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**THE CLIMATE-CONFLICT NEXUS: THE CRUCIAL  
ROLE OF CLIMATE FINANCE IN FRAGILE AND  
CONFLICT-AFFECTED SETTINGS**



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# ACRONYMS

**ACLED:** Armed Conflict Location & Event Data

**AFH:** Action For Humanity

**BTEX:** Benzene, Toluene, Ethylbenzene and Xylene

**COP26:** The 2021 United Nations Climate Change Conference

**COP27:** The 2022 United Nations Climate Change Conference

**FCAS:** Fragile and Conflict-Affected Settings

**GHG:** Greenhouse Gases

**IIED:** International Institute for Environment and Development

**IPPC:** The Intergovernmental Panel on Climate Change

**ISCO:** In Situ Chemical Oxidation

**MRV:** Measurement, Reporting, and Verification

**ND-GAIN:** Notre Dame Global Adaptation Initiative Index

**PCBS:** Polychlorinated Biphenyl

**TPH:** Total Petroleum Hydrocarbon

**UNAMI:** UN Assistance Mission to Iraq

**UNCTAD:** United Nations Conference on Trade and Development

**UNEP:** UN Environment Programme

**UXO:** Unexploded Ordnance

# INTRODUCTION

This paper calls for policy-makers, governments and donors to increase financial support for climate action in Fragile and Conflict Affected Settings (FCAS). The link between climate change and conflict is highlighted, emphasising that climate hazards can undermine peace and stability, exacerbate existing conflicts and create new ones. It shows that conflict and fragility increase vulnerability to climate change and limit adaptive capacity, while the nature of conflict can drive vulnerability more than climate change itself.

Financial providers of climate-related activities in FCAS are urged to recognise the complexities of the link between conflict and climate change and adopt risk-informed approaches. It is crucial to recognise that insufficient climate finance can exacerbate vulnerability to climate-related security risks and that ambitious mitigation efforts are necessary to address the increasing costs of adaptation over time.[1] The international community should strive to meet financial commitments and go beyond the current levels of climate finance to support climate-vulnerable countries experiencing from conflict and instability. This includes allocating a significant portion of climate finance to prioritise fragile and conflict-affected settings and providing tailored adaptation financing to meet the specific needs of these regions.

To enhance the effectiveness of these commitments, fostering local leadership and participation is imperative to ensuring that climate finance projects are contextually appropriate and inclusive. Additionally, it is important to integrate conflict sensitivity by conducting comprehensive conflict analyses, as well as mainstream climate-related security risks into the finance architecture to help manage the potential impacts of conflicts on project outcomes. Climate finance in FCAS should be seen as a commitment to sustaining peace, security, and stability alongside climate resilience.



# UNDERSTANDING THE LINK BETWEEN CLIMATE CHANGE AND CONFLICT



Regions experiencing fragility or conflict are highly vulnerable to the impacts of the climate crisis. While these settings differ in their specific circumstances, their ability to adapt to climate change is severely hindered by conflict. Conflicts weaken institutions, disrupt essential services, undermine the economy, erode social cohesion, and hinder developmental progress. As a result, their capacity to effectively respond and adapt to a changing climate is greatly diminished.[4]

For example, climate change exacerbates existing challenges and contributes to the worsening of conditions, impacting the dynamics of fragile regions. The Intergovernmental Panel on Climate Change (IPCC), the leading world body for the assessment of climate change, states that climate change is a 'threat multiplier' that contributes to conflict and instability.[5]

**The climate conflict nexus refers to the intricate relationship between climate change and conflicts in fragile and conflict-affected settings (FCAS).[2] These settings are typically countries or regions characterised by weak governance, political instability, social unrest, and ongoing or recent conflicts.[3] It recognises that climate change plays a complex role in exacerbating the challenging conditions in these regions.**

The IPCC acknowledges that climate change can intensify and magnify various risks, including conflicts, by exacerbating underlying factors such as poverty, resource scarcity, inequality, and migration. This is because countries enduring conflict are already weakened and are therefore less able to adapt to the effects of climate change. Of the 25 countries deemed most susceptible to climate change, 14 face ongoing conflict.[6]

The IPCC does not go as far as to say that climate change alone can be distinctly identified as a direct driver of conflict, however there is agreement that the risk of conflict is indirectly exacerbated by the multiple compounding environmental conditions which climate change brings with it. Factors like socio-economic conditions, governance, and political factors interact and play a key role in translating changing climatic conditions into conflict risks, including with links to water and food security. Degradation of both the social support systems and natural ecosystems further reduces the resilience of people and local environments to adapt to climate change. For example, attacks on water systems and infrastructure limit recovery, and conflict-related pollution continues as a post-conflict issue that transects both the social and environmental perspectives.

Proof of this self-reinforcing cycle can be seen in Yemen, for example. Alongside ongoing violence, the country faces increasingly frequent periods of drought and flooding. 17.4 million Yemenis are food insecure and in need of assistance to ward off the risk of famine and this number is set to rise to 19 million by December 2022.[7] Conflict and climate change make food and

increasingly scarce, creating tensions and competition between communities, which can quickly escalate into localised violence, and increase migration and displacement.

The link between climate change and conflict is also supported by evidence showing how changes in temperature and precipitation patterns systematically increase the risk of both interpersonal and intergroup conflicts. [8] Moreover, climate change impacts women and girls disproportionately, as they face increased challenges in accessing resources, are at higher risk of insecurity and violence, and are vulnerable to sexual and gender-based violence in conflict-affected areas. Efforts to understand and address the climate conflict nexus are crucial to mitigate the adverse effects of climate change and promote peace and stability in these vulnerable settings.

In FCAS, the breakdown of social structures and institutions, as well as the destruction of infrastructure and natural ecosystems, can severely disrupt the provision of essential services to communities. The effects of conflict and fragility can lead to a deterioration in living conditions, increased marginalisation, and further exacerbation of environmental degradation.

## Social Vulnerabilities

Climate change exacerbates the impact of conflict by causing significant damage to critical infrastructure. Extensive research and first-hand testimonies have confirmed that transportation networks, water distribution systems, bridges, and energy/power systems suffer extensive harm due to conflict.[9] Water systems and infrastructure can often be the target of attacks during conflict.[10] Furthermore, it has been documented that the destruction of physical infrastructure during conflict significantly hampers the delivery of essential social services, including disaster recovery. The damage inflicted on electricity and water infrastructure, educational and healthcare facilities, as well as agricultural systems, further exacerbates the challenges faced by communities during these periods of conflict.[11]

Pollution is a post-conflict issue which transects both the social and environmental perspectives. For farmers in Yemen,[12] access to agricultural lands is also hampered by landmines and Unexploded Ordnance (UO), as noted by Human Rights Watch in their 2020 annual report.[13] Other reports from The Armed Conflict Location & Event Data Project (ACLED) note that these practices of placing landmines and improvised explosive devices are particularly rampant in Hodeida,[14] while Medicine Sans Frontier provides local insight in this 2019 article on the increase of these practices on farmers and their livelihoods.[15] Using Donbas, Ukraine, as another example, according to a World Bank assessment conducted in 2015, it highlighted conflict-related environmental pollution, in particular between 10-20 extraction mines were damaged, creating problems with hazardous

waste and water, soil and land contamination.[16] Power plants were hit by artillery and rocket shelling, which could have resulted in both the breakdown of electricity to pumping stations, and release of toxic Polychlorinated Biphenyl (PCBSs), as well as crude oil spillage. Chemical production facilities and storage sites were also attacked, potentially creating local environmental pollution hotspots.[17]

## Environmental Vulnerabilities

The existing body of literature on the environmental repercussions of conflict reveals several recurring themes. Specifically, these include the devastation of land, soil, vegetation, and forests. While this list is not exhaustive, it is worthwhile to highlight some noteworthy studies that shed light on these issues.

According to Islamic Relief Worldwide, the conflict in Yemen over the past years has prompted a wave of deforestation and desertification. Severe fuel shortages resulting from a blockade of opposition-controlled areas and restrictions on imports into Al Hodeida port have forced people and businesses to chop down trees for firewood. More than 5 million trees have been cut down since 2018 - with more than 889,000 felled annually to fuel bakeries and restaurants in Sana'a alone. Protection measures for forests and woodland have been abandoned.[18]

From 2012 to 2019, Syria lost 20.4% of all tree cover.[19] Depletion of forest cover has been linked to a variety of factors related to the conflict, such as forest fires, illegal logging and the weakness of state institutions in managing natural resources and environmental development.[20]

Forest fires' frequency and intensity increased dramatically during the conflict in Syria. In 2020 alone, fires wiped out over 9,000 hectares of agricultural and forested land. One of the main causes of these fires has been the bombing campaigns by different parties to the conflict within dense forests as protection from detection by drones and aircrafts.[21] In 2013, 40% of the country's power lines were attacked, 30 power stations were inactive, and trees became essential for heating and electricity, leading to excessive illegal logging.[22] Bombing also disrupted the soil, making it easier to transport by wind and water and increasing the occurrences of dust storms. Soil erosion has also been accelerated by a reduction in vegetation, as a result both of the high demand for natural resources as well as the expansion of urban areas during the conflict due to population movements. More than 85% of agricultural land in Syria is exposed to soil erosion.[23]

According to a 2015 United Nations Conference on Trade and Development (UNCTAD) report, Palestine has experienced environmental degradation caused by settlers, through the discharge of untreated wastewater into nearby wadis and release of solid domestic and industrial waste from settlements onto Palestinian lands. In addition, several incidents of dumping of hazardous and toxic waste in the West Bank have been documented. The uprooting of trees by the military and settlers contributes to desertification and soil erosion. This erosion is further compounded by the construction activities which result in the cutting of trees.[24]

Reports from Ukraine also paint a similar story. The Minister of the Environmental Protection and Natural Resources for Ukraine announced to Euro News in October 2022 that Ukraine's natural resources have been devastated since the start of the war in February earlier in the year, inflicting an estimated cost of more than €36 billion. The minister noted that across 7 months of war more than 2,000 cases of environmental damage had been recorded by the authorities, adding that soil damage and air pollution alone posed "huge" costs of €11.4 and €24.6 billion, respectively. As of August, some 30% of Ukraine's protected natural areas, covering 3 million acres, have been - bombed, polluted, burned, or hit by military manoeuvres.[25]

Loss of productive soils, vegetation and forest cover and overall land quality cause knock-on effects for years to come and further compounding impacts.

# CLIMATE FINANCE IN FRAGILE AND CONFLICT AFFECTED SETTINGS



Climate finance in FCAS is marked by significant imbalances and limitations that hinder effective climate action. FCAS, despite their vulnerability to the impacts of climate change, receive minimal funding compared to more stable middle-income countries.[26] Multilateral climate funds and bilateral donors tend to avoid allocating funds to fragile and conflict-affected situations due to perceived risks and challenges, resulting in "conflict blind spots."[27]

Conflict-affected locations within countries are also often excluded from climate finance, and only a fraction of international climate finance is dedicated to local action. Research indicates that extremely fragile and fragile settings receive minimal climate finance per person compared to more stable countries.

This underfunding stems from risk aversion in climate finance decision-making processes and limited climate change strategies addressing conflict and fragility.[28]

Donors tend to avoid areas outside of government control or with non-state armed groups, and the increasing trend of providing finance as loans further deters countries already burdened by high debt. The neglect of comprehensive adaptation, focus on specific sectors, and inadequate consideration of marginalised populations further exacerbate the gap.[29]

Donors, governments and authorities have also historically prioritised security over longer-term work like peacebuilding and climate action in FCAS,[30] which can then result in climate adaptation efforts being limited.

Evidence from the IPCC shows that inequitable responses to climate change further exacerbate marginalisation, exclusion or disenfranchisement of some populations, which are commonly recognized drivers of violent conflict,[31] suggesting that adaptation and mitigation efforts to climate change play a role in peacebuilding.

To address these issues and strengthen the resilience of conflict-affected communities, concerted efforts are needed to bridge the climate finance gap and prioritise climate action in these vulnerable contexts, considering conflict sensitivity and the wider impact of climate and non-climate-related conflicts.[32] FCAS should receive more attention in global discussions and climate negotiations. Insufficient climate finance exacerbates vulnerability to security risks, highlighting the need for ambitious mitigation efforts.[33]

There is a need to improve conflict analyses, ensure conflict-sensitive planning and program delivery, and increase climate finance in fragile and conflict-affected contexts. Programs should include conflict assessments that identify local power dynamics and imbalances underlying intercommunal conflicts over natural resources. Integrating climate-related security risks into climate finance and involving peacebuilding actors can improve risk management and incentivise investment. Donors, governments, and implementing agencies should integrate the climate adaptation and conflict nexus into their strategies, policies, and investment guidance.[34]

More broadly, there is ongoing debate and concern about whether climate finance is separate from other development assistance, as there are instances where funds may be diverted or recycled from existing aid budgets towards climate-related initiatives. If climate finance is genuinely additional, it can be integrated into development activities without compromising current objectives, however, redirecting existing aid towards climate objectives would fundamentally change spending across regions and sectors. [35] Additional funds are crucial to address the specific challenges posed by climate change, particularly in FCAS, as traditional development assistance alone may not be sufficient. Ensuring that climate change finance remains separate from development assistance is essential to safeguard development objectives.

# URGENT MEASURES FOR CLIMATE ADAPTATION AND MITIGATION



Additionally, there is a gap between funding for mitigation and adaptation, with adaptation funding trailing behind. Between 2010 and 2018, global public adaptation finance accounted for a mere 6% of cumulative international official development assistance.[36]

It is important to define climate mitigation and climate adaptation in this context. Climate adaptation refers to the process of adjusting to the current and future effects of climate change, including adjustments to transitional and physical climate change risk. The physical risks are risks resulting from climatic events, such as wildfires, storms, and floods, whereas transitional risks result from policy action taken to transition the economy away from fossil fuels.[37] Climate adaptation differs from climate mitigation, which focuses on making the impacts of climate change less severe by preventing or reducing the emission of Greenhouse Gases (GHG) into the atmosphere.[38]

Studies have shown that the time between a pulse of GHG and most of its warming is around a decade. Thus, we will experience the full effect of today's emissions in 10 to 20 years' time. Even if we ceased all GHG emissions today, we would still experience the impacts for years to come[39]. Therefore, even if our GHG emissions were halted today, the effects of climate change, particularly the physical climate risks, would still be felt. With increasing global surface temperatures, it is likely that the frequency of droughts and intensity of storms will increase. As more water vapor is evaporated into the atmosphere it becomes fuel for more powerful storms to develop.[40] Warmer temperatures enhance evaporation, which reduces surface water and dries out soils and vegetation. This makes periods with low precipitation drier than they would be in cooler conditions.[41] Recent findings suggest that the number of severe tropical cyclones will increase with every tenth of a degree in global average temperature rise.[42]

Extreme weather accounted for 9.4% of all deaths globally between 2000 and 2019, according to a 2021 study linking changes in temperatures to annual increases in mortality.[43] Developing countries are particularly affected by the impacts of climate change. They are hit hardest because they are more vulnerable to the damaging effects of a hazard but have lower coping capacity. The ten countries most affected by the quantified impacts of extreme weather events in 2019 were Mozambique, Zimbabwe, Bahamas, Japan, Malawi, Islamic Republic of Afghanistan, India, South Sudan, Niger and Bolivia. All of these countries belong to the low[44] or lower-middle[45] income category by World Bank definitions except Japan and The Bahamas. The Islamic Republic of Afghanistan, Mozambique, Malawi, South Sudan and Niger are also Least Developed Countries by UN definitions[46], representing half of the ten most affected countries.[47] In order to prevent further loss of lives and livelihoods due to climate change, particularly in vulnerable regions, climate adaptation is of utmost importance.

The Islamic Republic of Afghanistan, Bangladesh and Pakistan feature within the top 12% of the countries most affected by the quantified impacts of extreme weather events in 2019 and Lebanon and Republic of Yemen are in the top 41%. Climate adaptation funding is important in any vulnerable country but those most at risk are especially in need at this time.

The COP26 conference in Glasgow saw important progress made on the Global Goal on Adaptation (GGA)[48]. The launch of the two-year Glasgow-Sharm El-Sheikh work programme[49] at COP26 represented a step forward in establishing the GGA outlined in the Paris Agreement. Discussions in

Glasgow, and the subsequent decisions, reinforced the importance that the GGA adaptation action be inherently nationally determined and locally appropriate, reflecting the realities on the ground. The GGA should not become a top-down reporting exercise that further burdens countries with limited public resources. Instead, it should become a tool that helps countries identify their strengths and weaknesses so they can better respond to the impacts of climate change.[50]

Alongside discussions on the GGA at the COP26, there was a renewed commitment to scale up climate finance for adaptation to at least double the collective provision of adaptation finance from 2019 levels by 2025. This commitment was made with the goal of achieving a balance between mitigation and adaptation in the provision of scaled-up financial resources, recalling Article 9, paragraph 4, of the Paris Agreement.

In particular, it was emphasised that developed nations needed to double adaptation finance by 2025 to the nations most at risk to the impacts of climate change. It has been estimated that adaptation finance was roughly USD 20 billion per year in 2019. A doubling of efforts, as agreed in the Glasgow Climate Pact and reiterated by the G7 ministers, would bring adaptation finance into the vicinity of \$40 billion per year.[51] Now a standalone and transparent implementation plan is needed to show progress towards the 2025 doubling target, especially demonstrating funds flowing to country-led climate adaptation and resilience programs as an outcome to COP27.[52]

As of June 2022, some analysis done by the International Institute for Environment and Development (IIED) suggested that “rich countries” and multilateral organisations were on track to provide little more than half of the promised USD \$40bn per year of adaptation financing. IIED’s analysis suggests out of 22 bilateral providers, only France and Sweden have pledged over their fair share. The Netherlands, New Zealand, the UK, Denmark and Germany are at least halfway towards providing their fair share of finance for adaptation.[53] This adaptation funding gap will be a key topic at COP27.

It is important that the nations hit hardest by climate change receive the adaptation funding needed to put in place the infrastructure and build up capacity to deal with the worst impacts of the climate change in the coming years. FCAS have their own specific vulnerabilities to climate change, which is where nation-led initiatives by those best informed about the local land come in. Some 60 per cent of the 25 States deemed most vulnerable and least ready to adapt to climate change by the Notre Dame Global Adaptation Initiative Index (ND-GAIN) [54] are affected by conflict. [55]

**Table: Notre Dame Global Adaptation Initiative Index Lowest 25 Country Rankings.**

ND-GAIN Index Ranking out of 182	Country	Income Group	Score
158	Comoros	Low	37.5
158	Nigeria	Lower Middle	37.5
160	Papua New Guinea	Low	37.4
161	Burkina Faso	Low	37.2
161	Ethiopia	Low	37.2
163	Malawi	Low	37.0
164	Bangladesh	Lower middle	36.9
165	Burundi	NA	35.5
166	Uganda	Low	35.4
167	Madagascar	Low	35.3
168	Haiti	Low	35.0
169	Congo	Low	34.8
170	Mali	Low	34.7
171	Yemen	Low	34.5
172	Somalia	Low	34.2
173	Liberia	Low	33.8
174	Zimbabwe	Low	33.1
175	Afghanistan	Low	33.0
176	Niger	Low	32.9
177	Sudan	Low	32.3
178	Dem. Rep. of the Congo	Low	31.1
178	Eritrea	Low	31.1
180	Guinea-Bissau	Low	30.6
181	Central African Rep.	Low	27.1
182	Chad	Low	26.7

Source: Notre Dame Global Adaptation Initiative Index, University of Notre Dame. (Action for Humanity countries of focus are in bold).

# CLIMATE ADAPTATION FOR SPECIFIC CONTEXTS IN FRAGILE AND CONFLICT AFFECTED SETTINGS



Adaptation funding needs to flow towards adaptation efforts on the ground in order to fulfil the GGA and the local needs. Within countries themselves, when climate finance is provided, it often excludes conflict-affected locations, particularly when these territories are not under the control of the State. It is important that these regions within the states themselves are also not excluded from crucial climate adaptation financing.[56]

Weak governance, institutional capacity constraints, and issues with access and accreditation requirements contribute to the lack of climate finance in conflict-affected countries.[57] Moreover, the complex and rigid requirements of climate finance do not adequately account for the rapidly changing contexts of crises and fragility.[58] Each region affected by conflict and fragility has specific vulnerabilities and local differences,

not just in the type of conflict and fragility that has been experienced in the region but the landscape, climate, biodiversity and land type will also differ. This means that the restoration and adaptation projects must be honed to local specifications.

Whilst these projects must be locally led and context-specific, there are some general practices which can serve as a basis from which to adapt to a local context.

## **Disaster Recovery Services**

The resilience of a region to climate change extreme events will also depend upon the social services available in the region to respond to the immediate human needs during natural disasters. While climate adaptation does depend upon longer term projects to enhance the resilience of the region, responding to immediate human needs in the aftermath of extreme climate events is also key. Emergency medical services, temporary accommodation, transportation and evacuation services and medical, food and domestic supplies will all be needed.

## **Vegetation and Forest Recovery**

The EEA report "Water-retention potential of Europe's forests"[59] shows that water retention has an important role to play in buffering the effects of heavy rainfall and droughts. The volume of water retained by forests can depend on characteristics such as forest cover area, the length of vegetation growing season, tree composition and tree density, as well as the age and the number of layers of vegetation cover. Water retention by forests affects the amount and timing of the water delivered to streams and groundwater by increasing and maintaining infiltration and storage capacity of the soil. Forests can soak up excess rainwater, preventing run-offs and damage from flooding. By releasing water in the dry season, forests can also help provide clean water and mitigate the effects of droughts. The report shows that water retention potential tends to increase along with the extent of forest cover in a water basin. Compared to basins with a forest cover of 10%, total water retention is 25% and 50% higher in water basins where the forest cover is more than 30% and 70%, respectively.

Trees can also help reduce pollutants by taking up nutrients and other pollutants from soils and water through their roots. Trees can then transform pollutants into less harmful substances.[60]

There have been some criticisms of tree and vegetation planting initiatives. Namely, the planting of non-native vegetation to the region and not choosing the right type of vegetation that is adapted to the particular climatic risks of that area. Also, the planting of monocultures instead of focusing on enhancing the biodiversity of the region has also been a pain point in other planting initiatives.[61] Tree planting when appropriate for the region, land and season can be an important tool for enhancing the resilience of the land to future droughts and floods.

## **Water**

Rebuilding of key essential water infrastructure that has been lost due to lack of funding for maintenance or direct targeting by conflict to ensure that agricultural production, water consumption and land recovery projects can take place should be part of any resilience plan. Rebuilding the lost water infrastructure and even enhancing the infrastructure to extend the capacity beyond the original threshold can be key to resilience action.

## Clean Up

Depending on the type of conflict that has taken place on the land, there may be clean-up and remediation needed of the land before regeneration can take place.

Bioremediation is the use of biological processes to degrade, transform, or remove contaminants from soil and water. This process relies on micro-organisms including bacteria and/or fungi, which use the contaminant as a food source.

Bioremediation is widely used to remediate organic contaminants and can be an effective means of mitigating hydrocarbons, halogenated organic solvents, halogenated organic compounds, non-chlorinated pesticides and herbicides, nitrogen compounds, metals (lead, mercury, chromium) and radionuclides.[62]

In the scenario of an oil spill, bioremediation that is tailored to the specific characteristics of the soil type and chemical characteristics of the crude oil itself can provide one affordable and relatively simple route. Microbes are used to naturally break down petroleum by adding nutrients from manure, bulking agents like wood chips and water, this can create conditions for the bacteria to thrive and speeding up the natural process of breaking down the oil. This was tested in Iraq by the UN Environment Programme (UNEP) and UN Assistance Mission in 2019 (UNAMI). [63]

Chemical decontamination methods generally focus on chemical oxidation, whereby reactive chemical oxidants are injected into the soil and groundwater for the purpose of rapid and complete contaminant destruction.

In Situ Chemical Oxidation (ISCO) can be useful when remediating contaminants located in difficult to access areas such as soils at depth or soils beneath buildings. Chemical oxidation can be used to treat various organic contaminants including Total Petroleum Hydrocarbon (TPH), Benzene, Toluene, Ethylbenzene and Xylene (BTEX) and PCBs. [64]

Soil stabilisation relies on the addition of immobilizing agents which reduce a contaminants' leachability and bioavailability. This technique can also be used to improve the geotechnical competency of the ground, making it more suitable for construction work due to higher resistance and lower permeability. [65]

Other important clean-up activities include water contamination clean up and clean-up of landmines and explosive remnants from the land.

## Soil Carbon Recovery

If the land is safe to use, pre- or post-clean up activities, then the soil carbon recovery can begin in order to encourage more productive and resilient soil and lands.

For "mineral soils," soils in which the bulk of the soil mass is made up of mineral matter, i.e., sand, silt and clay, and where organic matter normally constitutes only a few percent of the total mass; organic matter additions such as compost and manures can increase soil carbon content. Both by virtue of the added carbon in the soil itself and through improving soil physical attributes and nutrient availability, such that plant productivity and residue carbon inputs increase as well.[66]

For organic soils, when their hydrological conditions can be restored (also referred to as “rewetting”) the soil carbon accumulation can begin.[67] When wetland conditions are restored, restoring cultivated organic soils provides very large per hectare net emission reductions as well so is also a mitigation crossover project.[68]

Implementation of soil carbon enhancement projects requires a robust, scientifically-sound Measurement, Reporting, and Verification (MRV) system to track the increases in soil carbon stock. Much of the infrastructure for an effective MRV system for soil carbon sequestration could be assembled relatively quickly and with modest research and development commitments.[69][70]

FCAS not only need fertile, intact soil for the climate adaptation benefits but also for the benefits to the food security of their nation since fertile soils are more productive than damaged soils. Food security can also be a cause of conflict in and of itself. Food insecurity, especially when caused by higher food prices, heightens the risk of democratic breakdown, civil conflict, protest, rioting, and communal conflict.[71] Security in the national food supply chain also means less reliance on foreign imports of food that depend on political stability.

This is not an exhaustive exploration of the possible adaptation measures that can be employed in FCAS but a groundwork from which to advocate from. Locally-led initiatives that are appropriate for the region are the priority. Conflict leads to specific climate adaptation needs and the countries most in need of the adaptation climate financing cannot afford to be left out of the conversation.



# RECOMMENDATIONS

Committing to climate action in FCAS is not just a matter of environmental concern; it is an commitment to sustaining peace, security, and stability alongside climate resilience. By recognising the interconnected nature of climate change and conflict, policymakers, governments, and donors can work together to provide the financial support needed to address the vulnerabilities, build adaptive capacity, and promote long-term sustainable development in these critical settings.



**Increase Financial Commitments:** Go beyond current levels of climate finance and strive to meet the financial needs of climate-vulnerable countries affected by conflict and instability. Scaling up financial commitments to adequately address the impacts of climate change, build resilience, and support sustainable development in these regions.



**Prioritise Climate Action in Fragile and Conflict-Affected Settings:** Recognise the heightened vulnerability of these regions to climate change and allocate a significant portion of climate finance to support adaptation and resilience-building efforts in these areas.



**Support Adaptation Financing:** provide dedicated adaptation financing that is tailored to the specific needs of conflict-affected and fragile states in line with the Global Goal on Adaptation. Additionally, ensure that climate adaptation projects are developed for conflict-affected regions within countries, including those areas not under state control, and provide access to the necessary financing.



**Integrate Conflict Sensitivity:** Incorporate conflict sensitivity into climate finance practices by conducting comprehensive conflict analyses and understanding the intersection of climate change and conflict dynamics. This will help identify potential risks and design effective adaptation projects that do not inadvertently exacerbate conflict.



**Foster Local leadership and Participation:** Involve local communities, leaders, and stakeholders in the design and implementation of climate finance projects. This ensures that initiatives are contextually appropriate, inclusive, and responsive to the diverse needs and perspectives of communities affected by both climate change and conflict.



**Mainstream Climate-Related Security Risks:** Integrate climate-related security risks into climate finance architecture by considering the potential impacts of both climate and non-climate-induced conflicts on project outcomes.



**Transparent Reporting and Long-term Planning:** Ensure transparency and accountability in reporting climate finance expenditures and develop a comprehensive and long-term strategy for climate finance, encompassing both immediate needs and long-term sustainable development goals. Regularly publish comprehensive and accurate reports on climate funding, detailing how funds are allocated and the impact they have on climate mitigation, adaptation, and nature conservation projects.

# END NOTES

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