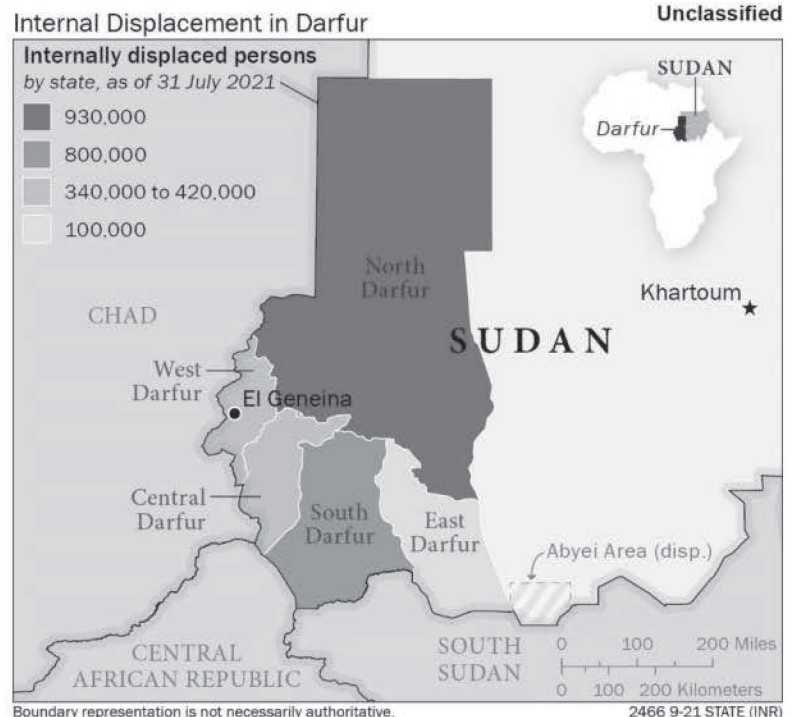




Climate Change in Sudan a Compounding Factor for Darfur Violence

The Juba Peace Agreement was signed in 2020, but experts note that the Sudanese government has yet to address the multifaceted drivers underpinning the complex crisis in Darfur. The International Organization for Migration estimates that the January-July 2021 displacement of Darfuris exceeds 250,000—more than four times the number displaced by conflict in all of 2020 and the largest figure reported in Darfur since 2014. According to experts, the main contributor to the conflict in Darfur continues to be politicized ethnic and tribal differences, but climate change is a compounding factor because it has exacerbated a competition for resources.

Ethnic and tribal divisions that were manipulated by the former government and inflamed by rival militias largely are driving the conflict in Darfur. However, according to experts, climate change–driven resource competition, especially for land, is among the many compounding factors.^{1,2,3} Before creeping desertification and drought took hold in the region in the late 1960s, most Arab herders and settled farmers maintained a symbiotic relationship of traditional agricultural patterns and activity.^{4,5} The expansion of the Sahara desert south by almost one mile every year and significant annual declines in median rainfall—occurring decades before the outbreak of the 2003 war in Darfur—compelled farmers to modify their practices. They now had to assert exclusive control of previously-shared commons such as land and water resources.^{6,7} This shift in land use toward exclusive ownership barred many herders from their traditional grazing areas and eroded the longstanding relationship between the two groups.⁸ Limited grazing and pasture corridors have resulted in conflict and caused what some international observers label “the first climate change conflict.”^{9,10} Media report that changes in land use and management over time deepened local power struggles linked to ethnic and tribal land claims and simultaneously eroded traditional dispute-resolution mechanisms.¹¹ Reports describe growing ethnic dimensions in these struggles that, along with government manipulation and inflated political rhetoric, compounded intergroup differences and threats, contributing to the genocide against black Darfuri tribes starting in 2003.^{12,13,14}



Today, according to the UN and open-source reporting, violence continues in Darfur with an estimated 250,000 Darfuris displaced by conflict from January-July 2021—more than four times the number displaced by conflict in all of 2020 and the largest figure reported in Darfur since 2014.^{15,16} Violence this year has increased the total number of internally displaced in Darfur to approximately 2.6 million according to UN reports (see map).¹⁷ Climate change remains a compounding factor because Darfur experiences extremely high seasonal variability and water stress, rising average temperatures, decreasing

major crop yields, and worsening food insecurity.¹⁸ Environmental degradation and desertification have reduced the availability of arable land while the demand has increased.¹⁹ The 2020 Juba Peace Agreement calls for lands to be returned to original occupants, but land rights and access to land remain contentious issues.²⁰ In El Genenia, West Darfur—an area that experienced clashes and attacks this year between Masalit and Arab tribes—Masalit leaders called for vast tracts of land taken from them to be returned, threatening Arab communities that occupy some of those lands.²¹ The voluntary return of displaced Sudanese adds to the competition for land because many returnees' homes have been occupied by others.^{22,23} Experts say that any comprehensive solution to address Darfur's instability must extend beyond a political treaty and recognize the role climate change plays and the future of land use.²⁴

INR/GGI prepared this Commentary.

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- ¹ Internal Displacement Monitoring Centre (IDMC), "Burst of Violence in Darfur Triggers Sudan's Highest Number of Conflict Displacements in Six Years," IDMC, 18 February 2021, <https://www.internal-displacement.org/media-centres/burst-of-violence-in-darfur-triggers-sudans-highest-number-of-conflict-displacements>
- ² Max Bearak, "Massacres threaten to engulf Darfur, where revenge as substituted for justice," The Washington Post, 20 April 2021, <https://www.washingtonpost.com/world/2021/04/20/darfur-sudan-massacres/>.
- ³ J. Andrew Plowman, "Climate Change and Conflict Prevention: Lessons From Darfur," National Intelligence University, September 2014.
- ⁴ Stephan Faris, "The Real Roots of Darfur," The Atlantic, April 2007, <https://www.theatlantic.com/magazine/archive/2007/04/the-real-roots-of-darfur/305701/>.
- ⁵ Zengxin Zhang, Chong-Yu Xu, Maiduline El-Haj El-Tahir, Jianrong Cao, & V.P. Singh, "Spatial and temporal variation of precipitation in Sudan and their possible causes during 1948–2005." *Stochastic Environmental Research and Risk Assessment*, Volume 26 (2012): 429-441, <https://doi.org/10.1007/s00477-011-0512-6>.
- ⁶ Musa, Abdul-Jalil and Jon D. Unruh, "Land Rights under Stress in Darfur: A Volatile Dynamic of the Conflict, War & Society." Volume 32 Issue 2, (2013): 156-181.
- ⁷ Chase Sova, "The First Climate Change Conflict, UN WFP, 30 November 2017, <https://www.wfpusa.org/articles/the-first-climate-change-conflict/>.
- ⁸ Olsson, Ola, and Eyerusalem Siba. "Ethnic cleansing or resource struggle in Darfur? An empirical analysis." *Journal of Development Economics*, Volume 103, (2013): 299-312.
- ⁹ Stephan Faris, "The Real Roots of Darfur," The Atlantic, April 2007, <https://www.theatlantic.com/magazine/archive/2007/04/the-real-roots-of-darfur/305701/>.
- ¹⁰ Chase Sova, "The First Climate Change Conflict," UN WFP, 30 November 2017, <https://www.wfpusa.org/articles/the-first-climate-change-conflict/>.
- ¹¹ Stephan Faris, "The Real Roots of Darfur," The Atlantic, April 2007, <https://www.theatlantic.com/magazine/archive/2007/04/the-real-roots-of-darfur/305701/>.
- ¹² Stephan Faris, "The Real Roots of Darfur," The Atlantic, April 2007, <https://www.theatlantic.com/magazine/archive/2007/04/the-real-roots-of-darfur/305701/>.
- ¹³ Olsson, Ola, and Eyerusalem Siba. "Ethnic cleansing or resource struggle in Darfur? An empirical analysis." *Journal of Development Economics*, Volume 103, (2013): 299-312.
- ¹⁴ J. Andrew Plowman, "Climate Change and Conflict Prevention: Lessons From Darfur," National Intelligence University, September 2014.
- ¹⁵ UN OCHA, "Sudan: West Darfur Emergency Situation Report No. 2, As of 4 May 2021," ReliefWeb, UN OCHA, 4 May 2021, <https://reliefweb.int/report/sudan/sudan-west-darfur-emergency-situation-report-no-02-4-may-2021-enar>.
- ¹⁶ Jerome Tubiana, "The revolution was hijacked: Inside the conflict in Darfur," Al Jazeera, 6 July 2021, <https://www.aljazeera.com/features/2021/7/6/the-revolution-was-hijacked-inside-the-conflict-in-darfur>.
- ¹⁷ UNHCR, Operational Data Portal, UNHCR, access date September 21, 2021, <https://data2.unhcr.org/en/country/sdn>.
- ¹⁸ World Resources Institute, Aqueduct Data, World Resources Institute, access date July 2021, <https://www.wri.org/aqueduct/data>.
- ¹⁹ Stephan Faris, "The Real Roots of Darfur," The Atlantic, April 2007, <https://www.theatlantic.com/magazine/archive/2007/04/the-real-roots-of-darfur/305701/>.
- ²⁰ Philip Kleinfeld & Mohammad Amin, "What's behind the rising violence in Sudan's Darfur," The New Humanitarian, 8 April 2021, <https://www.thenewhumanitarian.org/news-feature/2021/4/8/whats-behind-the-rising-violence-in-sudans-darfur>.
- ²¹ Philip Kleinfeld & Mohammad Amin, "What's behind the rising violence in Sudan's Darfur," The New Humanitarian, 8 April 2021, <https://www.thenewhumanitarian.org/news-feature/2021/4/8/whats-behind-the-rising-violence-in-sudans-darfur>.
- ²² Oxfam International, "Natural resource conflict escalate Darfur crisis," Oxfam International, 29 April 2014, <https://www.oxfam.org/en/press-releases/natural-resource-conflicts-escalate-darfur-crisis>.
- ²³ Zurab Elzarov, "Emerging options for durable solutions in Darfur," Forced Migration Review, October 2019, <https://www.fmreview.org/sites/fmr/files/FMRdownloads/en/return/elzarov.pdf>.
- ²⁴ Stephan Faris, "The Real Roots of Darfur," The Atlantic, April 2007, <https://www.theatlantic.com/magazine/archive/2007/04/the-real-roots-of-darfur/305701/>.