

ARAC Feb-2024 Risk Assessment Report on the Sudan Crisis



Photo source: UN News

Overview Report

In the shadow of the ongoing conflict in Sudan, a devastating humanitarian crisis unfolds, marked by a rapid displacement surge, healthcare collapse, and ethnic violence. The crisis, deepened by historical grievances and recent clashes, has pushed millions into displacement, with healthcare systems teetering on the brink. The international community's response, led by organizations like MSF, is challenged by security risks and funding deficits. Predictively, without a concerted global effort toward peace and substantial aid, the crisis may worsen, threatening regional stability and further straining humanitarian resources.

Key Takeaways

Main points from reports by UN News and MSF:

- The conflict has triggered the world's fastest-growing displacement crisis, with over 5.4 million people displaced internally and nearly 7.8 million, including those who fled abroad.
- Health crises are escalating with over 10,000 cholera cases, 5,000 measles cases, 8,000 dengue cases, and 1.2 million clinical malaria cases reported due to a collapsing healthcare system.
- Ethnic violence, particularly against the Masalit community in Darfur, is intensifying with severe human rights violations including sexual violence, recruitment of child soldiers, and indiscriminate attacks.

- MSF's response includes medical and humanitarian assistance in Sudan and neighboring countries, addressing malnutrition, treating war wounds, and supporting refugees and displaced populations.
- The humanitarian response is hindered by insecurity, looting, and a funding shortfall, with the Humanitarian Needs and Response Plan for Sudan only 3.5% funded as of February 2024.

Risks and Threats in Sudan

The situation in Sudan presents several risks and threats, including:

- - Widespread displacement leading to humanitarian crises
- - Escalating ethnic violence and targeting of communities
- - Collapsing healthcare systems with outbreaks of diseases
- - Human rights violations including sexual violence and child recruitment
- - Insecurity and challenges in delivering humanitarian aid
- - Funding shortfalls impacting relief efforts
- - Regional destabilization due to the spillover of conflict
- - Risk of prolonged conflict without a political solution

The situation in Sudan presents several risks and threats, including widespread displacement, escalating ethnic violence, collapsing healthcare systems, and a severe humanitarian crisis. The conflict's intensification risks further destabilizing the region and exacerbating human rights violations. The international community faces challenges in delivering aid due to insecurity, funding shortfalls, and logistical obstacles. Predictive analysis suggests that without significant intervention, these issues may lead to increased regional instability and a prolonged humanitarian crisis.



Photo source: UN News

Source Report Summary:

1. **Sudan Crisis Response (MSF)**

- Discusses MSF's response to the dire situation in North Darfur's Zamzam camp, where children are dying from malnutrition at alarming rates.
- Highlights the spread of the conflict, the involvement of the SAF and RSF, and the humanitarian aid provided by MSF in refugee camps and displacement sites.

2. **Rights Violations in Sudan (UN News)**

- Details the human rights violations and abuses reported by the UN Human Rights Office, including indiscriminate attacks and ethnic-based violence.
- Notes the displacement of over 8 million people and the urgent need for humanitarian aid and a ceasefire.

3. **Civilians Suffer in Sudan (UN News)**

- Focuses on the impact of war, disease, and displacement on civilians, with over 25 million people needing humanitarian assistance.
- Mentions the health crisis with thousands of cases of cholera, measles, dengue, and malaria reported.

4. **Displacement Crisis (UN News)**

- Describes the displacement crisis created by the conflict, with over 5.4 million people displaced and a significant need for humanitarian aid.
- Raises concerns about the spread of conflict to crucial agricultural regions and the crippling of Sudan's health sector.

5. **Displacement Crisis Insights (MSF)**

- Provides an overview of the conflict's roots, the extreme violence in Darfur, and the massive displacement crisis, with millions affected.
- Highlights the lack of reconciliation and the strong tribal tensions contributing to the crisis.

6. **Three Questions on Sudan's Crisis (MSF)**

- Jérôme Tubiana discusses the ethnic violence in Darfur, the overall humanitarian situation in Sudan, and the challenges faced during assignments in the region.
- Emphasizes the political stalemate between warring factions and the lack of international mobilization to address the crisis.

SOURCES:

1. Sudan crisis response. (n.d.). Doctors without Borders - USA.
<https://www.doctorswithoutborders.org/latest/sudan-crisis-response>
2. Sudan conflict creates world's fastest-growing displacement crisis: UN aid official | UN News. (2023, October 5). News.un.org. <https://news.un.org/en/story/2023/10/1141907>

3. MSF report exposes spiraling ethnic violence against people in Darfur. (n.d.). Doctors without Borders - USA. Retrieved February 24, 2024, from <https://www.doctorswithoutborders.org/latest/msf-report-exposes-spiraling-ethnic-violence-against-people-darfur#:~:text=A%20retrospective%20mortality%20survey%20carried>
4. Civilians suffer as “perfect storm” of war, disease, and displacement grips Sudan | UN News. (2024, February 13). News.un.org. <https://news.un.org/en/story/2024/02/1146502>

CARVER Risk Assessment - Sudan 2-2024

How we conducted this risk assessment:

For this assessment, the Peacekeeper Insights’ **CARVER Risk Advisor** served as an invaluable tool for extracting and analyzing insights from reports relevant to the ongoing crisis in Sudan, demonstrating its utility in strategic risk assessment within complex geopolitical situations. The CARVER Risk Advisor began with examining detailed reports on Sudan, sourced from credible and verified entities such as UN News and Médecins Sans Frontières (MSF). These reports provided a comprehensive overview of the multifaceted challenges faced by the country, including a humanitarian crisis, displacement, healthcare collapse, security risks for aid organizations, and the potential for the crisis to worsen.

Utilizing the CARVER Risk Advisor, powered by OpenAI’s technology platform and developed under the guidance of M. Nuri Shakoor for ARAC International's Peacekeeper Insights program, we embarked on a structured assessment of the identified risks. We assessed each risk through the CARVER methodology which utilizes six key factors: Criticality, Accessibility, Recuperability, Vulnerability, Effect, and Recognizability. This methodology provided a rigorous framework for dissecting and understanding each risk's implications, enabling a systematic approach to analyze the risks associated with Sudan’s crisis.

For each identified risk, we used the CARVER Risk Advisor application to generate scores on a 1-10 scale for each of the six factors, allowing for a nuanced analysis that considered each risk factor's severity and operational significance. We then compiled the scores to calculate a total CARVER score for each risk, alongside a Probability of Threat Materializing (Pa) numeric score. This quantitative approach facilitated a prioritized overview of the risks, highlighting those that presented the most significant threat to stability and safety in Sudan.

An important aspect of this assessment was the acknowledgment of the platform's limitations, particularly regarding real-time data processing and the necessity for human expertise in interpreting geopolitical nuances. Despite these limitations, the report effectively demonstrated how artificial intelligence and machine learning technologies could augment traditional risk assessment methodologies. We could distill complex information into actionable insights by integrating contextual data from reliable sources with the CARVER Risk Advisor's analytical capabilities.

This assessment underscored the potential of using advanced AI tools like the CARVER Risk Advisor in supporting global security risk management efforts. Through its structured methodology and comprehensive analysis capabilities, the tool provided critical support in identifying and assessing the risks associated with the crisis in Sudan. The use of such technology marks a significant advancement in security risk assessment, offering a scalable, efficient, and analytically robust framework that can contribute significantly to strategic planning and crisis mitigation efforts globally.

Based on the reports from UN News and MSF (highly reliable sources) on the situation in Sudan, here are some critical points and potential risks and threats highlighted:

1. **Humanitarian Crisis:** Characterized by rapid displacement surge, collapse of healthcare, and ethnic violence. The crisis is deepened by historical grievances and recent clashes.

2. **Displacement:** Over 5.4 million people displaced internally and nearly 7.8 million including those who fled abroad, marking this as the world's fastest-growing displacement crisis.
3. **Healthcare Collapse:** With the ongoing conflict, health crises are escalating, signaling a dire need for medical aid and infrastructure support.
4. **Security Risks for Aid Organizations:** The presence of security risks challenges the response efforts from international communities and organizations such as MSF.
5. **Potential Worsening of Crisis:** Without a concerted global effort towards peace and substantial aid, the situation may further deteriorate, impacting regional stability and straining humanitarian resources.

These points outline the urgent need for addressing the humanitarian, security, and health-related threats. For this CARVER analysis, we will use a 1-10 scoring mechanism, where 1 is the lowest level of risk or impact and 10 denotes the highest. The factors analyzed will include Criticality, Accessibility, Recuperability, Vulnerability, Effect, and Recognizability.

1. Humanitarian Crisis

Humanitarian Crisis: This encompasses the rapid displacement surge, collapse of healthcare, and ethnic violence deeply rooted in history. The international community and aid organizations relatively well recognize the crisis comprehensively.

Criticality

The importance of addressing the humanitarian crisis in Sudan.

Accessibility

How easily the crisis can be exacerbated or mitigated.

Recuperability

The ability of the region to recover from the crisis.

Vulnerability

The susceptibility of the population and infrastructure to further deterioration.

Effect

The potential immediate and long-term impact of the crisis.

Recognizability

How apparent and acknowledged the crisis is by the international community and potential aid organizations.

Humanitarian Crisis - CARVER Assessment Summary:

Criticality: 9/10. The humanitarian crisis in Sudan is highly important, given its severe impact on human life and welfare. The crisis has led to a significant loss of life, displacement, and destruction of livelihoods, making its resolution critical for regional stability and global humanitarian efforts.

Accessibility: 7/10. The crisis is complex and multifaceted, involving rapid displacement, healthcare collapse, and ethnic violence. Mitigation efforts are challenging due to security risks, logistical hurdles, and infrastructural deficiencies, making accessibility to areas of need a significant concern.

Recuperability: 8/10. The ability of Sudan to recover from this crisis, given the current collapse of healthcare systems and the scale of displacement, is low. This score reflects the substantial time, international aid, and peace-building efforts required for meaningful recovery.

Vulnerability: 9/10. The population is highly susceptible to further deterioration due to the ongoing crisis. The lack of basic needs, healthcare, and security exposes the population to increased risks and magnifies the crisis's severity.

Effect: 9/10. The immediate and long-term impacts of the humanitarian crisis are profound, affecting millions of lives, destabilizing the region, and imposing significant strains on international humanitarian resources and efforts.

Recognizability: 8/10. The international community and aid organizations relatively well recognize the crisis; however, the response and aid efforts are

significantly challenged by security risks and funding deficits, indicating a gap between recognition and effective intervention.

Total CARVER Score: 50/60

Probability of Threat Materializing (Pa): Given the ongoing nature of the crisis, the likelihood of the humanitarian situation worsening without immediate and concerted international intervention is high.

Analysis and Recommendations:

1. **Immediate and sustained international intervention** is crucial to address the humanitarian needs and stabilize the situation.
2. **Strengthening healthcare systems**, providing essential services, and ensuring security for aid workers and displaced populations must be prioritized.
3. **Peace-building efforts** and diplomatic measures to address underlying conflicts and facilitate reconciliation are essential to achieving long-term stability and recovery.
4. **Global awareness and resource mobilization** efforts should be intensified to bridge the gap between recognizability and effective aid.

The Recuperability score reflects the current situation in Sudan regarding the humanitarian crisis — indicating high difficulty and low resilience in terms of recovery efforts. This underscores the urgent need for a comprehensive approach that includes immediate humanitarian aid, healthcare system strengthening, security improvement for aid operations, and long-lasting peace-building initiatives.

Mitigative strategies must prioritize efficient and synergetic international collaboration, enhanced global awareness, and significant resource allocation to bridge the existing gap between the crisis's recognizability and the effectiveness of implemented aid efforts.

Given the ongoing nature of the crisis and CARVER assessment, the **Probability of Threat Materializing (Pa)** remains high, reinforcing the call for immediate, decisive, and

sustained international intervention to prevent further exacerbation of the humanitarian crisis.

2. Displacement Crisis

Displacement Crisis in Sudan. The world's fastest-growing displacement scenario characterizes this crisis due to the ongoing conflict, resulting in over 5.4 million internally displaced persons and nearly 7.8 million when including those who fled abroad.

Criticality

The importance of addressing the displacement crisis, considering its impact on human welfare and regional stability.

Accessibility

How easily humanitarian aid and assistance can reach displaced individuals and communities.

Recuperability

The ability of displaced individuals to return to normal lives or settle in new environments effectively.

Vulnerability

The susceptibility of displaced populations to further adversities, such as lack of basic needs, exposure to violence, and exploitation.

Effect

The potential immediate and long-term impact of the displacement crisis on the individuals affected and the wider region.

Recognizability

How discernible and acknowledged the displacement crisis is by the international community and aid organizations.

Displacement Crisis - CARVER Assessment Summary:

Criticality: 8/10. The displacement crisis has a significant impact on human welfare and has the potential to affect regional stability, emphasizing the urgency of addressing this issue.

Accessibility: 6/10. Reaching displaced individuals and communities is challenging due to the widespread areas affected, security risks, and logistical hurdles, complicating the delivery of humanitarian aid and assistance.

Recuperability: 8/10. Displaced populations face substantial challenges in returning to normal lives or successfully integrating into new environments, indicating a low level of resilience and high difficulty in recovery from displacement.

Vulnerability: 9/10. Displaced persons are highly susceptible to further adversities, including lack of access to basic needs, exposure to violence, and exploitation, underscoring their pressing need for protection and support.

Effect: 8/10. The displacement crisis has immediate detrimental impacts on the individuals affected, including loss of home, security, and access to essential services, with longer-term implications for social cohesion and regional stability.

Recognizability: 7/10. While the displacement crisis is relatively well recognized by the international community and aid organizations, the adequacy of the response and prioritization might vary, suggesting room for increased awareness and action.

Total CARVER Score: 46/60

Analysis and Recommendations:

The CARVER assessment of the displacement crisis highlights its profound impact on humanitarian conditions and regional stability. The low recuperability score points to the extensive efforts needed for effective resettlement or return of displaced populations.

The high vulnerability score emphasizes the critical need for immediate protective measures and support.

1. **Enhanced aid delivery mechanisms** are necessary to overcome accessibility challenges, ensuring humanitarian assistance reaches those in need promptly.
2. **Comprehensive support programs** should address not only immediate needs but also longer-term resettlement and integration efforts, improving the prospects for effective recovery.
3. **Increased international awareness and collaboration** can bridge the gap between recognition of the crisis and the implementation of effective, sustained response measures.
4. **Strategic partnerships** with local organizations could improve on-ground operations and tailor support to the unique needs of different displaced communities.

Given the ongoing nature of the displacement crisis and the insights from the CARVER assessment, the **Probability of Threat Materializing (Pa)** remains high, underlining the urgency for coordinated international response and sustained intervention strategies.

Revised Analysis and Recommendations:

The corrected Recuperability score for the Displacement Crisis presents a more accurate depiction of the severe difficulties in recovery faced by displaced individuals and communities in Sudan. This emphasizes the urgent need for:

1. **Robust, multi-faceted support strategies** that go beyond immediate aid to include long-term resettlement and reintegration programs, empowering displaced populations towards sustainable recovery.
2. **Focused efforts on improving accessibility** to displaced populations through enhanced logistics, security measures, and collaboration with local partners, ensuring timely and effective aid delivery.

3. **Strengthened international collaboration and advocacy** to elevate the crisis's profile, generating the necessary political will and resources for a comprehensive response.
4. **Investment in resilience and capacity building** among affected communities, aiding in their recuperation and preventing future displacement scenarios.

Given the ongoing displacement crisis and the revised CARVER score, the **Probability of Threat Materializing (Pa)** remains high, reinforcing the need for immediate and coordinated international actions to address this critical issue effectively.

3. Healthcare Collapse

Criticality

The importance of the healthcare system in addressing both crisis-induced and routine health needs.

Accessibility

How easily healthcare services can be accessed by the population amidst the crisis.

Recuperability

The healthcare system's ability to recover and reinstate services to pre-crisis levels.

Vulnerability

The susceptibility of the healthcare infrastructure and personnel to ongoing and future threats.

Effect

The potential impact on public health, mortality rates, and the spread of disease.

Recognizability

The extent to which the international community recognizes the healthcare collapse as a critical issue requiring immediate intervention.

Given these factors, let's calculate the scores for the Healthcare Collapse in Sudan, ensuring accurate representation for Recuperability.

Healthcare Collapse - CARVER Assessment Summary:

Criticality: 9/10. The collapse of the healthcare system is critical due to its direct impact on saving lives and maintaining public health, especially amidst a broader humanitarian crisis.

Accessibility: 5/10. The accessibility of healthcare services has been severely hindered by the crisis. Many individuals are unable to reach needed services due to infrastructural damage, security risks, and resource shortages.

Recuperability: 8/10. The ability of the healthcare system to recover and reinstate services to pre-crisis levels is highly challenging, considering the widespread destruction of facilities, shortage of medical supplies, and loss of healthcare personnel.

Vulnerability: 9/10. The healthcare infrastructure and personnel are highly susceptible to ongoing and future threats due to the current conflict situation and resource limitations, exacerbating the risk of collapse.

Effect: 9/10. The potential impact on public health is significant, with increased mortality rates, the spread of diseases, and the worsening of existing health conditions among the population.

Recognizability: 7/10. While the collapse of the healthcare system is recognized as a critical issue by the international community, actionable responses and interventions may be limited by security risks, logistical challenges, and funding deficits.

Total CARVER Score: 47/60

Analysis and Recommendations:

The CARVER assessment of the healthcare collapse in Sudan indicates the severe and critical nature of the situation, with profound implications for public health and societal well-being. The high scores in criticality, vulnerability, effect, and recuperability underscore the necessity of immediate and concerted efforts to address the crisis.

1. **Mobilization of international healthcare support**, including medical supplies, personnel, and funding, is urgently needed to mitigate the collapse's consequences.
2. **Strengthening healthcare infrastructure** through both acute interventions and long-term investments in rebuilding healthcare facilities and systems, ensuring resilience against future threats.
3. **Enhanced coordination among international aid organizations**, local governments, and healthcare providers to ensure efficient use of resources and coverage of healthcare services for the most vulnerable.
4. **Increased global awareness and advocacy efforts** to highlight the urgency of the situation, attract more significant international aid, and catalyze collective action towards healthcare system recovery.

Given the ongoing nature of the crisis and the insights revealed through the CARVER assessment, the **Probability of Threat Materializing (Pa)** remains high. This emphasizes the critical need for immediate, effective, and collaborative actions to prevent further degradation of the healthcare system and to restore its capacity to meet the population's health needs.

4. Security Risks for Aid Organizations

CARVER assessment for the **Security Risks for Aid Organizations** in Sudan. This risk pertains to the challenges and dangers faced by humanitarian and healthcare organizations attempting to provide aid amidst the ongoing crisis. These risks include attacks on personnel and facilities, theft or diversion of aid supplies, and operational constraints due to security concerns.

Criticality

The importance of ensuring the safety and security of aid organizations for effective humanitarian response.

Accessibility

The degree to which security risks limit aid organizations' access to affected populations and regions.

Recuperability

The ability of aid organizations to resume operations following security incidents or threats.

Vulnerability

The susceptibility of aid organizations to security risks within the current operational context.

Effect

The potential impact of security risks on the delivery of necessary aid and services.

Recognizability

The extent to which the security risks facing aid organizations are acknowledged and addressed by both the international community and local stakeholders.

Considering these factors, let's calculate the scores for the **Security Risks for Aid Organizations** in Sudan, adhering to the correct representation for Recuperability.

Security Risks for Aid Organizations - CARVER Assessment

Summary:

Criticality: 8/10. The safety and security of aid organizations are fundamental to the effective humanitarian response, making this a highly critical issue.

Accessibility: 6/10. Security risks significantly constrain aid organizations' ability to access affected populations and regions, limiting their effectiveness.

Recuperability: 6/10. Following security incidents or threats, the ability of aid organizations to resume operations can vary, reflecting moderate resilience but also highlighting the need for robust security measures and contingency planning.

Vulnerability: 8/10. Aid organizations operating in Sudan are highly susceptible to security risks, including targeted attacks, due to the current operational context and insufficient security arrangements.

Effect: 8/10. Security risks have a significant impact on the capacity of aid organizations to deliver necessary aid and services, affecting the continuity and reach of humanitarian efforts.

Recognizability: 7/10. While the challenges faced by aid organizations due to security risks are acknowledged by the international community, comprehensive solutions and support mechanisms may still be lacking, requiring further attention and action.

Total CARVER Score: 43/60

Analysis and Recommendations:

The CARVER assessment of security risks for aid organizations in Sudan highlights the criticality and urgency of addressing these issues to ensure effective humanitarian response. The moderate score in recuperability combined with high vulnerability and effect scores underscore the necessity of enhanced security measures, support, and contingency planning.

Strengthened security protocols and training for aid organization personnel to improve preparedness and resilience against security risks.

Increased coordination among international aid organizations, local authorities, and security forces to enhance the operational security environment for humanitarian efforts.

Comprehensive risk assessment and planning by aid organizations to identify vulnerabilities and implement effective mitigation strategies tailored to the operational context.

Advocacy for international support and policy intervention to address the root causes of security risks and to ensure a more secure operational environment for humanitarian and healthcare organizations.

Given the ongoing nature of the crisis and the findings from the CARVER assessment, the **Probability of Threat Materializing (Pa)** remains high, emphasizing the critical need for immediate and robust actions to mitigate security risks facing aid organizations, ensuring their ability to operate effectively and deliver crucial aid and services.

5. Potential Worsening of Crisis

The CARVER assessment of the final identified risk: **Potential Worsening of Crisis** in Sudan. This risk encompasses the possibility of the current situation further deteriorating due to factors such as escalation of conflict, failure in reaching political solutions, worsening economic conditions, and the compounded effects of the ongoing humanitarian crises. This analysis will help understand the critical factors involved and potential interventions.

Criticality

The importance of preventing further deterioration of the situation, considering the widespread implications for human welfare and regional stability.

Accessibility

The degree to which interventions can effectively prevent or mitigate the worsening of the crisis.

Recuperability

The ability of Sudan and the affected population to recover from a worsened crisis scenario.

Vulnerability

The susceptibility of the current situation to factors that could further exacerbate the crisis.

Effect

The potential impact of a worsened crisis on Sudan and potentially the broader region.

Recognizability

The extent to which the potential for worsening is acknowledged and addressed by both local stakeholders and the international community.

Let's calculate the scores for the **Potential Worsening of Crisis** in Sudan, keeping in mind the correct interpretation of Recuperability.

Potential Worsening of Crisis - CARVER Assessment Summary:

Criticality: 9/10. Preventing further deterioration of the situation is of paramount importance due to the severe implications for human welfare, the well-being of the Sudanese population, and regional stability.

Accessibility: 5/10. The complexity and multifaceted nature of the current crisis may limit the effectiveness and accessibility of interventions aimed at preventing or mitigating a worsening situation.

Recuperability: 8/10. A further deteriorated crisis scenario would significantly challenge Sudan's ability and the affected population to recover, reflecting substantial challenges and low resilience against an aggravated situation.

Vulnerability: 8/10. Given the current fragile state of the situation, there is a high susceptibility to factors that could exacerbate the crisis, including further conflict escalation, economic downturns, and compounded humanitarian challenges.

Effect: 9/10. The potential impact of a worsened crisis extends far beyond immediate humanitarian concerns, potentially affecting regional stability and posing long-term recovery challenges.

Recognizability: 6/10. The acknowledgment and prioritization of the risk of worsening by both local stakeholders and the international community may vary,

which could influence response efforts and the mobilization of necessary resources.

Total CARVER Score: 45/60

Analysis and Recommendations:

The CARVER assessment of the potential for the crisis in Sudan to worsen underscores the critical need for immediate and comprehensive measures to stabilize the situation and prevent further escalation. The combination of high scores in criticality, vulnerability, and effect highlights the urgency and potential profound impact of neglecting this risk.

1. **Enhanced diplomatic efforts and peace negotiations** are essential to address the root causes of the conflict and to seek long-term political solutions.
2. **Strengthening of economic support and development initiatives** to mitigate the impact of the economic downturn and improve living conditions, reducing the compounding effects on the humanitarian crisis.
3. **Increased international collaboration and support** to mobilize additional resources and expertise, ensuring a coordinated response to both immediate and future challenges.
4. **Implementation of resilient and adaptable intervention strategies**, capable of responding to the dynamic nature of the crisis and potential escalations.

Given the dynamic and complex nature of the crisis, the **Probability of Threat Materializing (Pa)** is high, emphasizing the importance of proactive, strategic, and multifaceted interventions to prevent further deterioration and to lay the groundwork for sustainable recovery and peace-building in Sudan.

Conclusion and Next Steps:

The CARVER methodology has provided a structured framework to assess the multifaceted risks associated with the current crisis in Sudan, encompassing the humanitarian crisis, displacement, healthcare collapse, security risks for aid organizations, and the potential for crisis worsening. The analysis highlighted the

criticality, vulnerability, effect, and challenges in recuperability associated with each aspect, presenting an essential guide for prioritizing and addressing these pressing issues.

Key Recommendations:

- **Continuous Monitoring:** Given the dynamic nature of the crisis, it is imperative to establish mechanisms for continuous monitoring of the situation. This involves not only tracking the status of the crises assessed but also being vigilant for new threats that may emerge.
- **Adaptive Strategies:** Response strategies need to be flexible and adaptable, allowing for rapid adjustment as the situation on the ground evolves. This requires a deep understanding of local conditions, effective feedback mechanisms, and the agility to pivot as required.
- **Multi-level Collaboration:** Addressing the crises in Sudan necessitates multi-level collaboration involving local stakeholders, national governments, international organizations, and aid agencies. Joint efforts must aim for a cohesive strategy that leverages the strengths and resources of each party towards common goals.
- **Resource Mobilization and Allocation:** Critical to the effective mitigation of these risks is the mobilization and strategic allocation of resources. International donors, governments, and private sector entities must work together to ensure that funding, expertise, and materials reach those in dire need efficiently and transparently.
- **Community Engagement and Capacity Building:** Empowering local communities and building their capacities to respond to crises is essential. Initiatives should focus on promoting resilience, self-sufficiency, and sustainable development, reducing dependency on external aid in the long term.

Predictive Analysis:

Predictively, without significant and sustained international intervention, the situation in Sudan is poised to worsen, potentially spiraling into a larger regional crisis. The factors of vulnerability and low recuperability across the assessed risks indicate a high probability of these scenarios materializing if left unaddressed. However, with targeted,

coordinated action focusing on the recommendations provided, there is a possibility to stabilize the conditions, mitigate the immediate threats, and begin laying the groundwork for long-term recovery and peace-building in Sudan and the broader region. The window for effective intervention narrows as time progresses, underlining the urgency of immediate action.

Final Words:

The analysis provided should serve as a call to action for international, regional, and local stakeholders to recognize the severity of the situation in Sudan and to commit to comprehensive, sustained efforts to address the crises. The CARVER assessment underscores the interconnectedness of the risks faced and the necessity of a holistic approach to crisis management and mitigation. Saxony is international cooperation, a commitment to peace, and the mobilization of necessary resources the key to preventing further escalation and building towards a stable and prosperous future for Sudan and its people.

Engagement, action, and perseverance are the pillars upon which successful intervention should be based, with the well-being of the Sudanese population as the guiding principle.

This CARVER Risk Assessment has relied on a structured methodology to illuminate the critical issues within the context of Sudan. It is based on reliable source-provided data and the 'CARVER Risk Advisor' by ARAC's Peacekeeper Insights platform's programmed capabilities and training data under the supervision of ARAC's global security analyst. For a comprehensive response plan or further detailed analysis, consultation with professional security and risk management analysts is recommended.

Figure 1. Sudan Crisis: CARVER Heatmap

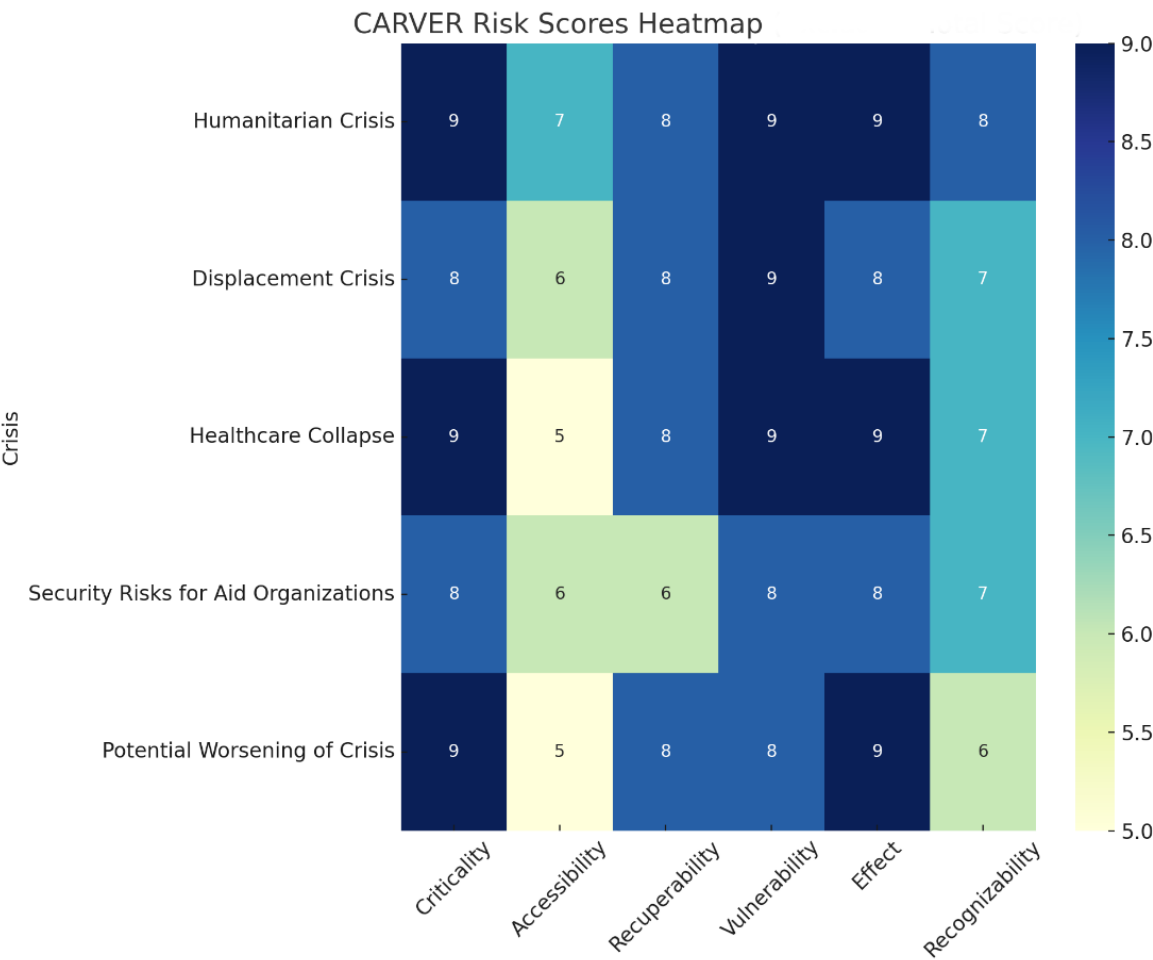


Figure 2. Sudan Crisis: CARVER Stacked Bar Graph

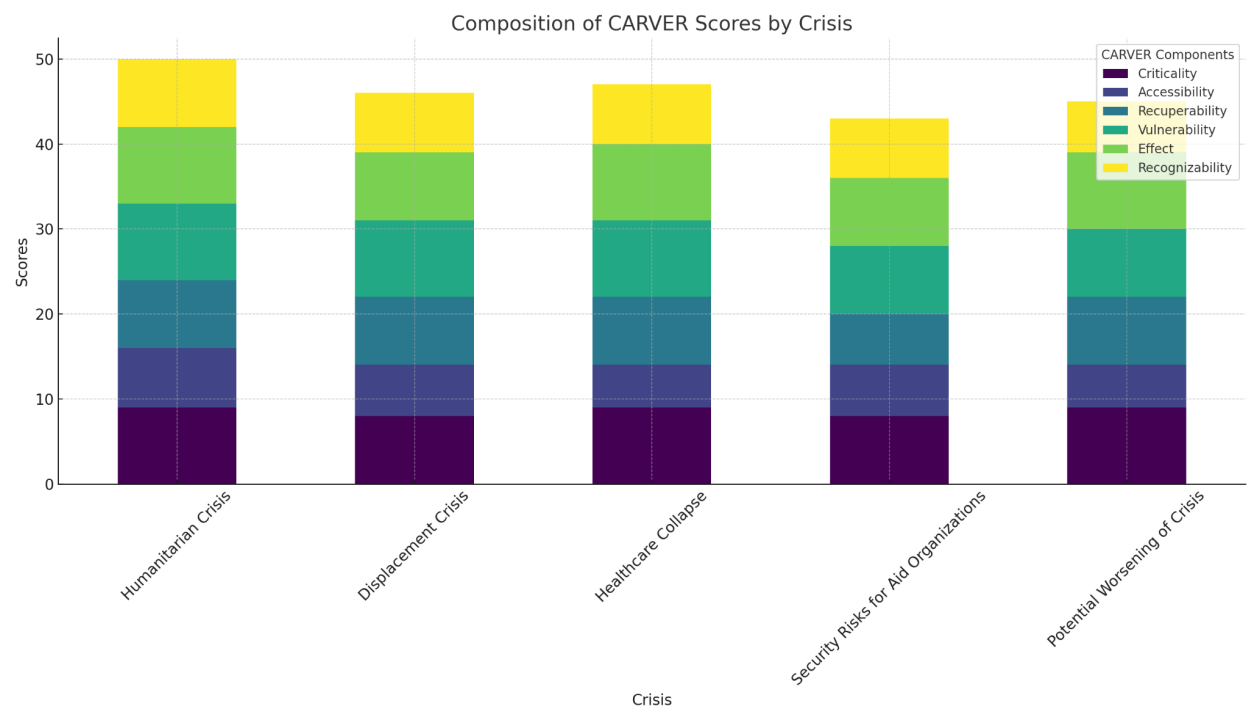
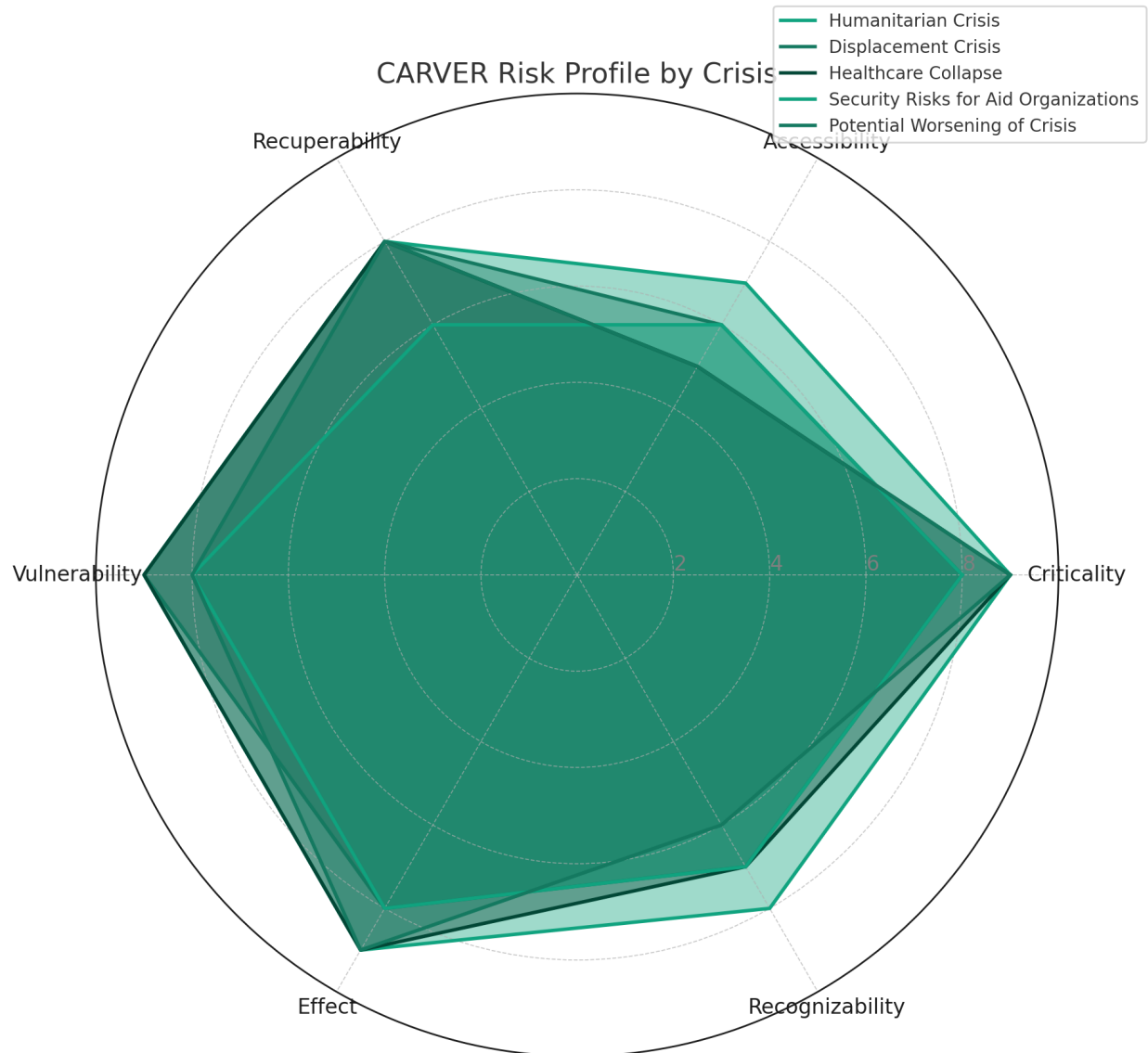


Figure 3. Sudan Crisis: CARVER Radar Chart



The graphs above provide several insights into the CARVER Risk Scores for the various crises in Sudan:

Heatmap:

- The heatmap shows that Vulnerability and Effect are consistently high across all crises, indicating these areas are critical concerns regardless of the specific crisis.
- Accessibility tends to score lower compared to other components, suggesting it may be less of a limiting factor in these situations.

Stacked Bar Graph:

- This graph reveals that Vulnerability and Effect are significant contributors to the total CARVER scores, reinforcing their critical role in the risk assessment.
- The Humanitarian Crisis and Healthcare Collapse have relatively higher contributions from Criticality, indicating these crises are deemed highly critical.

Radar (Spider) Chart:

- The Radar Chart highlights that all crises have high scores in Vulnerability and Effect, suggesting these are common areas of concern that need attention across different crisis situations.
- The chart also shows that the Humanitarian Crisis has relatively balanced high scores across most components, indicating a widespread and multifaceted risk profile.
- In contrast, specific components such as Accessibility in the Displacement Crisis and Security Risks for Aid Organizations have lower scores, pointing to potential areas where improvements could mitigate overall risk.

Overall, these visualizations suggest that while each crisis has its unique profile, there are common areas of concern across crises, especially in terms of Vulnerability and Effect. Addressing these common areas could potentially lead to significant improvements in crisis management and response strategies. Additionally, the insights could help prioritize interventions by focusing on the components that contribute most to the total risk scores, such as Criticality in the Humanitarian Crisis and Healthcare Collapse scenarios.

Probability of Threat Materializing (Pa) for Each Risk:

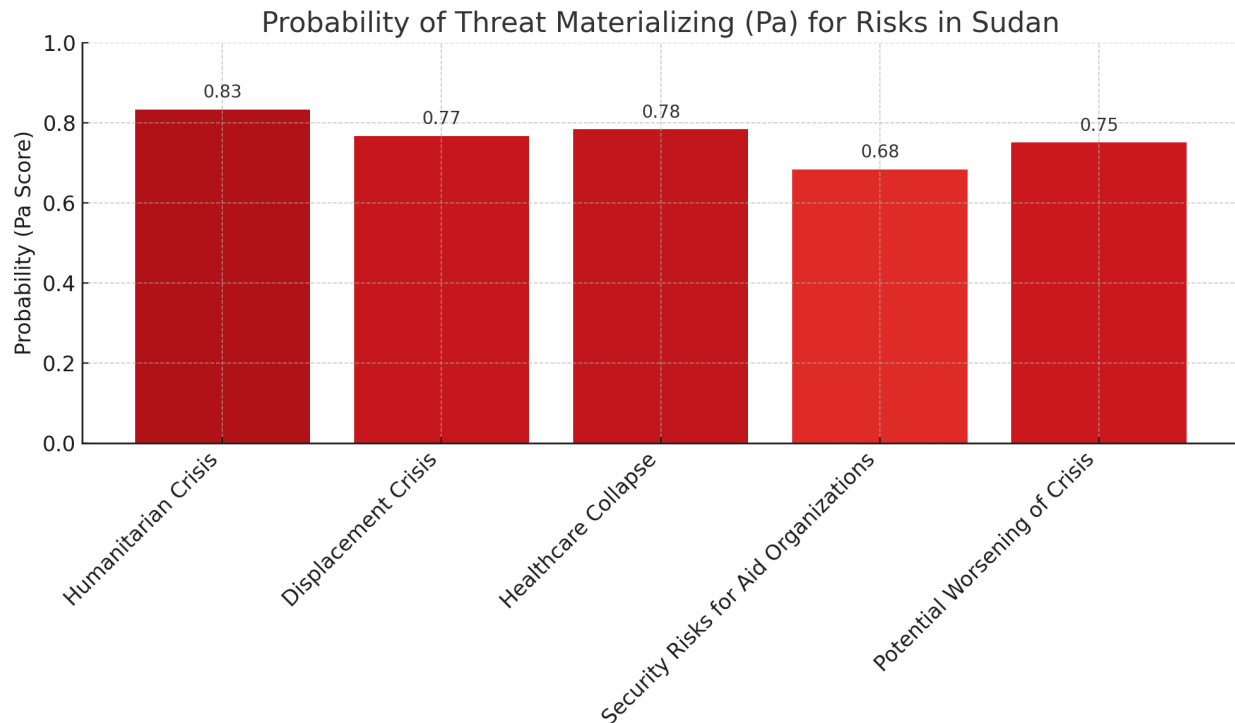
Humanitarian Crisis: $P_a = 0.83$

Displacement Crisis: $P_a = 0.77$

Healthcare Collapse: $P_a = 0.78$

Security Risks for Aid Organizations: $P_a = 0.68$

Potential Worsening of Crisis: $P_a = 0.75$



The bar graph visualizes the **Probability of Threat Materializing (Pa)** for each identified risk in Sudan, with the color intensity of red varying based on the Pa score. As illustrated:

- Darker hues indicate risks with higher Pa scores, translating to a greater criticality or likelihood of further impact if not adequately addressed.
- The **Humanitarian Crisis** stands out as the most critical risk with a Pa score of **0.83**, reflected in the darkest hue of red.
- The **Displacement Crisis**, **Healthcare Collapse**, and the **Potential Worsening of Crisis** follow closely, signaling substantial risks that require focused interventions.
- **Security Risks for Aid Organizations**, although slightly lower, still presents a considerable challenge, as indicated by its Pa score of **0.68**.

This visualization assists in prioritizing actions and resources towards the more critically rated risks, emphasizing the pressing need for collaborative efforts to mitigate these threats effectively. The graph serves as a stark reminder of the urgency and severity of the crisis in Sudan, urging immediate and concerted remedial measures.

Reflection on the Current Situation:

The **Probability of Threat Materializing (Pa)** scores provide a quantitative measure of the likelihood that each risk will further impact the situation in Sudan based on the CARVER assessment's factors. Notably, all scores exceed 0.5, indicating a more than moderate probability that these threats could advance if not suitably addressed.

Humanitarian Crisis (Pa = 0.83): This high score reflects the critical nature and immediate impact of the humanitarian crisis. Given the current data and assessment, this area is at significant risk, necessitating urgent and robust international intervention.

Displacement Crisis and Healthcare Collapse (Pa = 0.77 and 0.78, respectively): These scores highlight the substantial likelihood of worsening conditions in the realms of displacement and healthcare, crucial areas deeply intertwined with the overall humanitarian situation. The data suggests potential for further escalation unless comprehensive remedial actions are taken.

Security Risks for Aid Organizations (Pa = 0.68): Significantly impacting the ability to deliver aid, this score emphasizes the necessity of improving security arrangements and ensuring the safety of aid workers to maintain the continuity of humanitarian operations.

Potential Worsening of Crisis (Pa = 0.75): This score warns of the high probability of the overall crisis in Sudan worsening due to a variety of factors. It underscores the importance of preemptive, coordinated efforts aimed at crisis stabilization and prevention of further escalation.

Conclusion:

The Pa scores, derived from the CARVER assessments, underscore the urgency and critical need for diverse interventions across multiple fronts to address the evaluated risks. The current situation, illuminated by our data-driven analysis, requires a multi-dimensional approach involving international cooperation, local engagement, resource mobilization, and sustained efforts toward stability and recovery in Sudan.

In essence, the predictability of these risks manifesting in more severe forms calls for immediate action, leveraging the insights provided by these assessments to inform strategic, effective, and responsive measures. The cooperation of global and local communities, governments, and organizations will be pivotal in mitigating these threats and steering Sudan towards a path of recovery and peace.

About this report and the CARVER Risk Advisor Tool

The CARVER Risk Advisor is an innovative application powered by the OpenAI platform, developed under the insightful direction of M. Nuri Shakoor. This cutting-edge tool is part of the ARAC International's Peacekeeper Insights program, which focuses on enhancing global security risk management through the deployment of advanced technology solutions. The CARVER Risk Advisor stands as a testament to the commitment of ARAC International in leveraging artificial intelligence to support and streamline decision-making processes in security risk assessments.

M. Nuri Shakoor, a noted expert in security analysis and risk management, played a pivotal role in the conceptualization and development of the CARVER Risk Advisor. His expertise and deep understanding of the complexities involved in global security have been instrumental in ensuring that the application effectively addresses the needs of professionals engaged in the field of security risk management.

The CARVER methodology, which forms the backbone of this application, is a well-established and respected analytical tool in the security industry. It assesses threats and vulnerabilities based on six key factors: Criticality, Accessibility, Recuperability, Vulnerability, Effect, and Recognizability. By providing a structured approach to evaluating security risks, the CARVER methodology facilitates the identification of priority risks and aids in the formulation of targeted mitigation strategies. Training data for the CARVER Risk Advisor encompassed a broad range of sources, including security assessments, case studies, expert analyses, and historical data on security incidents globally. Under the guidance of M. Nuri Shakoor and other subject

matter experts from ARAC International, the system was meticulously trained to analyze complex security scenarios, understand the nuances of global threats, and deliver actionable insights. The training process was designed to ensure the application's accuracy, relevance, and ability to adapt to evolving security challenges.

As part of ARAC International's Peacekeeper Insights program, the CARVER Risk Advisor serves a critical role in supporting the organization's mission to promote peace, stability, and security worldwide. By harnessing the power of OpenAI's platform, the application offers a scalable, intelligent solution that empowers users to conduct comprehensive risk assessments with greater efficiency and precision. Whether for facility security, event management, or supply chain risks, the CARVER Risk Advisor is positioned to be an invaluable tool for security professionals, aiding in the formulation of strategies that protect assets, save lives, and contribute to a safer global environment. In conclusion, the CARVER Risk Advisor is a remarkable achievement that exemplifies the fruitful collaboration between security experts and advanced AI technologies. With its comprehensive training and sophisticated analytical capabilities, it offers a promising avenue for enhancing global security risk management practices, furthering ARAC International's vision of a more secure and peaceful world.

While the CARVER Risk Advisor represents a significant advancement in the field of security risk assessment, it is essential to recognize the inherent limitations of such automated platforms. The precision and relevance of the tool's outputs heavily depend on the quality and context of the data fed into the system. For this reason, the assessments and analyses generated by the CARVER Risk Advisor must be viewed as part of a larger mosaic of decision-making inputs, not as definitive solutions in isolation.

For the assessment concerning the situation in Sudan, for instance, we provided a wealth of contextual data derived from reliable and verified sources, including UN News and Médecins Sans Frontières (MSF). These sources are recognized for their integrity, dedication to accuracy, and commitment to providing up-to-the-minute information on global humanitarian crises and security issues. By integrating data from such reputable

entities, the CARVER Risk Advisor was able to generate insights that are both relevant and grounded in the current realities of the Sudanese crisis scenario.

However, users should be mindful of the platform's limitations, particularly in its ability to process real-time data or interpret nuanced geopolitical developments without additional contextual input. The platform currently cannot fetch real-time updates or directly access external databases, which means the most current developments or last-minute changes in the assessed scenarios may not be reflected in the analysis.

Moreover, while the CARVER Risk Advisor is a powerful tool for preliminary risk assessment, it cannot replace the nuanced judgment and strategic decision-making abilities of professional security analysts. Its assessments should be seen as a knowledgeable assistant (hence the name 'Advisor') in brainstorming and evaluating potential security risks rather than a comprehensive solution.

While leveraging the advanced capabilities of the CARVER Risk Advisor, users are encouraged to supplement the tool's analyses with further research and consultation with security experts. This holistic approach ensures that the derived strategies and recommendations are robust, well-rounded, and responsive to the dynamic nature of global security challenges.