

Out of the Frying Pan, Into the Fire

Part one – understanding the links between climate change and violent conflict

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Cover: A young Turkana man armed with an AK-47 moving cattle in the semi-arid Rift Valley, northwest Kenya, 2007.

Photographs: Cover: Siegfried Modola/IRIN, ©UN/OCHA, used with permission from IRIN/UN

List of Acronyms

ARC	African Risk Capacity
DFID	Department for International Development
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit
IDS	Institute of Development Studies
INFORM	Index for Risk Management
IoPt	Israel and the occupied Palestinian territory
IPCC	Intergovernmental Panel on Climate Change
NGO	non-governmental organisation
OCHA	Office for the Coordination of Humanitarian Affairs
OECD	Organisation for Economic Co-operation and Development
ODI	Overseas Development Institute
SD	Standard Deviation
UN	United Nations
UNEP	United Nations Environment Programme
WFP	World Food Programme

Foreword: Does climate security equal climate justice?

More than 15 years ago, different defence and intelligence agencies from many countries started to consider the serious risks that climate change may pose to global stability. Various scenarios were forecast: climate-induced food shortages, decreasing water supplies, and disrupted access to energy – leading to economic and political turmoil, social unrest, riots, deadly battles and even all-out war. Security officials wanted to know what they should be doing.

The Americans were quick on the draw. In 2003, the Pentagon published the first of what was to become a series of long-running assessments.¹ Over time, the threat assessments snowballed and grew in sophistication. In 2014, the Pentagon published its Climate Change Adaptation Road Map, a national defence strategy for the future impacts of climate change. Climate change was described as a threat multiplier and a near-term strategic challenge that may ‘exacerbate many of the challenges we are dealing with today, from infectious diseases to terrorism’.² These assessments have come to be known as the climate security agenda.

Despite all the sophistication and wealth of knowledge it has generated, the climate security agenda remains limited and short-sighted. It targets only the symptoms, not the causes of climate change. As the Transnational Institute emphasised: ‘The US military may be the last defender of climate science within the Trump administration, but don’t expect the Pentagon to fight for climate justice.’³

As such, there is a wider, more comprehensive agenda which is called *climate justice*. It is now codified into the 2015 Paris Agreement of the United Nations (UN) Framework Convention on Climate Change signed by 195 countries, of which 145 have ratified. It is now these countries’ legal obligation to identify nationally determined contributions to hold the increase in the global average temperature to well below 2°C; to pursue efforts to limit the temperature increase to 1.5°C above pre-industrial levels; to improve steps towards adaptation and resilience; and to make finance flows consistent with lower greenhouse gas emissions and climate-resilient development.

The climate justice agenda is equally backed by impressive research and knowledge resources, pooled by the Intergovernmental Panel on Climate Change (IPCC) set up by the UN to ‘provide policymakers with regular assessments of the scientific basis of climate change, its impacts and future risks, and options for adaptation and mitigation’.

Climate security and climate justice may be substantially different agendas. But the question is – could they be made to work together, or complement each other? For example, could climate security, such as that pursued by the US military, be structured in a way that makes commitments in the Paris Agreement easier to achieve? And could wider climate justice improve on the details of the commitments to adaptation, resilience, and financial flows, to address many of the security-focused problems on the ground?

In line with its ethos of tackling root causes, not just the symptoms, of climate change and violent conflict, Christian Aid argues the following: the best form of climate security is climate justice. In this document, we begin our elaboration of this argument.

Climate change is without doubt one of the greatest global challenges of our time. But to suggest that it alone is responsible for causing conflict is overstating its impact. For example, poor herder and farmer communities have managed climate stresses in the past, preventing tensions from escalating into conflict. However, these coping mechanisms are being undermined, especially by land appropriation for the benefit of private companies from food-insecure countries. Blaming climate change alone for increasing violence between herders and farmers today deflects attention from the more contentious root causes, such as the abuse of land rights. Upholding land rights may be about upholding justice; but also preserves or enhances local mechanisms for managing climate stresses and thus enable more stability.

The capacity to respond to stresses is critical. As the IPCC points out, drought may trigger completely different outcomes in two neighbouring countries – one may be crippled by riots and chaos, while the other mobilises citizens successfully to implement collective action solutions. The outcomes will depend on the respective governance and resilience capacities of the two countries. Clearly, climate security should focus as well on building and supporting governance and resilience capacities.

Views are emerging too that the resolution of conflicts, like that in Syria, would need 'to improve water-use efficiency and productivity in agriculture, better management and monitoring of groundwater resources, and comprehensive international agreements on managing and sharing the rivers that cross political borders'.⁴

These various issues are just beginning to be flagged up by development agencies. Christian Aid is hoping that the publication of this report could serve to expand these conversations.

Supporting resilient livelihoods under conditions of both violent conflict and climate change may require bridging the gaps, and making climate security and climate justice work together.

Eric Gutierrez

Senior Adviser on Tackling Violence, Building Peace

Introduction

For more than a decade, Christian Aid has been committed to tackling the effects of climate change on the world's poorest people. But the unprecedented pace of climate change only continues to grow. For the past three consecutive years, global temperatures have reached a record high.

As NASA put it: 'Two years ago, we wrote: "The year 2014 was Earth's warmest in 134 years of records." Last year we wrote: "2015 was the warmest year ever recorded on Earth, and it was not even close." This year, we are running out of ways to say it.'⁵

These rocketing temperatures show no signs of abating. Despite the commitments of the Paris conference, global temperatures still look likely to rise far above agreed limits – the latest UNEP Emissions Report shows that we are still on track for 3.4°C of warming over the next century – over three times the levels we are currently experiencing.⁶

More and more, it is acknowledged that promoting sustainable development in the face of climate change requires new approaches. Christian Aid works on improving community resilience, enhancing the ability of individuals and communities to anticipate, organise for and adapt to change.⁷ Christian Aid's work on resilience, however, is increasingly carried out in contexts where partner organisations and the communities with which they work are coping with not only the effects of climate change, in the form of more frequent natural disasters, or more erratic rainfall, but also with high levels of violence. And as the climate changes, human security is progressively threatened.⁸

This paper sets out to provide an analysis of what is currently known about the links between climate change and violent conflict, and the policy debates currently taking place on this issue. The purpose is to guide Christian Aid's own practice, and to inform our recommendations to international institutions and donors.

'One possible future... if the climate keeps changing faster than our efforts to address it. Submerged countries. Abandoned cities. Fields that no longer grow. Political disruptions that trigger new conflicts, and even more floods of desperate people seeking sanctuary in nations not their own'

US President Barack Obama at the Paris Climate Conference, December 2015⁹

Who is most affected?

It has been projected that due to climate change, surface temperatures will rise, that heat waves will occur more often and last longer, that sea levels are rising and that extreme weather events will become more frequent.⁹ And vulnerable people in developing countries, who have done the least to cause climate change, are those that are suffering the most. In its Global Climate Risk Index, Germanwatch reports that between 1996 and 2015, more than 525,000 people died as a direct result of nearly 15,000 extreme weather events in the world. Of the 10 most affected countries, nine were developing countries in the low-income or lower middle-income country groups.

In many developing countries, the challenges presented by climate change are compounded by high levels of violence. The UN Office for the Coordination of Humanitarian Affairs (OCHA) has identified the ‘threat of climate change’ and the ‘fall in world peace’ as the two major trends today in global volatility. At the first World Humanitarian Summit in 2016, OCHA suggested ‘a series of indicators and new metrics for assessing the risk of climate-induced conflict for 157 countries’. It identified 20 countries, all low or middle-income nations that are most affected by the climate–conflict nexus (Table 1). Christian Aid works in 11 out of these 20 countries, of which eight are priority countries in terms of tackling violence and building peace.¹⁰

‘For Honduras, climate change is a matter of life and death. The figures don’t add up... we are not all equally responsible. We haven’t come cap in hand... we come to show you how much we suffer’

President Juan Hernandez at the Paris Climate Conference, 2015

Table 1: The 20 countries* in the bottom quintile of both Positive Peace Index[†] and Resource and Climate Vulnerability Index[‡]

Afghanistan*	Madagascar
Bangladesh*	Mauritania
Burundi*	Mozambique
Cambodia*	Myanmar*
Chad	Niger
Eritrea	North Korea
Ethiopia*	Pakistan*
Haiti*	Somalia
Kenya*	Sudan*
Laos	Zimbabwe*

Source: OCHA, 2016¹¹

Bold indicates priority countries for Christian Aid in terms of tackling violence and building peace.

* Countries where Christian Aid works.

† The Positive Peace Index published by the Institute for Economics and Peace is an indicator that measures the attitudes, institutions and structures which create and sustain peaceful societies.

‡ The Resource and Climate Vulnerability Index reflects a country’s resource and climate vulnerability.

OCHA based its list on a comparison of two indices, the Positive Peace Index and the Resource and Climate Vulnerability Index, in an attempt to quantify the climate–conflict nexus for a better understanding of possible future humanitarian needs. However, quantification and use of indicators across very different contexts can also be limiting.

What is striking about this table is that it excludes cases that Christian Aid would see as particularly caught in the climate–conflict nexus. These would include Honduras, which ranks number one in on the Climate Risk Index and is characterised by high levels of social and gender-based violence. Efforts to build resilience and to conserve natural resources in Israel and the occupied Palestinian territory are continually hampered by the incessant conflict. In Angola, with abundant natural resources, another dimension to the link between conflict and climate change emerges, as tensions over land rights and access to water continue to grow. This is in part linked to land grabs by local elite, as insurance against diminishing oil prices and reserves, and other large-scale land acquisitions by foreign investors for biofuels or food exports. The Angolan case illustrates two points – not only is climate change possibly creating resource competition where none existed before, but also that responses to climate change may themselves be a source of risk.

These cases from Christian Aid's programme experience underline the point that within particular country contexts, not everyone will be affected equally – and it will always be the poor and vulnerable who will suffer the most. This point is reiterated in Mali, and in the Sahel region more widely, where one scholar has posited that the crucial factor determining which groups are likely to suffer from the climate–conflict nexus is the lack of political standing – ie, small, politically insignificant ethnic groups experience the most conflicts related to environmental factors.¹²

Framing the debate

As the cases of Honduras, the Middle East, Angola and Mali illustrate, part of the difficulty of defining the links between climate change and violent conflict is the very context-specific and diverse nature of the twin challenges, and the way in which they are interlinked. In this regard, this paper divides the debate into two main sections. The first looks at how violent conflict or high levels of violence affect vulnerability to climate change. The second is the reverse – how the impacts of climate change may affect efforts to tackle violence and build peace.

While it is clear that the presence of violent conflict must exacerbate the effects of climate change and impede climate change adaptation in various ways, it is worth enumerating and exploring how and why, given the urgency of addressing climate change at both the global and the local level.

Causal links between climate change and violent conflict are hard to prove, and therefore hotly debated. However, what is clear is that climate vulnerability can act as an aggravator to drivers of conflict, and that this is likely to worsen as temperatures rise. While this has long been discussed and accepted by the international security community, it is time that development NGOs consider and treat this issue with the importance and urgency it deserves, bringing their own perspectives and experiences to the international debates, while at the same time mapping out their own responses.

How does violent conflict or high levels of violence affect vulnerability to climate change?

In some ways, it may be self-evident that high levels of violent conflict increase vulnerability to climate change, just as they affect all aspects of society and the enjoyment of human rights. Nonetheless, it is still worth iterating the ways in which a violent context may exacerbate the effects of climate change.

It is clear, for example, that as climate change amplifies risks of prolonged droughts, violent conflict can mean the difference between barely coping and widespread famine, as was witnessed in the Horn of Africa in 2011. While Kenya, Somalia, Ethiopia, Eritrea and Djibouti were all affected, it was only in Somalia where drought led to famine. Long-term violence was found to have weakened traditional coping mechanisms and hampered internal movement. At the same time, international aid efforts were thwarted by the presence and control of the militant group al-Shabaab in some of the worst-affected areas. This affected aid relief in two ways: not only did al-Shabaab make supplying aid a difficult and risky business, but several donor nations, having declared al-Shabaab a terrorist organisation, made it a crime to supply material assistance to them. As Ferris and Petz point out: ‘although the restrictions were relaxed in response to the famine, NGOs were still uncertain about their situation – could they really guarantee that their aid wouldn’t end up in the hands of al-Shabaab?’¹³

Following from the above is that it is not only humanitarian efforts that are affected, as Harris et al note: ‘Conflict can undermine the capacity of governmental and non-governmental actors to plan and

protect people against hazards.¹⁴ Violent conflict may affect the work that has been put in place for disaster risk reduction, like early warning systems and weather data processing. Similarly, it affects the ability to understand and address future climate change. Violent conflict can interrupt the recording of weather data, thereby significantly degrading the climate data timeline, which is essential for understanding future trends in rainfall and temperature.

A lot of knowledge on how the local climate is changing – a requirement for making decisions on which are the best adaptation strategies to adopt – have been lost due to conflict. For example, in 1996 Taliban forces sacked the Afghan Meteorology Authority Office after they banned weather forecasting because it was considered to be sorcery. Equipment was ruined and more than 100 years of weather records were destroyed. Local farmers were eventually harmed, because drought information and forecasting could not take place.

Such loss of knowledge has been seen elsewhere. Many years ago, decades of continuous weather records in the West Bank were destroyed in the Israeli invasion. Similarly, the climate recording in Iraqi Kurdistan has been repeatedly damaged by recurrent conflict. In Rwanda, the genocide meant that effectively no climate science data collection could occur for two years. This now renders large parts of the world, mainly in the global South, with substantial deficits in the climate information they need to successfully deploy climate information services in climate adaptation strategies and policies.

Deforestation and usurpation of natural resources can also be used as a deliberate tactic in waging war, thereby exacerbating the effects of climate change or even contributing to climate change itself. In Darfur, for example, militia have burned crops, cut down trees and destroyed rural water pumps.¹⁵ Christian Aid partner Al-Haq has documented how ‘systematic steps have been taken by Israel as the occupying force to undermine the possibilities for environmental protection in the occupied Palestinian territory’, including the targeting of water treatment plants and the chemical spraying of vegetable crops in aerial attacks.¹⁶

Climate-related factors could increasingly structure responses to the resolution of conflicts. For example, the long-term drying trend anticipated for the Jordan Valley and the presence of aquifer resources in the West Bank may more likely make or unmake future steps to be taken, including UN Security Council resolutions, on the Israel-Palestine conflict. It could lead to a situation where the anticipated, future impacts of climate change may contribute to the perpetuation of a conflict in the present.

The case of Israel and the occupied Palestinian territory illustrates the role which conflict plays in hampering climate change response at a macro level. The upgrading of Palestine from observer to party in the UN Framework Convention on Climate Change in March 2016 should assist in allowing Palestinian access to UN financial mechanisms to tackle climate change. However, this has led to push-back from politicians in the US, with the *New York Times* reporting that President Trump is considering terminating funding for any UN agency which gives full membership to the Palestinian Authority.¹⁷

Samer Jarrar, the director of the Canaan Center for Organic Research & Extension (CORE), a Christian Aid partner, explains the difficulties encountered in Palestine. CORE is promoting organic farming, and has so far built a network of almond orchards covering 1,000 hectares in Tubas and Jenin. However, because water is controlled by Israel in the occupied territories, they are allowed access to only 20% of available water, and have to pay for it. 'As water becomes more scarce with climate change, there will be more competition for it, and this is a source of conflict for us all,' he says. Jarrar was in the ACT Alliance delegation to the COP21 in Paris.

These examples serve as a stark reminder that 'climate adaptation is an inherently political process' – at global, national and regional levels.¹⁸ For example, Christian Aid's experience in Angola shows that while the Angolan government has all the required memberships and strategies for tackling climate change,¹⁹ the regime's dependence on passive 'rents' from export of indigenous resources, including oil, mean that these strategies have very little worth in practice. Such strategies may even serve political purposes which could potentially lead to both environmental degradation and conflict. For example, power holders in the country proposed to grant a buffer zone surrounding a national park to farmers who would defend conservation. In fact, this was a thinly disguised land grab, which would lead to clashes between farmers encroaching on national parklands and the pastoralists who have longstanding rights to graze livestock within the national park. Christian Aid's partner ACC secured a victory in halting the plan and defending the rights of pastoralists' transhumance access.

On the other hand, there are well thought out efforts that appear sound and workable, but could nevertheless be criticised for ignoring the political implications of their implementation. An example is Ethiopia's Climate Resilient Green Economy Strategy, which seeks to increase productivity and resource efficiency in the livestock sector, by improving productivity per head of cattle, while partially shifting to lower carbon-emitting protein sources like poultry. By increasing the share of meat consumption from poultry to 30% by 2030, the strategy intends to achieve substantial reductions in emissions from domestic animals.

The Humanitarian Policy Group, however, frets about how the strategy may affect pastoralist communities. It argues that policies entailed in such a climate management strategy may have significant consequences for the ability of pastoralists to continue their rangeland management strategies, with further implications for their land rights, cultural identity and relationships with the state. Hence, while the group does not question the logic of the Green Economy Strategy, it asks why there is no discussion of the political implications of its implementation; why it does not mention the sporadic conflicts involving pastoralists in the arid and semi-arid lands; and why it does not give much information on how the management of the change would take place.²⁰ The Ethiopian Government has responded to these concerns by creating the new Ministry of Federal and Pastoralist Development Affairs, which has among its mandates: 'establishing systems for preventing and resolving conflicts and to uphold and ensure good relations among different religions and beliefs'.

Such strategies may even serve political purposes which could potentially lead to both environmental degradation and conflict.

To conclude, it is necessary to reiterate the ways and contexts in which violence and conflict worsen vulnerability to climate change. A drought affecting a limited area can transform into a famine and wider humanitarian emergency, as conflict weakens traditional coping mechanisms for managing climate stresses, and hampers movement into less-affected areas. Conflict complicates the distribution of aid and various forms of humanitarian assistance, potentially tainting it, especially if it ends up in the hands of protagonists to the conflict. Conflict aggravates the dilemma that humanitarian aid, although delivered to alleviate suffering and to mitigate the hazards of climate change, may end up relieving armed groups from the survival tasks, thus enabling them to focus on fighting and intensifying the violence.

In similar vein, conflict not only undermines the capacity to plan and protect against hazards. Conflict also interrupts the recording of weather data, thus affecting the ability to understand and forecast critical survival and livelihood decisions, such as whether to delay planting or not, or to move livestock earlier than in the previous season. Worse, tactics of warfare – burning crops, deforestation or destroying water sources – cumulatively intensify the impact of climate change.

Most importantly, conflict muddles and complicates the inherently political process of climate adaptation. Environmental solutions or technocratic fixes become ill-disguised land grabs or outright suppression of land rights and cultural identities. In order to tackle climate change and enhance resilience and adaptation in conflict-affected areas, therefore, very context-specific and politically informed approaches are needed.

How does climate change impact on tackling violence and building peace?

'Does climate change cause conflict?' is a question which has been debated in various circles over the past decade and, as with most such questions, there is no simple answer. It is not only difficult to demonstrate a proven link between climate change and climate variability to events in specific cases. Probing the root causes of violent conflict is also essentially contested. These phenomena are often so complex that attribution to a single cause is just not possible nor helpful.

The case of Mali and the Sahel region illustrates just how difficult it is to make attributions as to the possible causes of local climate change and conflict. While climate change has been cited as a factor which might lead to future conflict in the Sahel, due to intensified drought and consequent desertification, Tor Benjaminsen noted that some climate models actually suggest a more abundant – possibly delayed and concentrated – local rainfall in the region. Furthermore, the Sahel region has actually become greener, not more desertified, since the drought years of the 1980s.²¹ Some observers consider this to be a result of climate-change related increased rainfall,²² while the Stockholm Resilience Institute has produced a number of studies suggesting that reforestation using drought-tolerant species has played an important part in this re-greening.²³

'Climate change is one of the most serious threats facing the world today. It is not just a threat to the environment, but also to our national and global security, poverty eradication, and economic prosperity'

Joint statement in February 2015 by David Cameron, then Prime Minister and Leader of the Conservative Party; Nick Clegg, Deputy Prime Minister and Leader of the Liberal Democratic Party; and Ed Milliband, Leader of the Opposition and the Labour Party.

In terms of the links between climate and violent conflict in Mali, Benjaminsen points out that while factors indirectly associated with drought – such as the migration of young Tuareg men in the drought years to Libya, where they were hired as soldiers – might be regarded as contributing to conflict, the key factors in provoking Tuareg rebellion were anger at pastoral marginalisation and rent seeking by corrupt officials, such as the embezzlement of drought relief funds by government officials.²⁴ Rüttinger et al cite a plethora of factors which led to the 2012 coup d'état, distinguishing between external factors (including the Arab Spring, the war in Libya, illicit trade in drugs and arms) and internal issues (including corruption, northern separatism and high population growth).²⁵

The example of Mali clearly demonstrates the difficulties in establishing clear causal links between climate change and conflict. However, it also illustrates the potential of climate vulnerability to act as an aggravator of the drivers of conflict. As Rüttinger et al note: 'Mali is still suffering from multiple interconnected crises, which together place immense stress on a country highly vulnerable to both climate change and conflict.'²⁶

Resource scarcity – a trigger for different types of conflict

Perhaps the most frequently cited example of a driver of conflict aggravated by climate change is that of resource scarcity. It has been argued convincingly that resource scarcity, caused by prolonged drought, for example, can be a contributing factor to violent conflict in certain circumstances.²⁷ This can lead to confrontations and conflict, both within communities, or between different neighbouring communities, for resource access and use. It has been suggested that for this type of conflict, which is usually a local conflict and does not involve the state, local institutions are able to mediate effectively, reduce tensions, and solve the resource conflicts with local level initiatives and arrangements that regulate the sharing of scarce resources.²⁸

However, resource scarcity can also play a part in much more complex conflicts. In Syria, for example, several observers have pointed to the multi-year drought that immediately preceded the 2011 uprising as a key factor in the violent conflict that followed.²⁹ Peter Gleick, for example, argues that the conflict in Syria, while complicated, has a direct connection to the growing threat to its water systems. Changed climate patterns with higher temperatures and reduced rainfall, resulting in more frequent and severe droughts, had impacted on groundwater recharge, thereby affecting the availability for both human consumption and economic use.³⁰

Most sources agree that the movement of rural inhabitants into cities was driven by the impacts of drought, and was a key factor in sparking the onset of conflict in 2011. However, while some portrayed the resulting unrest as a classic struggle over growing resource and commodity scarcity in urban areas, others point out that in fact the move of rural dwellers into urban areas allowed both urban and rural protestors to join forces in protesting the regime. Randall contends that: 'This was not a resource war, but an act of co-operation.'³¹ The example of Syria shows that climate change may in fact have a much wider and more complex impact than localised struggles over resources.

Resource scarcity, caused by prolonged drought, for example, can be a contributing factor to violent conflict in certain circumstances.

Climate change and the displacement of people

Climate change is also projected to increase displacement of people in the 21st century, leading to greater vulnerability and potential for violence.³² The 2011 famine in Somalia saw a sharp increase in incidence of rape and sexual violence, partly as a result of the breakup of traditional clan structures and other safety nets.³³ The IPCC cites several studies which show that women and girls are more likely to experience violence after a disaster, particularly where they are living in emergency accommodation.³⁴

Christian Aid's experience during the recent prolonged drought in Central America shows that food insecurity increased migration and left women, men and children more vulnerable to violence in the home, from gangs, and from trafficking and sexual exploitation.

The potential of climate as an aggravator of drivers of conflict has been understood and investigated further by the international security community, who often characterise climate change as a global security 'threat multiplier'.³⁵ The Global Security Defense Index found that: 'the governments and militaries of an overwhelming majority of countries have identified climate change as a threat to their security.'³⁶

In 2014, the UN Security Council held an open meeting on this topic and concluded: 'Everyday more countries are incorporating climate change considerations into their national security policies, and since Climate Change is, and will be, altering geopolitical dynamics, it seems necessary to develop more structured means of addressing this issue from an international perspective.'³⁷

Certain observers caution however against framing climate change exclusively in terms of national and global security, while recognising that it has played a role in moving the climate agenda forward. Schoch states that the security community played 'a vital role in raising the much needed awareness of climate change as an issue that deserves global action. But at what cost? Focusing on climate change as a security threat alone risks devolving humanitarian responsibilities to the military, ignoring key challenges and losing sight of those climate vulnerable communities that stand most in need of protection.'³⁸

The EU Institute of Security Studies in 2014 also recognised that 'the "securitisation" of responses to climate change may occur, providing a pretext for militarisation, inhibiting cooperative efforts to adapt to climate change.'³⁹

Partly as a response to these concerns, the IPCC 5th Assessment Report examined **climate change as a threat to human security**. In this report, human security is defined as: 'a condition that exists when the vital core of human lives is protected, and when people have the freedom and capacity to live with dignity.'⁴⁰ It outlines the role in which climate change will play in undermining livelihoods, compromising culture and identity, increasing migration that people would rather have avoided, and challenging the ability of states to provide the conditions necessary for human security. The conclusion of the report is that there is high agreement and robust evidence that human security will be progressively threatened as the climate changes.

Climate change is also projected to increase displacement of people, leading to greater vulnerability and potential for violence.

Human security will be progressively threatened as the climate changes.

At less than 1°C above pre-industrial levels, our world has already been irrevocably altered by human-induced climate change. Yet despite the commitments at the Paris conference to keep warming below 2°C, the 2016 UNEP Emissions Gap Report estimates that we are currently on track for global warming of up to 3.4°C.⁴¹ This puts us, quite literally, in uncharted territory. The IPCC acknowledges that: 'at high levels of warming, the rate of changes in environmental conditions in most places will be without any precedent in human history' and that: 'much of the current literature on human security and climate change is informed by contemporary relationships and observation and hence is limited in analysing the human security implications of rapid or severe climate change.'⁴²

One effort to consider the possible implications was undertaken by a group of experts in 2007. Their conclusion was that with warming of up to 1.3°C by 2040, we can expect heightened internal and cross-border tensions due to migration, and further conflict over resource scarcity. With further warming of up to 2.5°C by 2040, the authors contend that: 'armed conflict between nations over resources... is likely and nuclear war is possible'.⁴³ And with warming of 5.6°C by 2100 they fear that: 'this catastrophic scenario would pose almost inconceivable challenges as human society struggled to adapt.'

It is not difficult to find fault with these types of sweeping statements – but they serve to make the point that we are dealing with some completely unprecedented situations in terms of scale and rapidity of change, and that we also need to be prepared to mitigate the potential for violence and conflict. In Israel and the occupied Palestinian territory, for example, the long-term drying trend anticipated for the Jordan Valley, and the presence of aquifer resources in the West Bank mean that climate-change related impacts on access to water are increasingly brought to the table in conflict negotiations, with implications for any possible solutions.

We have examined here how the impact of climate change has the potential to aggravate drivers of violent conflict, but there is a need to look beyond and focus on action. Attempts to tackle violence and build peace will increasingly need to be aware of the potential aggravation of climate change on the drivers of violent conflict.

Christian Aid's work on resilience in fragile settings already seeks to address this. On the Kenya/Ethiopia border, a project which combines resilience capacity building with conflict analysis and conflict management interventions is being put to the test by prevailing drought, which is seriously affecting all of East Africa. However, in Marsabit county where the project is operating, there has been no conflict reported thus far as pastoralists from Kenya move into Ethiopia in search of water and pasture, due to the agreed routes and use of resources negotiated by the local peace committees.⁴⁴

Attempts to tackle violence and build peace will increasingly need to be aware of the potential aggravation of climate change on the drivers of violent conflict.

Conclusion and recommendations

It has often been stated that preventing conflicts before they start is better than attempting to respond to them once they turn into a crisis. The gradually increasing effects of climate change in the coming century may provide plenty of opportunity to put this idea into practice.⁴⁵

'In a warmer, more weather-unstable, more crowded world, where conflict is to be expected, local competition for resources and power will not be easily or safely repressed. However, it is not conflict but conflict management that should be of utmost concern; that is, the ways in which environmental and political stressors interact in the presence of ameliorative or exacerbating institutions are the keys to overcoming violence'.⁴⁶

This paper attempts to explore the links between violent conflict and climate change, drawing on current debates in academia and in practitioner circles, including Christian Aid's own experience and that of its partners. Some key messages are presented below:

- **Developing countries are suffering most as a result of climate change.** In many developing countries, these challenges are compounded by high levels of violence. While metrics such as the OHCA climate–conflict nexus list identifies those countries worst affected by violence and climate change and may be useful in coordinating response, the use of comparative indicators across very different contexts can also be limiting.
- **The presence of violent conflict clearly has a negative effect on the impacts and responses to climate change.** The presence of violent conflict can inhibit rapid response to climate events and their wider impacts (such as in Somalia in 2011). Violent conflict often prevents the collection of climate data, which affects the ability to understand and address climate change in an appropriate and effective way. Deliberate destruction of natural resources, used as a weapon of war, potentially exacerbates or contributes to climate change, as has been observed in Darfur and in Israel and the occupied Palestinian territory.
- **Attempts to address climate change and adaptation to its impacts requires a conflict sensitive and politically aware approach.** The international community is increasingly concerned with the human security impacts of climate change, but this does not always translate into more conflict sensitive climate change adaptation policies. The majority of policies remain highly technical. Political interests are often a subtext in national climate adaptation policies, exacerbating – and even perhaps triggering – violent conflict.
- **Climate change can present a real and growing threat to tackling violence and building peace, as a massive aggravator of the drivers of violent conflict.** As warming continues to rise, this will only continue to grow. Attempts to tackle violence and build peace will need to be increasingly aware of the potential aggravation of climate change on the drivers of violent conflict.

- **It is time that the development NGO community engaged more deeply with the implications for the twin challenges of violent conflict and climate change on promoting sustainable development.** While the international security community has played its role in establishing climate change as a ‘threat multiplier’, a militarised response to the challenge is not the solution and risks undermining local collective action.
- **The NGO community should build on the momentum provided by the acknowledgment of climate as a human security risk,** by demonstrating how approaches such as resilience programming can address the effects of both climate vulnerability and violent conflict.
- **Climate change is the biggest, most universal threat that the world has faced in recent times.** Therefore the response must also be global, but take into account the context-specific nature of violent conflict and climate change.
- In order for us to tackle climate change and violent conflict in tandem, we must **‘think locally and act globally’, as well as ‘thinking globally and acting locally’.** The more work that can be done within local contexts to identify particular challenges and appropriate responses to climate change, the better the policies at national and international level will be.

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