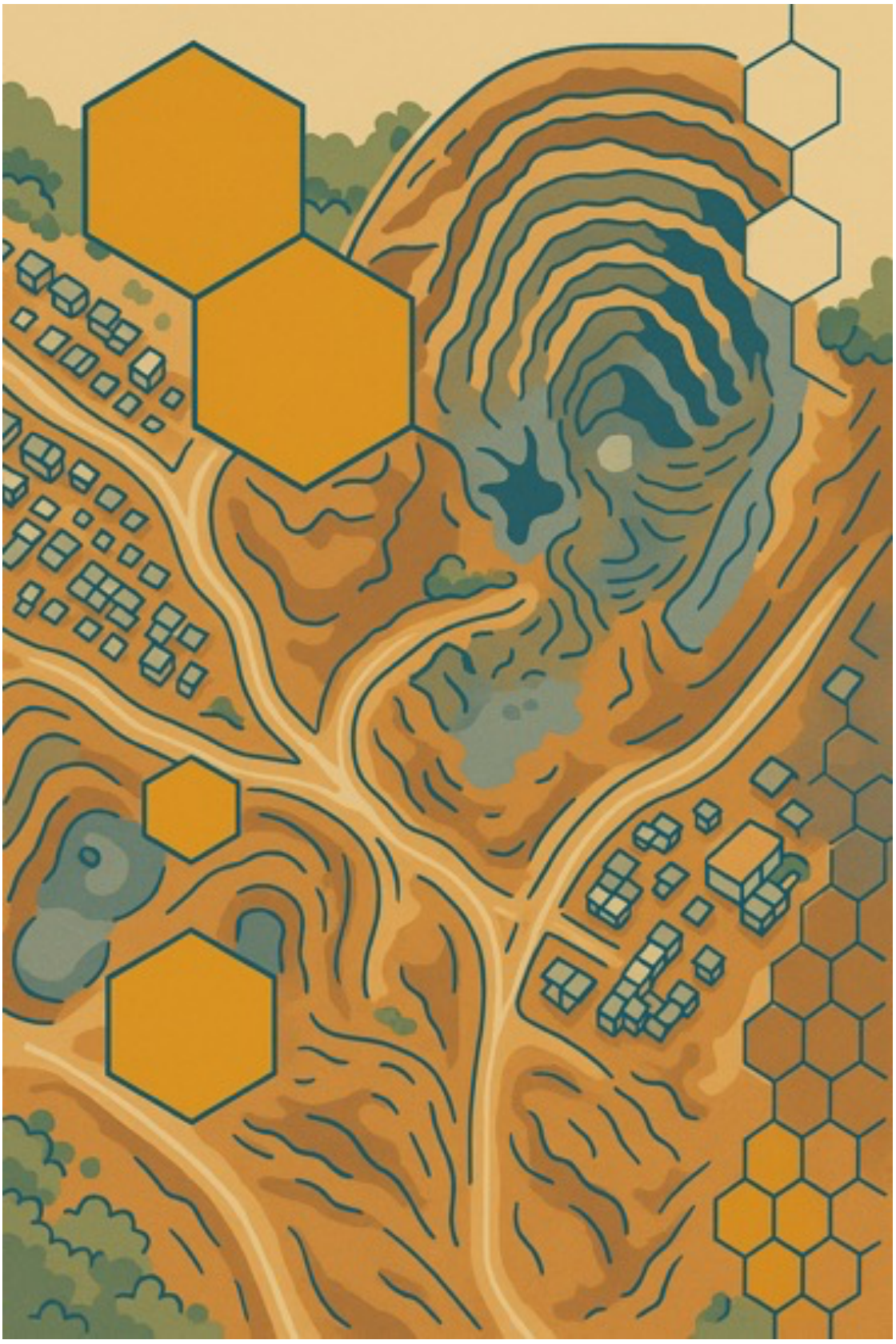
Fault Lines: Mining, Power, and the Politics of Instability in Southeastern DRC



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1 The Argument

Climate change is routinely described as a "threat multiplier" for violent conflict. Donor agendas, security strategies, and development programming increasingly treat it as a primary driver of instability in fragile regions. But in southeastern Democratic Republic of Congo, one of the world's most conflict-affected and resource-critical landscapes, the evidence tells a different story.

Multi-source field research across Katanga Province, combining expert interviews, community surveys, open-source intelligence, and geospatial analysis, found no direct evidence linking climate change to conflict in the region. What it did find was a densely interconnected system of threat multipliers dominated by mining, power dynamics, governance failures, and historical dispossession, forces that conventional climate-security framing routinely obscures.

This matters because how we frame the problem determines how we programme the response. If climate change is misdiagnosed as the primary conflict driver, interventions will prioritise climate adaptation at the expense of addressing the political, economic, and ethno-cultural forces that actually produce instability. In a region where global demand for cobalt is set to intensify extraction pressures dramatically, getting this diagnosis right is not academic, it is operationally urgent.

> *"If we say climate change is coming with a transition of energy and then increase of need of cobalt and economy, okay, there is an impact. But the thing is that people don't feel it actually, and it's not the priority of people thinking about climate change." — Local Expert, Katanga*

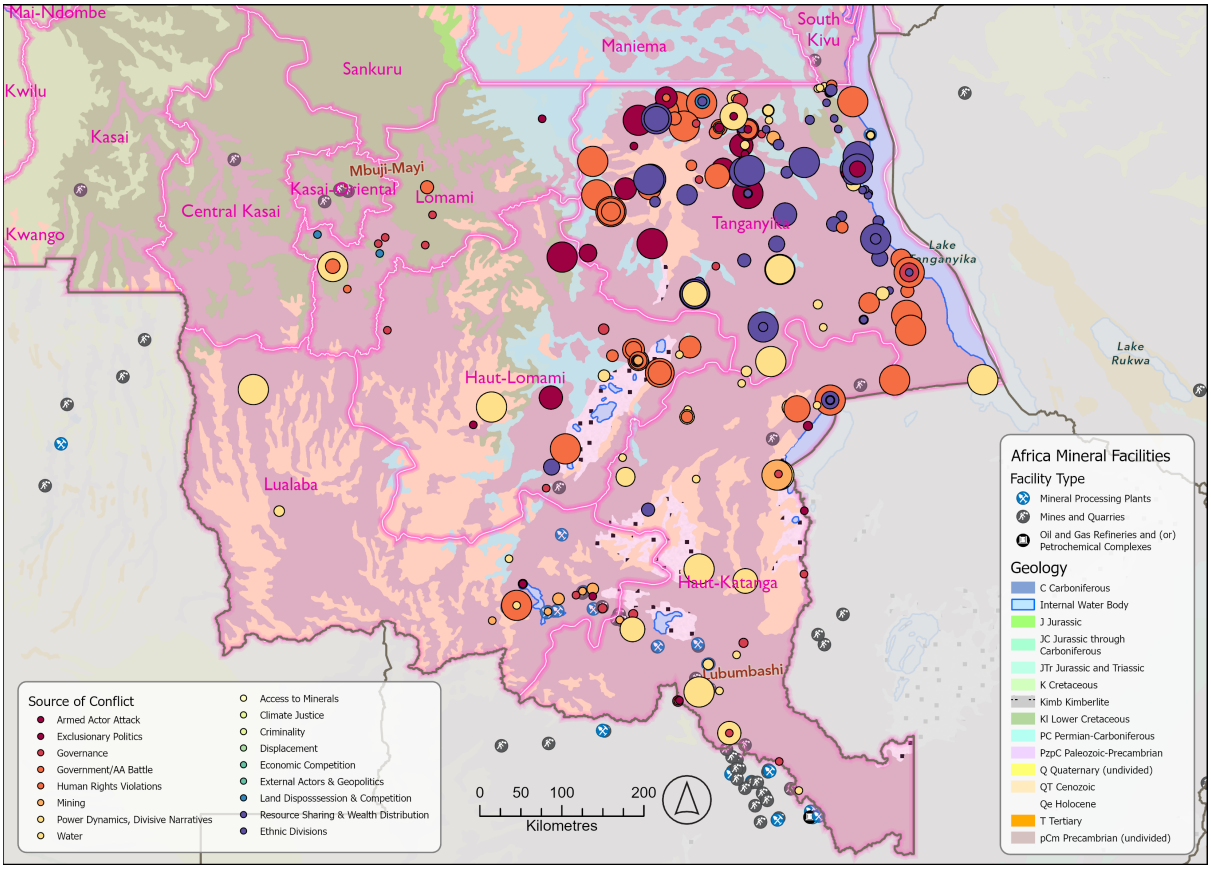
2 The Landscape

Katanga Province sits at the heart of the global cobalt supply chain. It holds some of the world's largest deposits of cobalt, copper, and other critical minerals essential for the renewable energy transition. It is also the site of deep historical conflict, Belgian colonial exploitation, contested independence movements, ethnic in-migration policies, and decades of resource-driven instability.

The region's ecology is equally significant. Katanga straddles the Congo Basin headwaters, hosts fragile savannah and riverine ecosystems, and contains biodiversity of global conservation importance including indigenous Pygmy populations whose cultural and livelihood systems are inextricably linked to the landscape.

This creates what researchers describe as a "perfect storm": climatic variability intersecting with high-value resource extraction, fragile governance, historical grievance, and marginalised populations. The question is not whether these forces interact, they clearly do, but which interactions actually drive conflict, and which are being imposed by external framing.

[MAP 1: The Katanga Cobalt Belt — Mines, Concessions, and Conflict]



Source from thesis: Figure 5.2 (Spread of mines and geological map), Figure 5.3 (Artisanal Mines and Restricted Areas), Figure 5.4 (Active Exploitation and Exploration Licenses), and Figure 5.6 (Conflict Incidents South Katanga 1990–2024). A composite overlay showing mining concession density, artisanal mining zones, and geolocated conflict incidents colour-coded by cause.

3 What Actually Drives Conflict

The research identified six thematic domains of threat multipliers, scored through a risk-and-impact framework combining hazard intensity, exposure breadth, and vulnerability depth. The results are unambiguous: natural resource dynamics and political forces dominate, while climate change ranks as the lowest-impact threat multiplier.

Threat Domain	Driver	Exposure	Vuln.	Risk Score
Natural Resources	4	4	3	48
Political	4	3	3	36
Ethno-Cultural	3	3	3	27
Economic	3	2	2	12
Climate Change	3	2	2	12
Socio-Historical	2	2	2	8

Risk and Impact = Driver × Exposure × Vulnerability (scored 1–5). Source: Adapted IPCC risk framework applied through SPESF conceptual model.

3.1 Mining: The Dominant Multiplier

Mining and its metabolic relations were cited as the primary conflict driver across all expert interviews. Local experts anticipate that as global demands for critical minerals intensify over the next 15 years, mining-related conflict in Katanga will escalate correspondingly.

The research identified multiple conflict pathways through the mining system: tensions between artisanal and industrial miners over site access and regulation; environmental degradation through water pollution, deforestation, and soil contamination; land dispossession driven by mining concessions overriding customary land rights; displacement without adequate compensation; and the influx of foreign companies, particularly Chinese firms, operating with reduced environmental compliance.

Water emerged as the single most cited cause of community-level conflict: 65% of survey respondents identified water disputes as their primary source of tension. Nearly all expert interviewees linked water conflict to mining operations, either through physical access blocked by concessions or contamination of existing sources.

3.2 Power Dynamics: The Force Multiplier

Power dynamics were rated the second most important conflict driver, but their significance extends beyond their own score. Power structures act as a force multiplier across every other threat domain, shaping who controls mineral access, which ethnic groups hold governance positions, how legislation is enforced, and how wealth from extraction is distributed.

The research found that those in power routinely fill influential positions with members of their own ethnic group, creating cycles of exclusionary politics, hostility, and periodic calls for secession. Key power centres include the Ministry of Mines, the head of Gécamines, and the Ministry of Finance and Economy. The ethnicity of the DRC president was identified as a significant influence on conflict dynamics in Katanga.

External geopolitical actors compound these dynamics. US, Chinese, and Russian interests operate through multinational corporations and political engagements, with Chinese investment in Katanga mines particularly extensive. Russia has conducted documented disinformation campaigns in the DRC, with domestic actors increasingly adopting information manipulation as a political tool.

3.3 The Governance Gap

Governance failures emerged across every thematic domain. Environmental Impact Assessments are rarely conducted, and when they are, they fail to integrate conflict sensitivity. The mining cadastre system produces overlapping ownership claims with mining code consistently overriding customary land rights. Compensation frameworks lack transparency. Tax enforcement is weak and corrupted.

Geospatial proxy analysis revealed that governance infrastructure, health facilities, education facilities, electricity access, is concentrated almost exclusively in urban centres and mining sites, leaving vast rural areas functionally ungoverned. This spatial pattern of governance presence maps closely onto the geography of extraction, not the geography of population need.

4 Where Climate Change Fits — And Where It Doesn't

The research did not dismiss climate change. It found real and measurable climate impacts in the region: erratic rainfall causing droughts and floods, declining agricultural yields, rising temperature extremes posing health and safety risks for mine workers, and emerging food security concerns. Survey respondents identified drought (71%) and changing rainfall patterns (41%) as their primary climate concerns.

But critically, none of the datasets, qualitative interviews, quantitative surveys, OSINT analysis, or geospatial mapping, identified climate change as a structural driver of conflict. Expert interviewees did not raise climate change as a significant topic without prompting. Only 2% of survey respondents

believed the climate situation was deteriorating. OSINT sources showed minimal citation of water security (2%) in relation to climate impacts.

The disconnect is telling: communities experience climate impacts, but they do not experience them as conflict drivers. What they experience as conflict drivers is mining, dispossession, ethnic exclusion, and governance failure. The danger of the climate-security framing is that it privileges a narrative that aligns with donor priorities over the lived reality of affected populations.

What communities say drives conflict	What communities say about climate
65% cite water as primary conflict cause	71% cite drought as primary climate concern
57% say conflict impacts livelihoods	81% say agriculture most vulnerable to CC
Mining and power dynamics top expert interviews	CC not raised without prompting
99% concerned about human rights abuses	Only 2% say climate is worsening
OSINT: 11% cite natural resources in conflict	OSINT: 52% see CC as economic opportunity

5 The System That Produces Instability

The research revealed that conflict in Katanga is not produced by any single driver but by the interaction effects between domains. Understanding these feedback loops is essential for effective programming.

5.1.1 The Mining–Governance–Dispossession Loop

Mining concessions override customary land rights, displacing communities. Weak governance fails to enforce compensation or environmental regulation. Displaced communities lose traditional conflict mediation structures and livelihood access. Patronage systems restrict alternative employment. Tensions escalate into localised protest and violence, which the mining industry's private security apparatus suppresses, deepening grievance.

5.1.2 The Ethnicity–Power–Resources Loop

Colonial-era labour migration policies created the Kasai–Katangan ethnic division that persists today. Those in political power allocate governance positions along ethnic lines. Control of mining revenues, land allocation, and public services flows through ethnic networks. Political transitions trigger realignment of these networks, with each presidential change reshaping conflict dynamics in Katanga.

5.1.3 The Global Demand–Local Impact Loop

Rising global demand for cobalt and copper for the renewable energy transition intensifies extraction pressure. This increases competition between industrial and artisanal mining, drives land dispossession, attracts foreign investment with variable environmental standards, and amplifies geopolitical competition between the US, China, and Russia for mineral access. The irony is sharp: the Global North's climate response is itself a conflict driver in the regions supplying the minerals that response depends on.

6 The Evidence Base

This analysis draws on a multi-method research programme designed to triangulate across data types and overcome the limitations of any single source. The methodology reflects the integrated analytical approach that underpins SaltLines' operational framework.

Method	Description
Qualitative Interviews	7 expert interviews (90 mins each) with mining specialists, political economists, and climate/environment specialists. Conducted remotely in English and French.

Quantitative Surveys	303 community-level surveys conducted by World Vision across Katanga in September 2023, covering climate exposure, conflict exposure, vulnerabilities, and coping strategies.
Open-Source Intelligence	Bilingual OSINT analysis across four historical periods (1992–2024) using Google searches, print media, Facebook, and X.
Geospatial Analysis	Multi-source GIS integrating ArcGIS, ESRI Living Atlas, World Bank, ACLED, Uppsala, EJAtlas, Global Forest Watch, FAO, WRI Aqueduct, CAMI, and Copernicus.
Analytical Framework	Adapted IPCC risk assessment integrated with Ostrom's SESF and Selby's political ecology framing, producing a novel Socio-Political-Ecological Systems Framework (SPESF).

7 What This Means for Programming

The findings challenge dominant donor narratives and carry direct implications for how development, peacebuilding, and environmental programming is designed in resource-rich, conflict-affected settings.

Stop leading with climate security

Framing conflict through a climate-security lens in contexts where mining, governance, and power dynamics are the demonstrated drivers risks misallocating resources and designing interventions that address symptoms rather than causes. Climate adaptation programming remains essential, but it should not be the organising logic for conflict-sensitive programming in Katanga.

Centre mining governance

Anti-corruption measures, transparent mineral revenue management, EIA enforcement, formalisation of the artisanal mining sector, and equitable compensation frameworks should be the priority focus for conflict-reduction programming. These are not secondary concerns, they address the highest-scoring threat multiplier directly.

Address historical injustice

Colonial legacies are not historical background, they are active conflict drivers. Land restitution, reparative justice initiatives, inclusive governance reform, and investment in infrastructure beyond mining corridors are essential for addressing the structural conditions that produce instability.

Integrate, don't silo

The SPESF framework developed through this research demonstrates that effective analysis requires cross-domain integration. Climate, conflict, governance, economy, ethnicity, and history interact through feedback loops that cannot be addressed through single-sector programming. Analytical tools like SaltLines' LSF-TC framework are designed precisely for this kind of systems-level integration.

8 The SaltLines Lens

This research demonstrates the kind of integrated, multi-source intelligence that SaltLines delivers through its Salt² platform. The analytical architecture used in this study, combining Earth Observation, field-based research, OSINT, and political-ecology frameworks within a systems model, provides the base for SaltLines' operational methodology.

The adapted SPESF conceptual framework developed through this research directly informs the TC1 (Contextual Systems) and TC2 (Commodity Structures and Behaviours) analytical domains within Salt². The six thematic areas of the threat multiplier analysis map onto SaltLines' indicator architecture, demonstrating how academic rigour translates into operational intelligence.

For clients navigating commodity risk, ESG compliance, or conflict-sensitive investment in the DRC and comparable contexts, this research illustrates what decision-grade intelligence looks like when it starts with the right questions rather than inherited assumptions.

This summary is derived from MSc research conducted at SOAS University of London (CeDEP) with fieldwork support from World Vision. Data collection included research conducted under ethical approval in August 2023.

SaltLines Geo

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