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Democratic Republic of the Congo

The Democratic Republic of the Congo (DRC) is faced with a confluence of climate change, environmental degradation, resource exploitation and conflict dynamics that is exacerbating insecurity in the country. The dual impact of climate change and the global green energy transition risks deepening divisions over resource management and fostering intercommunal conflict over resources such as land and water. Climate-related security risks threaten to undermine human security through increased livelihood and food insecurity and changing patterns of transhumance.

- The impacts of climate change on agriculture, including temperature rises and precipitation variability, are eroding productivity and leading to heightened food insecurity and vulnerability in the DRC.
- Armed and intercommunal conflict in the east of the DRC is a key driver of displacement, causing mass population movement and rendering local communities, refugees and internally displaced persons (IDPs) vulnerable to the impacts of climate change. The last five years have also seen a dramatic increase in the number of registered displacements caused by storms and floods.
- Climate change mitigation efforts and the sustainable management
 of forest resources are being impeded by ongoing conflict, corruption
 and instability in the country. Illegal activities by armed groups, such
 as illicit mining, logging and wildlife trading, are contributing to
 environmental degradation and biodiversity loss.
- The green energy transition is creating immense global demand for access to minerals such as copper, cobalt, lithium, manganese, rare earth elements and zinc. The operation of state and non-state armed groups in illegal mining and resource extraction is undermining natural resource governance, causing environmental damage and exacerbating communal tensions.

The DRC has been framed by President Félix Tshisekedi as a 'solution country' for climate change, providing essential inputs for green technologies and storing a large proportion of the world's carbon dioxide in the Congo Basin. Yet the country is also characterized by deep and persistent conflict, particularly in its eastern regions. In order to mitigate climate-related security risks, the United Nations, international organizations, climate financiers, partner countries and the DRC authorities need to cohere through conflict-sensitive policies on mitigation and adaption and the green energy transition.

RECOMMENDED ACTIONS:

- International partners and United Nations agencies should invest in strengthening knowledge of the links between climate change, environmental degradation and conflict in the Democratic Republic of the Congo (DRC). Environmental monitoring capabilities should be improved to better predict extreme weather events and forecast changing local climate patterns. Monitoring should also pay attention to the growing number of displacements due to natural disasters such as floods and storms, as well as to the changing patterns of transhumance.
- ➤ The UN, climate financiers and relevant international actors should increase their support for climate adaptation in the DRC, particularly conflict-sensitive adaptation programmes that build resilience and target the root causes of vulnerability. To guide the adaptation support, the national adaptation plan and other relevant policy documents should integrate local climate-related security risks, emphasizing what conflict sensitivity means in the context of the DRC.
- Governments and the private sector should ensure the ecologically sustainable and ethical extraction of resources. This could be done by promoting responsible sourcing and environmental, social and governance standards in the extractive sector, through introducing supply chain due diligence and novel value chain models, and supporting the formalization of the artisanal and small-scale mining sector. Such efforts should take the gendered dynamics of resource extraction into account.
- The knowledge base and capacity for climate security in the DRC should be built up using a long-term perspective. To support this, the UN, international partners and the DRC government should establish climate security adviser roles that facilitate the assessment of climate-related risks, and design and implement policies to alleviate the security risks posed by climate change and environmental degradation in the country.

Figure 1. Key statistics

Climate and environment

(B

Projected mean annual temperature increase of 1.2°C–2.4°C (2040–59)



Longer dry spells and increased drought frequency
Increase in rainfall variability and incidences of flooding

⊕

Agriculture employs c. 60 percent of the population

Population

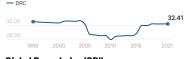
Total population 102.3 million (2023)
Internally displaced population 6.4 million (2022)

Population in acute food insecurity (IPC phase 3 and above)

25.4 million (2023)

ND-GAIN Country Index

The ND-GAIN Country Index captures a country's vulnerability to climate change and other global challenges, and its readiness to improve resilience. It is a score out of 100; the higher the score, the less vulnerable and more ready the country.



Global Peace Index (GPI)

It is a score out of 5; the lower the score, the more peaceful the country.

— DRC

3.4

Human Development Index (HDI)

The HDI measures a country's achievement in key dimensions of human development: a long and healthy life, being knowledgeable and having a decent standard of living. It is a score out of 1.0; the higher the score, the higher the level of human development.



Sources: World Bank Group, Climate Risk Country Profile: Congo, Democratic Republic (World Bank Group: Washington, DC, 2021); United States Agency for International Development, 'Climate risks to resilience and food security in Bureau for Humanitarian Assistance geographies: Democratic Republic of the Congo', 2023; United Nations Population Fund, 'World population dashboard: Congo, the Democratic Republic of', accessed 23 Oct. 2023; UN High Commissioner for Refugees (UNHCR), 'Democratic Republic of the Congo: DRC at a glance', Oct. 2023; Integrated Food Security Phase Classification, 'Democratic Republic of the Congo: Acute food insecurity situation for July—Dec. 2023 and projection for Jan.—June 2024', accessed 23 Oct. 2023; World Bank, 'The World Bank in DRC', accessed 25 Oct. 2023; Notre Dame Global Adaptation Initiative (ND-GAIN), 'ND-GAIN Index country rankings 2020', accessed 23 Oct. 2023; Vision of Humanity, 'Global Peace Index 2023', accessed 23 Oct. 2023; and UN Development Programme (UNDP), Human Development Report 2021/2022 (UNDP: New York, 2022).

Climate exposure: Trends and projections

The DRC has a largely equatorial climate, but with significant variations across the country. These can be grouped into three climatic zones: equatorial, tropical and oceanic. In the equatorial climate zone, temperatures and humidity are high and rain falls throughout the year. There is more seasonal variability in the country's tropical climate zones—north and south of the equatorial zone—with distinct dry and rainy seasons. Along the west coast, there is a small zone characterized by an oceanic climate.¹

Temperature: The DRC has experienced a temperature increase of 0.17°C per decade over the last 30 years.² It is predicted that the country will experience an increase of 1.2–2.4°C by 2040–59.³ Increasing temperatures will significantly impact human health, agriculture, water resources and ecosystems.⁴

Precipitation: The meteorological network in the DRC is limited and recorded observations are scarce. Rainfall varies significantly across the country, but there have not been any significant changes in precipitation patterns since 1960. Nevertheless, rainfall is predicted to become more variable and unpredictable, with an increase in extreme weather events. Changing rainfall patterns are expected to have negative impacts on agriculture, water, energy, forestry and health, as well as on available agricultural land, freshwater resources and ecosystems.

Socioecological vulnerabilities

The DRC is entrenched in one of the world's most protracted armed conflicts, with more than 100 armed militias currently operating in the country's eastern provinces. Its rich resource base has also rendered it vulnerable to exploitation by neighbouring countries, which are engaged in illicit trade and war by proxy. After a 10-year lull in the Rwandan-backed rebellion of the March 23 Movement (M23) in eastern DRC, there was a sudden resurgence of M23 activities in 2022.

In addition to the complex conflict dynamics, the DRC is among the five poorest countries in the world, with 62 per cent of the population living below the international poverty line and 42 per cent of children being stunted and malnourished. The DRC is also highly vulnerable to the impacts of climate change, primarily due to socioeconomic factors and its proneness to natural disasters such as landslides and floods.

The impacts of climate change in the DRC are in turn exacerbated by the long history of conflict. ¹⁰ Conflict increases the country's vulnerability to climate change by contributing to increased poverty rates, displacement and immobility, and by eroding social networks and support systems. ¹¹ It has resulted in massive population displacement: the DRC is home to the largest population of IDPs in Africa, with almost 6.4 million people displaced. ¹² The country also hosts over half a million refugees and asylum seekers from neighbouring countries. Meanwhile, over 1 million DRC citizens reside as refugees elsewhere on the African continent.

- ¹ World Bank Group, *Climate Risk Country Profile: Congo, Democratic Republic* (World Bank Group: Washington, DC, 2021).
- ² Dutch Ministry of Foreign Affairs, Climate Change Profile: Democratic Republic of the Congo (East) (Dutch Ministry of Foreign Affairs: The Hague, Apr. 2018); and World Bank Group (note 1).
- ³ World Bank Group (note 1).
- ⁴ World Bank Group (note 1).
- ⁵ World Bank Group (note 1).
- ⁶ German Council on Foreign Relations (DGAP) 'Climate and environmental security in the Democratic Republic of Congo', DGAP Report no. 3, Apr. 2023.
- ⁷ Africa Centre for Strategic Studies, 'Rwanda and the DRC at risk of war as new M23 rebellion emerges: An explainer', 29 June 2022.
- ⁸ World Bank, 'The World Bank in DRC: Overview', accessed 1 Sep. 2023.
- ⁹ Notre Dame Global Adaptation Initiative (ND-GAIN), 'ND-GAIN Index Country Rankings', accessed 15 Aug. 2023, and International Monetary Fund (IMF), 'The Democratic Republic of the Congo: Selected issues'; IMF Country Report no. 22/211, July 2022.
- 10 Verweijen, J., Stable Instability: Political Settlements and Armed Groups in the Congo (Rift Valley Institute: London, 2016).
- ¹¹ Dutch Ministry of Foreign Affairs (note 2).
- ¹² United Nations High Commissioner for Refugees (UNHCR), 'Democratic Republic of the Congo: DRC at a glance', Oct. 2023; and International Displacement Monitoring Centre (IDMC), 'Country profile: Congo, Democratic Republic of—Overview 2022', accessed 1 Oct. 2023.

Conflict reduces the government's capacity to respond to a changing climate and its impacts. The link between climate adaptation and insecurity is recognized by the DRC's national adaptation plan (2022–26), which promises to make interventions conflict sensitive, but it does not provide practical guidance besides the general inclusion of affected communities.¹³ There is little support for adaptation action, however, as climate finance is mainly leveraged to curtail deforestation.¹⁴

Climate-related peace and security risks

Climate change can undermine development gains, exacerbate the dynamics of ongoing violence and disrupt fragile peace processes. Violent conflict and political instability can also weaken community resilience to the effects of climate change. This fact sheet uses four interrelated pathways to navigate the relationship between climate change, peace and security: (a) livelihood deterioration, (b) migration and mobility, (c) military and armed actors, and (d) political and economic exploitation and mismanagement.¹⁵

Livelihood deterioration

Climate change aggravates livelihood and food insecurity in the DRC, which in turn compounds the conflict dynamics. 16 Approximately 25.4 million people are estimated to be experiencing high levels of food insecurity, of which IDPs and people living in conflict zones are the most affected.¹⁷ Assessments of the impacts of climate change on the DRC have identified the agricultural sector as a key vulnerability.11 The agricultural sector is critical to the country's economy and food security, employing over 60 per cent of the population and accounting for 19 per cent of national gross domestic product. 19 As temperatures continue to increase and precipitation is predicted to become more variable, livelihoods will be negatively affected, which is likely to further fuel competition over land, water and other resources. Local communities in the provinces of North Kivu and South Kivu have been documented as suffering from the emergence of new pests, loss of soil fertility and disruptions to agricultural cycles attributed to climate change.20

Increased periods of drought are expected to negatively affect water availability, particularly in southern regions, which will likely increase pressure on water resources by mid-century and endanger households dependent on agriculture. ²¹ The DRC's forests are also crucial for livelihoods and ecosystems. Falling yields are forcing farmers to cut down more forest to increase their production areas. Forests are further threatened by growing demands for charcoal and tropical forest products. ²²

International actors should increase their support for climate adaptation in the DRC. They should emphasize conflict-sensitive adaptation programmes that tackle the root causes of vulnerability and can contribute to peace, in line with the country's national adaptation plan.

- ¹³ Democratic Republic of the Congo (DRC) Deputy Prime Minister's Office and Ministry of Environment and Sustainable Development, National Adaptation Plan to Climate Change (2022–2026), Nov. 2021.
- ¹⁴ DRC Deputy Prime Minister's Office (note 13).
- Mobjörk, M., Krampe, F. and Tarif, K., 'Pathways of climate insecurity: Guidance for policymakers', SIPRI Policy Brief, Nov. 2020.
- ¹⁶ DGAP (note 6); and World Bank Group (note 1).
- ¹⁷ Integrated Food Security Phase Classification (IPC), 'Democratic Republic of the Congo: Acute food insecurity situation for July-Dec. 2023 and projection for Jan.-June 2024', accessed 1 Oct. 2023.
- ¹⁸ Southern African Development Community (SADC), Synthesis Report on the State of Food and Nutrition Security and Vulnerability in Southern Africa 2022 (SADC: 2022).
- ¹⁹ World Bank, 'World Development Indicators', accessed 15 Sep. 2023; and US International Trade Administration, 'Democratic Republic of the Congo—Country Commercial Guide: Agriculture', accessed 1 Sep. 2023.
- ²⁰ Folke Bernadotte Academy, 'Climate-related security risks in Eastern DRC: Local perspectives from North and South Kivu provinces' (forthcoming 2023).
- World Bank Group (note 1).
- ²² UN Development Programme (UNDP) official, DRC country office, Interview with author, 2023.

Migration and mobility

Armed conflict is a key driver of displacement in the DRC and continues to cause massive population movement in its eastern regions. Moreover, the situation is escalating; over 880 000 people have been displaced since the resurgence of violence in North Kivu in March 2022.²³ Populations in the eastern regions are abandoning livelihoods to escape armed conflict.²⁴ IDPs are in turn highly vulnerable to the impacts of climate change, particularly floods and storms. Displaced populations frequently put increased pressure on natural resources as a coping mechanism, contributing to deforestation and land degradation.²⁵

Climate change can contribute to conflict through changing migration and mobility patterns.²⁶ Between 2008 and 2022, 1.7 million Congolese were internally displaced by floods and storms, and there has been a dramatic increase in registered incidents over the last five years.²⁷ Recent research indicates that migration is a frequently used coping strategy for local communities in North Kivu and South Kivu.²⁸ It also suggests that climate change-driven changes in mobility patterns are contributing to conflicts.

While transhumance from the Sahel into the DRC has taken place for hundreds of years, evidence strongly suggests that pastoralists' mobility patterns are changing and that this is partly due to climate change-related droughts and water scarcity in the Lake Chad Basin.²⁹ Mbororo pastoralists, in particular, have moved further north into the wetter climate of eastern DRC over the past 20 years. With increasing transhumance, pressure on scarce resources is growing and tensions and conflicts between herders and farmers are rising.³⁰

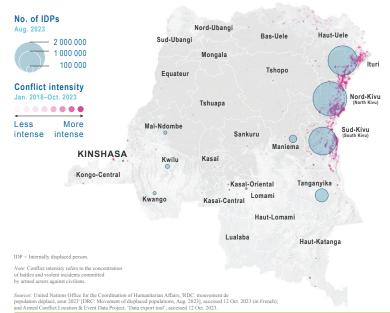
International partners and UN agencies should invest in monitoring systems to strengthen knowledge about the links between climate change, environmental degradation and conflict in the DRC. Monitoring should pay attention to the growing number of internal displacements due to natural disasters such as floods and storms, as well as the changing patterns of transhumance.

Military and armed actors

In the DRC, the operation of non-state armed groups has a significant bearing on environmental degradation and biodiversity loss, for example, from illegal logging and wildlife trading. As climate change and environmental degradation reduce access to land and resources, armed groups will likely expand efforts to occupy arable land and exert control over natural resources.³¹

- UNHCR, 'DRC Emergency: Update 13–26 March 2023', 2023.
 IPC, 'Democratic Republic of the Congo: IPC acute food insecurity snapshot, Jan.–June 2023', May 2023.
- ²⁵ UNDP official (note 22).
- ²⁶ van Baalen, S. and Mobjörk, M., A Coming Anarchy? Pathways from Climate Change to Violent Conflict in East Africa (Stockholm University: 2016).
- ²⁷ IDMC (note 12).
- ²⁸ Folke Bernadotte Academy (note 20).
- ²⁹ Nagabhatla, N. et al., 'Water, conflicts and migration and the role of regional diplomacy: Lake Chad, Congo Basin, and the Mbororo pastoralist', *Environmental Science & Policy*, vol. 122 (Aug. 2021).
- ³⁰ Nagabhatla et al. (note 29); and Tshimanga, R. M. et al., 'An integrated information system of climate-water-migrations-conflicts nexus in the Congo Basin', Sustainability, vol. 13, no. 16 (2021).

Figure 2. IDPs and conflict in the DRC



Both the Armed Forces of the DRC (FARDC) and non-state armed actors are involved in illegal resource extraction.³² This includes informally taxing the mineral sector and being directly involved in the illegal exploitation and trade of natural resources. As the FARDC is part of the state apparatus, its involvement in such extraction undermines the authority of the state. Meanwhile, the involvement of Mai Mai groups, which are local self-protection militias, impacts intercommunity relations.³³ In contexts where armed actors, including the FARDC, control natural resource supply chains and have connections with powerful elites, strengthening governance and reforming the security sector is difficult.³⁴

There is a need to build up the knowledge base and strengthen the capacity for climate security in the DRC, using a long-term perspective. The UN, the DRC government and international partners should establish climate security adviser roles that will support the assessment of climate-related risks, and design and implement policies to alleviate the security risks posed by climate change and environmental degradation. The UN Climate Security Mechanism could also support efforts to mainstream climate security across the UN entities in the country. Further, a joint regional hub on climate security for the UN and regional organizations should be established to connect experiences across national boundaries and provide technical advice, in line with the New Agenda for Peace.³⁵ Its design should take existing regional efforts and recommendations into account.³⁶

- ³¹ DGAP (note 6).
- ³² Stearns, J. K., The War That Doesn't Say Its Name: The Unending Conflict in the Congo (Princeton University Press: Princeton, NJ, Feb. 2022); and Verweijen, J., Schouten, P. and O'Leary Simpson, F., Armed Actors and Environmental Peacebuilding: Lessons from Eastern DRC (United States Institute of Peace: Washington, DC, Nov. 2022).
- ³³ Verweijen, Schouten and O'Leary Simpson (note 32).
- ³⁴ Stearns (note 32); and Verweijen, Schouten and O'Leary Simpson (note 32).
- 35 UN Secretary-General, 'A New Agenda for Peace', Our Common Agenda Policy Brief no. 9. July 2023.
- ³⁶ UN Regional Office for Central Africa, 'Sustaining peace in Central Africa through addressing the adverse impact of climate change on peace and security', June 2022.

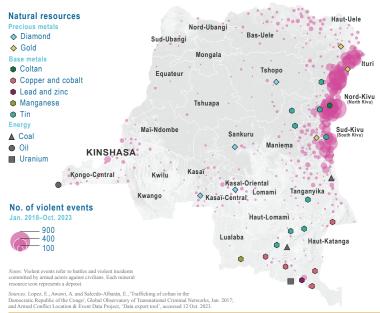
Political and economic exploitation and mismanagement

Congolese President Félix Tshisekedi views the DRC as a 'solution country' for global climate issues, due to its abundance of resources needed for the green energy transition.³⁷ However, the increased demand for key minerals and natural resources poses challenges for the country and has ramifications for peace and security. Megaprojects such as the hydropower Inga 3 dam promise to provide a stable source of green energy for the DRC and the wider region, but they also provide ample risks for corruption and graft.³⁸

Although the DRC is among the world's most geologically endowed countries, extraction has largely failed to provide the population with basic services or better incomes. ³⁹ Moreover, the negative security implications are visible in conflicts between the artisanal and small-scale mining (ASM) sector and international companies backed by the government, at times resulting in violent clashes. ⁴⁰ Recent research has also shown a gendered dimension to the marginalization of this sector. ⁴¹ Despite widespread participation in ASM, women occupy low-paid jobs, hold few decision-making positions and are exposed to environmental hazards and sexual violence.

Curtailing deforestation is the major focus of climate change mitigation in the DRC.⁴² The Congo Basin has the world's second largest area of tropical rainforest and peatlands, storing 8 per cent of global forest carbon stocks.⁴³ The UN's REDD+ framework is a key part of the country's forest-based mitigation programmes.⁴⁴ However, limited capacity to enforce regulations remains a challenge and, since 2010, deforestation has rapidly increased.⁴⁵ Despite national commitments, in practice the sustainable management of forest resources is heavily impaired by conflict and corruption.⁴⁶ The government has also recently auctioned the licensing rights for dozens of oil and gas blocks in parts of the Congo Basin.⁴⁷

Figure 3. Minerals and conflict in the DRC



Relevant UN agencies, the DRC government and the private sector should ensure that the extraction of resources is ecologically sustainable and ethical, and that the revenue from them benefits local communities. In this regard, some promising tools for international actors could include rigorous supply chain due diligence and novel value chain models ⁴⁸

- ³⁷ PRECOP 27, 'DRC, solution country: Managing, developing and protecting natural resources', accessed 1 Oct. 2023.
- 38 BankTrack, 'Inga III: Congo, the Democratic Republic of the', 19 Aug. 2020, accessed 1 Oct. 2023.
- ³⁹ PRECOP 27 (note 37).
- ⁴⁰ Amnesty International, "This is What We Die For"—Human Rights Abuses in the Democratic Republic of the Congo Power the Global Trade in Cobalt (Amnesty International: London, 2021).
- ⁴¹ Matthysen, K., Muller, T. and Bulakali, N. Z., Analysis of the Interactive Map of Artisanal Mining Areas in Eastern Democratic Republic of Congo: 2022 Update (IPIS: Antwerp, Nov. 2022); and Folke Bernadotte Academy (note 20).
- ⁴² Dutch Ministry of Foreign Affairs (note 2).
- ⁴³ UN Environment Programme, 'Critical ecosystems: Congo Basin peatlands', 27 Feb. 2023; World Bank Group (note 1); and UNDP Climate Change Adaptation Portal, 'DR Congo', accessed 15 Sep. 2023.
- ⁴⁴ Kengoum, F. et al., The Context of REDD+ in the Democratic Republic of Congo: Drivers, Agents and Institutions, Center for International Forestry Research (CIFOR) Occasional Paper no. 207 (CIFOR: Bogor, 2020).
- ⁴⁵ Climate Investment Funds, 'Investment Plan: Democratic Republic of Congo', 7 June 2011; Megevand, C., Deforestation Trends in the Congo Basin: Reconciling Economic Growth and Forest Protection (World Bank: Washington, DC, 2013); and UNDP official (note 22).
- ⁴⁶ DGAP (note 6); and Verweijen, Schouten and O'Leary Simpson (note 32).
- ⁴⁷ Gaving, M., 'What's behind the DRC's decision to auction off some of its rain forest?', Council on Foreign Relations, 26 Sep. 2022.
- ⁴⁸ Soulé, F., 'What a US-DRC-Zambia electric vehicle batteries deal reveals about the new US approach toward Africa', Carnegie Endowment for International Peace, 21 Aug. 2023; European Commission, 'Proposal for a directive of the European Parliament and of the Council on corporate sustainability due diligence and amending Directive (EU) 2019/1937', COM/2022/71 final, 23 Feb. 2022; and DGAP (note 6).

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The Climate, Peace and Security Fact Sheets aim to generate reliable, relevant, timely and actionable information and analysis on climate-related peace and security risks in selected countries and regions on the United Nations Security Council agenda.

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