the process at all to export these services to these countries. At times, the process would not be sufficient to achieve what is needed or expected: funds and medical devices like surgical sutures and cancer screening equipment sometimes are simply not approved by all the necessary parties for transfer to Sudan, to the detriment of Sudanese people who need them.[121]

On 17 January 2017, the US temporarily lifted sanctions with respect to Sudan and its government. The OFAC issued a general licence that temporarily authorised transactions prohibited by the Sudanese Sanctions Regulations (SSR), which was contingent on the US government's determination regarding Sudan's developments in key areas. Effective 12 October 2017, the temporary general licence is no longer operable, and the OFAC authorisation is not required for proposed transactions that were previously prohibited by the SSR unless the proposed transaction implicates the Darfur Sanctions Regulations or other OFAC-administered sanctions regulations. American citizens are still required to comply with the export and import controls of EAR administered by the US Department of Commerce, Bureau of Industry and Security (BIS). These requirements include restrictions that are maintained as a consequence of Sudan's inclusion on the State Sponsor of Terrorism (SST) List and apply to certain exports and re-export of items on the Commerce Control List.[122]

However, in October 2020, the prime minister of the Sudanese transitional government submitted a statutorily required report certifying that Sudan had not provided any support for acts of international terrorism to the US Congress.[123] Thereafter, the U.S announced Sudan's removal from the list of State Sponsors of Terrorism ("SST List"), which affected changes in the export/re-export controls related to Sudan under the EAR, on December 14, 2020.[124] Thereafter, items controlled only for anti-terrorism (AT) reasons on the Commerce Country Chart, Supp. No. 1 to Part 774 of the Export Administration Regulations (EAR), no longer require a licence for export/re-export to Sudan. However, items such as certain civil aircraft and their parts and components, and telecommunications and information security items are still controlled for reasons of national security, regional stability, crime control and missile technology, barring items indicated under the licence exception for civil use.[125] The License Exception Document, updated in January 2023, articulates that Technology and Software under Restrictions (TSR) permits exports and re-exports of technology and software where the Commerce Country Chart (Supplement No. 1 to part

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121 Maxmen, A. (2016, 14 January). Sudan Sanctions Deprive 'Whole Nation' of Health Care. *Foreign Policy*.
     https://foreignpolicy.com/2016/01/14/sudan-sanctions-deprive-whole-nation-of-health-care

122 Fox Rothschild LLP. (2017, 17 October). U.S. Lifts Sudan Sanctions.
     https://internationaltrade.foxrothschild.com/2017/10/articles/export-compliance/u-s-lifts-sudan-sanctions/

123 https://www.govinfo.gov/content/pkg/CDOC-116hdoc161/pdf/CDOC-116hdoc161.pdf

124 Coward, N, Hamilton, N, & Tovar, A. (2020, 18 December). US Government Removes Sudan from State Sponsor of Terrorism list. *Baker McKenzie*.
     https://sanctionsnews.bakermckenzie.com/us-government-removes-sudan-from-state-sponsor-of-terrorism-list

125 https://www.bis.doc.gov/index.php/documents/pdfs/2709-sudan-ssot-rescission-faqs/file

738 of the EAR)[126] indicates a licence requirement for the ultimate destination for national security reasons only, providing the software or technology is destined for Country Group B, with the exception of Sudan and Ukraine. However, the TSR licence exception also requires a written assurance from the consignee before exporting or importing under this License Exception.[127]

Despite the removal of Sudan from the SST List and the lifting of the trade embargo, much of the telecom equipment and software are still not available to Sudan, which has affected its access to quality internet services. One of the managers of the MNO companies, in an interview, stated:

> The deployment of telecom systems and equipment for coverage is affected by sanctions and MNOs cannot buy equipment directly from the manufacturer. We have to import all equipment indirectly through a third-party company. This directly affects the cost of operation because the third-party companies usually sell their products [at twice] the original price; hence the data bundle cost is also increased. Although the trade embargo was lifted in 2017, we have not seen any reflection by tech companies upon this, even after the removal of Sudan from the State Sponsor of Terrorism [list].

The list is long for all software technology and equipment that are still restricted even after the easing of sanctions and TSR. Big tech companies do not have Sudan on their list of regions that can access their services such as Google Workspace, Microsoft Azure, Azure Government and Microsoft Office 365, as well as online courses, platforms and other offerings provided for people worldwide. The director general of the National Information Centre during the transitional government said:

> The US sanctions have had a negative impact on the growth of digital services and ecosystems. The inaccessibility of software tools and hardware and the reservation of companies that are based inside and outside the US have forced digital enthusiasts to turn to open source software, which in many incidents posed great cybersecurity vulnerabilities to companies and end users. Therefore, digital development in Sudan is at the early stages, given the current demographics of the country and the large percentage of the population that is still offline.[128]

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126 https://www.bis.doc.gov/index.php/documents/regulations-docs/2253-supplement-no-1-to-part-738-commerce-country-chart/file

127 https://www.bis.doc.gov/index.php/documents/regulations-docs/2341-740-2/file

128 Mohammed, W., Elmontaha, S., Elhassan, M., Said, M. & Elsheikh, M. A. (2022). The impact of COVID-19 and US sanctions on digital rights in Sudan. In A. Finlay (Ed.), *Global Information Society Watch 2021-2022: Digital futures for a post-pandemic world*. Association for Progressive Communications. https://www.giswatch.org/en/country-report/sudan

It is confirmed by the International Telecommunication Union (ITU) that Information and communication technologies (ICTs) can help accelerate progress toward every single one of the 17 United Nations Sustainable Development Goals (SDGs).[129] However, it is clear that sanctions and restricted access to technologies can obstruct the acceleration of progress toward the achievement of the 17 SDGs, especially SDG 4, and SDG 5 as reflected in this research. Thus, the US must update its sanctions regime to facilitate access to technologies that can accelerate the achievement of the SDGs.

II. Impact of sanctions on women in STEM

Research conducted by the University of Oxford and the University of Khartoum highlighted the significant impact of tech sanctions affecting the style, content and continuity of academic research and education, given the increasing reliance on software, hardware and other equipment. As the rate of technological innovation speeds up, sustained periods of sanctions have left the Sudan academic communities considerably out of date. The impact of sanctions can be devastating and difficult to reverse even after sanctions are lifted.[130] Sudanese experts and policymakers worry that many graduates lack skills in using modern tools and equipment due to several reasons, including low investment by the government and private sector in R&D, in addition to the US sanctions that have hindered the development and upgrading of laboratories and other research facilities.[131]

One of the participants, a student at the University of Khartoum (UofK) School of Math, stated that sanctions have affected her graduation project. She said:

> For my graduation project, I needed info about AI – specifically in deep learning on the Udemy website and I couldn't access this content because of the sanctions. This could've been an advantage to me if the website was open and could've helped me in my graduation project. The library at UofK School of Math has only three computers and they are not working. [We] can't access many websites through these computers For coding [in languages] like Python, we are asked to write the code on paper or on our phones in the computer labs.

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129   https://www.itu.int/en/mediacentre/backgrounders/Pages/icts-to-achieve-the-united-nations-sustainable-development-goals.aspx

130   Bezuidenhout, L., Karrar, O., Lezaun, J., & Nobes, A. (2019). Economic sanctions and academia: Overlooked impact and long-term consequences. *PLOS ONE, 14*(11). https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0222669

131   Elhag, M. M., & Abdelmawla, M. A. (2020). Gender-based assessment of Science, Technology and Innovations ecosystem in Sudan. *African Journal of Rural Development, 5*(1), 95-111. https://repository.ruforum.org/sites/default/files/Muna%20final.pdf

One participant in Port Sudan State said:

> During my time at the university studying architecture, we were not able to use ArcMap, WaterGems, WaterCAD and AutoCAD software. Although these websites have a version available to all students worldwide, I couldn't access them as the website says it is "not available for your region". Even now, as an architecture professional, I am using a cracked version of the software and I have to use it offline. There are many online education platforms that are not available for Sudanese such as Coursera. We have to use a VPN to access a couple of courses but there are courses in AI, machine learning, etc. that are not available even after using VPN.

Furthermore, the MNO manager who was interviewed had this to say:

> The sanctions have isolated Sudanese from the global cybersecurity groups, so getting access to cybersecurity news and intelligence is not possible. The CIS Benchmark forum is a very good resource where we can get access to information and best practices that can be used in my daily job. However, to access these resources I have to use the company email and VPN.

Additionally, the interviewee added:

> Cybersecurity and information security education is greatly affected by the sanctions. Getting access to certifications is not easy and is very costly as I had to travel abroad to sit for the exams, and this is not affordable and applicable to many other women pursuing ICT professions. Sometimes training centres and examiners may refuse to allow you to sit for the exam when they realise you are Sudanese. To sit for one of the exams, I had to register through the telecom company to get access to one of the exams at the SANS Institute. This is also the case for many other education providers, including eCounsel.

In an interview with another key informant who went to the US on a scholarship to pursue her master's degree, she mentioned that access to scholarships and education is quite challenging due to the sanctions, especially for women in STEM (science, technology, engineering and mathematics). Most of the scholarships for STEM education offer opportunities for all nationalities, while very few offer seats for Sudanese. She said:

> I had to use the WES.org services to complete the degree equivalency process. The process is not easy for Sudanese; also payment online is not possible unless you know a person who is living abroad [who is able] to pay using their credit card as credit cards issued in Sudan are not working on these websites.

III. Women's digital skills in Sudan

Sanctions, customs, traditions and the patriarchal society are all reasons why women are not developing their digital skills in Sudan. A majority of elderly women in both rural and urban settings have to seek the assistance of their children, neighbours or friends to use their phones beyond calling. Very few women from the old generation are able to adjust the security or privacy settings on their devices. Those who are tech-savvy are mostly among the educated ones in cities such as Elfasher, Port Sudan and Khartoum and who learned these skills either through daily practice or got guidance from someone. In Kadugli, women know how to use the internet to access basic mobile applications such as WhatsApp, Facebook, Instagram, YouTube and Gmail to search for information, but very few are aware of how to tweak the security settings or maintain their privacy online.

In rural areas, women are not allowed to open electronic device shops at the market, and in some cases, they are not even allowed to go to the market. Digital training is not widely available in the country, and women lack the skill of using a laptop and using applications and smartphones. Younger educated generations are more likely to develop these skills by experience. Most of the research participants knew how to adjust security and privacy settings on their phones and their social media profiles, and to search or share information online and to download books. Yet experimentation can put them at risk sometimes. A participant shared the story of her neighbour friend who used TikTok to make videos thinking that she was only saving them on her phone, with no intention to share them. One day her brother found her videos on TikTok, and he beat her. In Kadugli, participants also stated that "the illiteracy rate is high, which resulted in the exclusion of women from different fields, including ICT."

Lack of digital skills also negatively affects women professionally too. One woman working in the government narrated her experience of an online meeting with the state governor. She was a fresh graduate with limited exposure to digital tools and this was her first job. She said, "I didn't know how to join online meetings, and which platform is used to have these meetings."

7.
Conclusion

As we migrate from voice to data services to over-the-top (OTT) platforms, the internet of things (IoT) and artificial intelligence (AI), a central policy challenge and paradox is often amplified by a lack of access to digital technologies. This is not only between the people connected and those who remain unconnected, but also between those barely connected due to the lack of affordability, skills, economic sanctions and government regulations and control on one side, and those who have all the resources to actively consume digital services and even use advanced technologies to produce and contribute to their prosperity. This research gives a glimpse of the impact sanctions have had on women's lives and experiences online. More research is much needed to examine the profound influence on a more extensive, broader and long-standing scale.

Although the right to access information has become a human right, many women in Sudan are restricted from accessing information, which has amplified the violence they experience both online and offline. The stories told by women from various locations show that their experiences with GBV, whether online or offline, are different in each case, yet they share the struggle with its impact on their lives. Women face various forms of violence when they are online, such as cyberstalking, bullying, hate speech, harassment and threats. These experiences can be traumatising and have a detrimental effect on their mental and emotional well-being. Their lack of access to justice and support systems further compounds the issue. The control of men over women dictates their presence on online spaces, which limits their internet usage and, in some cases, prevents them having an online presence altogether. It is important to build a narrative around OGBV as a crime, and in some cases, hate speech against women that deprives them from enjoying their rights, in order to better understand and address the broader violence against women in Sudan.

Increased access to the internet and technologies is one of the tools that can help women improve their conditions and ability to enjoy their rights. Internet and technologies offer women tremendous opportunities to access education, increase their livelihood opportunities, access information, etc. Similarly, they can offer the judicial system access to electronic evidence against online perpetrators, considering that offline GBV legal cases often get dismissed due to the lack of evidence.

Thus, this can encourage women to enjoy their digital rights and freedom of expression online, as well as encourage them to participate in public life with guarantees to access justice against online and offline GBV.

The ongoing war in Sudan is bound to exacerbate the situation in terms of access to technologies and further damage the existing weak ICT infrastructure, leaving citizens in total telecom blackout. Additionally, the impact of sanctions on access to information has rapidly come to the surface, as ads services are blocked on social media platforms, which could have helped promote access to information to GBV victims and pregnant women on medical treatment protocols. Citizens could have continued to access information using Satellite Internet to maintain access to information. Women's access to tech devices are much needed during wartime to easily access communication tools during emergencies, as well as information and online health services.

While currently there is no data available on any change in OGBV following the war, it was observed on social media that the de facto authority is targeting journalists who write about the war, accusing them of being affiliated to the other warring party. Some sources noted that these accusations are accompanied by online threats. In a case widely talked about on social media, a woman journalist was arrested by the de facto authority for speaking up on the impact of the war on people on Facebook. These worrisome developments suggest the possibility of increase in OGBV, and with the absence of state institutions since the war broke out, accountability will remain an elusive goal.

8.
Recommendations

Women in Sudan are experiencing economic, political, and both online and offline violence. They have become digitally excluded following the US sanctions against Sudan. Efforts to close the gender digital divide have mainly focused on connectivity. However, connectivity on its own is not sufficient to ensure that women can exercise their digital rights as citizens, consumers and producers. The legal framework in Sudan needs to be visited and amended in order to close the gender digital divide, and to ensure that women are protected online. Addressing OGBV and lack of accessibility to the internet is a complex issue that requires collective efforts at the community, national and international levels. This research proposes the following recommendations:

International community:

Firstly, the international community must continue to work to end the ongoing conflict in Sudan, to promote peace, freedom and justice, as well as continue supporting the transition towards a civilian-led government. Furthermore, the international community must continue to work on promoting the role of women in peace negotiations and agreement, as well as ensure their participation in government positions. The world must also work towards introducing economic policies to stabilise the free-falling economy as these are prerequisites to increasing the literacy rate and digital literacy in Sudan.

The gap in international law is enabling individuals, governments and telecommunication companies to escape accountability regarding OGBV. Moreover, tech companies, including social media platforms, must be governed by a law that forces them to activate reporting mechanisms against online perpetrators, as well as providing reports per judicial orders to serve as evidence in courts of law to support victims in attaining justice.

It is worth mentioning that all major social media platforms are US-based, including Facebook, Twitter, Instagram and LinkedIn. While the rest of the world seems to have an issue with the ways in which data is being handled by these companies, and against censorship, privacy and violence, Sudan has another layer of grievance against the US and that is the sanctions.

The United States should undertake more extensive public diplomacy about its engagement process in Sudan, including but not limited to promoting peace, democracy, but also to promote women's digital rights in Sudan through direct engagement with the government and civil society. The US must shift towards targeted sanctions only, because economic sanctions do not serve their intended purpose. On the contrary, they impact the population's ability to afford and access technologies that have been proven to contribute towards the realisation of the SDGs (Sustainable Development Goals). The legality of economic sanctions, reinforced by the decentralised system of public international law enforcement, enables more powerful states not only to use, but also to misuse economic sanctions. Thus, the United Nations Special Rapporteur on the promotion and protection of the right to freedom of opinion and expression must review the impact of sanctions on women's digital rights.

The impact of sanctions and war will further toughen the situation for women in Sudan; thus it is important that the international community consider easing restrictions to access technologies in Sudan. Such sanction-enabled restrictions can directly affect women and form yet another layer of restrictions for women against enjoying their digital rights online, while marginalising them in STEM professionally, and discouraging them from pursuing and excelling in this area. The international community must introduce a binding international mechanism to govern the internet in terms of access and usage to achieve the governance required for a sustainable digital future. Sanctions can disrupt the process of developing an inclusive global framework to overcome digital, data and innovation divides. Thus, there must be a legal framework that governs the impact of geopolitics on the internet.

Ministry of Social Affairs and telecom authority:

The Ministry of Social Affairs must create an enabling environment for women to have equal access to digital resources, and develop a gender mainstreaming policy to close the gender digital divide, with focus on addressing intersectional discrimination to address gaps in government institutions and practices and appointing a focal point in all entities to ensure the implementation of the policy. The ministry and the telecom authority must work towards developing and updating current policies that would accelerate women's access to the internet, criminalise OGBV and collaborate with the juridical system in collecting electronic evidence of cases reported. The ministry must work on raising awareness about the role the internet plays in developing socioeconomic status, as well as continuously run campaigns to ensure families end domestic violence against women both offline and online. Finally, due to the ongoing conflict, the telecom authority must work on easing access to SIM cards, as many citizens have left behind their ID original documents at home while fleeing the war.

The political and juridical system:

Political and economic political stability is key to addressing developmental and human rights issues in the country. Nevertheless, the juridical system must work on developing and updating laws, including 1) reforming all laws that discriminate against women and end offline violence, including the Nationality Law, Criminal Act, Evidence Act and Cybercrime Law, Personal Status Law and Labour Code, 2) reforming cybersecurity law to criminalise online GBV, and 3) improving the mechanism of filing legal complaints regarding OGBV to encourage victims to report and ensure their right to free legal counsel.