# Out of the Frying Pan Into the Fire Part two – Building resilience to climate change and violent conflict

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## **List of Acronyms**

ACC Associação para Construir Comunidades

**DFID** Department for International Development

ICPR Integrated Conflict Prevention and Resilience

IDS Institute of Development Studies

IPCC Intergovernmental Panel on Climate Change

NGO non-governmental organisation

**ODI** Overseas Development Institute

**PVCA** participatory vulnerability and capacity assessment

**UN** United Nations

## Introduction

Part one of this two-part report examined the overall links between climate change and conflict.1 It found how violent conflict worsens climate vulnerability. For example, violent conflicts lead to famine; natural resources destruction is a deliberate tactic in waging war; conflict hampers macro-level responses to climate change; and the adoption of 'green strategies' can also be used to gain the upper hand in conflicts.

Part one also found that climate change hazards make it more difficult to tackle violence and build peace. Climate change can trigger food shortages, decrease water supplies or disrupt access to energy supplies - leading to economic and political turmoil, social unrest, riots, deadly battles and even all-out war. In response, the governments and militaries of 110 countries have already identified climate change as a threat to their national security.

As with all complex problems, however, there is no simple chain of causality either way. A most important finding is that, to a large extent, the outcomes in countries exposed to both climate change and conflict will depend on the resilience of communities to adapt and tackle a range of shocks and hazards. A debilitating drought may bring riots and social unrest in one country, but in a neighbouring country, the same problem may be dealt with by citizen mobilisation towards collective action solutions. Community resilience explains the difference.

Part one concluded that in order to tackle climate change and violent conflict in tandem, we must 'think locally and act globally' as well as 'thinking globally and acting locally'. In other words, we must look at specific case studies and identify particular challenges and community responses, in order to improve national and international policies and programming practice.

Here in part two, we begin our examination of community resilience. It builds on the findings in part one by taking a closer look at the context of climate change and violence in three countries where Christian Aid works: Angola, Honduras and Mali. Each case study sets out the particular context in terms of conflict, violence and climate change, explores the links between climate vulnerability and violent conflict, and discusses approaches to supporting climate and conflict resilience in that country, based on the experiences of Christian Aid staff. In Angola, the protection of land rights is essential in building resilience and climate change adaptation among communities. In Mali, tackling security challenges and programming with an awareness of the presence of unusual actors are key to moving forward in a region vulnerable to both extreme weather and conflict. In Honduras, building environmental resilience using conflict sensitivity principles offers great promise in addressing the challenges.

Both climate change and violence are extremely context specific, and therefore, this paper does not attempt an across-the-board analysis according to a set of quantitative indicators. However, it does attempt to identify parallels and differences between the three case studies, in order to make some recommendations for policy development and wider application, as laid out below.

'Narratives of particular conflicts and local responses to climate change are a better guide to policy than generalised models showing simple chains of causality between conflict and climate change'

Institute of Development Studies, 2010

Most importantly, part two takes the view that building resilience in communities is just one important part in the menu of options – it does not stand alone in responding to the challenges of climate change and conflict. When taken alongside community-level tools for understanding the root causes of violence, such as participatory vulnerability and capacity assessments (PVCAs), and when complemented by national and global advocacy on the responsibilities and obligations of duty-bearers and market actors, it becomes the building block in Christian Aid's overall approach to climate justice.

As stated in part one, supporting resilient livelihoods in situations where both violent conflict and climate change are present may require bridging gaps, and making climate security and climate justice work together.

#### **Key findings and recommendations**

1. Programmes seeking to tackle violence and climate change should focus on building up a community's social capital and social infrastructure.

A community's resilience to both conflict and climate shock does not come out of nowhere. It is built upon a community's web of relationships and reciprocity, from which emerge shared norms, common values or collective experience that enable co-operation or collective action. It also facilitates the emergence of local leadership and mechanisms for mutual benefit. In other words, to a large extent, resilience is dependent on a community's social capital or social 'infrastructure'.2 Communities have social infrastructures too – such as traditional or informal community-based decision making institutions – that enable them to deal with stress and respond to shocks without resorting to violence.

Much of Christian Aid's work focuses on community structures that can respond collectively and successfully to disasters, risks and opportunities. Facing violent conflict and/or climate vulnerability can be facilitated by social support structures, such as the peace committees and community early warning systems in Angola, or local emergency response committees in Honduras.3

Using the presence or absence of functioning social structures as an indicator of resilience to climate vulnerability and violence also helps to identify where potential challenges may arise. The experience with urban resilience in Honduras, for example, highlights that urban settlements are less socially cohesive than rural settings, have a weaker sense of community and show less solidarity in addressing common problems. On the other hand, well-functioning social structures can be disturbed, for example in areas where access to natural resources is affected by either climate or conflict, or other related factors, such as the abuse of land rights. Farmers, herders and entire communities may travel or migrate, moving outside of their habitual social network, putting pressure on the social infrastructure in more resource-rich locations.

The process by which programmes are carried out in the community is therefore as important as the content, underlining the importance of using tools such as participatory vulnerability and capacity assessments (PVCAs) which empower individuals and

communities to analyse their own problems and suggest their own solutions, thereby enhancing social cohesion. Christian Aid, working in consortium with others, has produced another tool, Integrated Conflict Prevention and Resilience (ICPR), to be used in conjunction with PVCAs in fragile or violent contexts. Studies of cases where disaster resilience programming was undertaken in fragile contexts have underlined the importance of understanding the political aspects of vulnerability, of analysing the wider and local context and conflict environment, and considering conflict as both a risk and context in order that activities to address disaster risk.4 Power mapping is another useful tool for understanding where violent conflict may arise, but there may be limitations to participatory power mapping, if individuals are intimidated or fearful to mention certain actors.

#### 2. Addressing climate vulnerability and tackling violence should be carried out in tandem with land rights.

Climate change is one factor contributing to pressure on **resources** in the three case study countries; others include deforestation and inappropriate or over-exploitation of coastal or riverside areas, and expropriation of land to private investors. As such, work on climate vulnerability and tackling violence should be taken concurrently with Christian Aid's other work, ie, tackling the abuse of land rights and improving the poor's access to land.

Christian Aid take a strongly rights-based approach to land; while there is no universal 'right to land', access to land may affect the right to food, secure housing, water, health, work and an adequate standard of living.5 However, as Christian Aid staff in Angola observed, work on land rights may be wasted if land is deteriorating or desertifying. Conversely, people will not invest in climate change adaptation if their land rights are not secure.

Another aspect is the availability of land. The perception of unlimited natural resources in countries such as Angola and Mali can act both as a barrier to climate change adaptation (resources will never run out) and lead to greater likelihood of conflict when pressure over natural resources arises where none existed before. Angola, rich in natural resources, is seen as having almost infinite resources, leading to a rentier regime, whereby the elite thrive by selling or renting indigenous natural resources to external clients. Although Mali is far poorer in natural resources, open land has been increasingly under pressure, and has gone from abundance to land scarcity in less than 30 years.6

Conflict over resource scarcity is often motivated as much by perception of inequality in allocation of scarce resources, as over the actual scarcity of resources itself. This is illustrated by the 2012 Tuareg rebellion which led to the civil war in Mali. While drought certainly may have been a contributing factor, government policy leading to the marginalisation of pastoralist lifestyles is said to have been one of the underlying issues of the rebellion. On a more local level, resource scarcity and climate shocks have traditionally been managed through local coping mechanisms - but Mali has witnessed growing violence between farmers and pastoralists, which many attribute to increased drought and desertification, leading to a breakdown in these coping mechanisms.

#### 3. Security risks must be carefully assessed in resilience building in fragile contexts, and the role or involvement of 'unusual actors' must be considered.

When working in fragile contexts, security is obviously an issue that arises. Easy access to arms exacerbates climate-related violence. In Mali, where more and more people are involved in illicit trading, including in arms, farmers and herders are increasingly arming themselves. This is leading to a greater likelihood of disputes resulting in violence, livestock raids and retaliatory shootings. In the slums of Honduras, where people live in extreme poverty, arms are omnipresent and the rate of homicides has become the highest in the world.

In the Honduran urban resilience programme, the security risk was dealt with by enhanced support from Christian Aid's security team a high-input approach which may not be replicable across Christian Aid's programmes. In Mali, efforts to identify partners in the volatile North have been hampered by security issues.

Working on resilience in fragile settings also involves considering, rather than ignoring, the role of what Christian Aid in Mali has termed unusual actors - actors who may be involved in illicit or violent activities and who could appear in a variety of guises, such as those regarded as criminals by the state, but who may often be regarded by locals as providers of employment. This does not necessarily mean direct engagement, but only acknowledging their presence and having a keen awareness of the role which they may play in filling power or economic vacuums in situations where the state or local authority control is week. In the Honduran urban resilience programme, Christian Aid partners did not deal directly with gang leaders, but relied on community mediators as interlocutors and for security information.

4. Approaches which tackle environmental resilience with integrated conflict sensitivity, may in some situations be more successful than approaches to tackle violence directly. In fragile contexts, working on climate resilience may be viewed as less controversial than efforts to address violence directly.

The experience of Christian Aid and its partners in Honduras has outlined how even using the term 'conflict prevention' in some circumstances may cause people to become defensive or fearful. At national level, advocacy around climate resilience and mitigation may be better received than advocacy around violence prevention.

An integrated approach, therefore, might seek to enhance social capital for the stated purpose of resilience to climate shocks – which would then have the knock-on benefit of reducing propensity towards violence. Christian Aid's programmes in Angola, for example, use a very broad framing of resilience, to include economic resilience and resilience to violence as well as environmental shocks.

5. Resilience-building cannot succeed without tackling ethnic or social differences and inequalities.

While conflict over resource scarcity can be exacerbated by ethnic differences, it is worth considering how conflict over resources can arise both between and within communities.

In Angola, drought conditions triggered conflict over access to land and over access and use of water between farmers and pastoralists, between large landowners and small local farmers, and between men and women in the same community. Men typically take charge of larger grazing animals and prioritise water use for them, whereas women often prioritise water for cooking and household use, as well as the smaller livestock that they frequently hold.

Violence and conflict are often framed as a clash between two distinct groups; as the example above, shows, however, the reality is usually not so clear-cut. It is these types of distinctions and difference that Christian Aid's use of PVCAs and the accompanying tool, ICPR, seeks to uncover and address.

## Case study one: Angola

In brief: Tackling climate change in Angola, which is already seeing increased extreme weather events, is complicated by the country's history of a 27-year civil war, and the current regime's dependence on the export of oil and other natural resources. Land grabs by the elite are commonplace, and while the country has abundant groundwater reserves, access to water pumps is often difficult, particularly where pumps are situated on the land of large farmers. Christian Aid programming in Angola seeks to protect land rights and link these to climate change adaptation, use a broad framing of resilience in order to encompass both resilience to violence as well as to environmental and economic shocks, and play a role in connecting local partners to wider networks.

#### **Country context: conflict and violence**

Angola's past is scarred by the civil war which finally came to an end in 2002. The war claimed the lives of hundreds of thousands of people and left 4 million people displaced. After the war, Angola was one of the fastest growing economies in Africa due to its abundant offshore oil reserves. Yet only a few Angolans are benefiting from these financial riches and Angola is ranked 150 out of 188 countries on the UN Human Development Index. Corruption and state violence against citizens is rife, and Christian Aid has witnessed a shrinking of civil society space in the country. As oil prospects gradually diminish, land grabs are on the increase as the elite seek new ways to ensure their wealth. Land rights are an ever-present issue, particularly in and around the capital, Luanda.

President dos Santos did not run in general elections in August 2017, ending his 38 years in power. Whether that will lead to positive change in the political climate, however, remains uncertain.

# Country context: climate change vulnerability and impact

Angola is extremely vulnerable to climate change. Over the last 30 years, the country has already been hit hard by climate change with impacts such as prolonged drought, damaging flash floods, forest fires, reduced crop production, reduced water resources, changed fishing resources, etc. Climate change therefore poses serious risks to livelihoods and health of affected populations, but is also affecting the economic potential and national food security of the country as a whole.<sup>7</sup>

It is predicted that the mean annual temperature will increase by 1.2°C to 3.2°C by 2060, and 1.7°C to 5.1°C by 2090, and the country will also experience more extreme weather events, seasonal shifts in rainfall and sea level rises over the next 50 to 100 years.\*

Some regions in the south are already experiencing a regular worsening of droughts and floods, as well as coastal degradation.<sup>9</sup> Analysis carried out in Angola for Christian Aid in 2011 indicated that water shortages per se should not be a significant constraint on agriculture in the regions studied.<sup>10</sup> The report identifies rainfall variability and extremes, including more frequent flooding, as a more likely threat.

However, current natural resource management practices by communities are largely uncontrolled, and have the potential to lead to changes such as desertification of semi-arid areas and increase the impact of natural events such as flooding and drought.

# What are the links between climate vulnerability and violent conflict in Angola?

Clearly, the civil war has had an impact on the functioning of the nation's institutions. Combined with the lack of human resources, this has hampered both the collection of climate data and the implementation of climate change adaption initiatives. Oliver Sykes comments: 'Data exist for the late colonial period from around 1953 to 1975; thereafter there is a gap that continues to the present day, as repair of the network of hydrological and meteorological stations is not the Government of Angola's first priority.'

The lack of data is also evident at the community level. In Christian Aid research in Kapalandanda, a post-war settlement in Kwando Kubango, understanding of climatic changes in the area was limited, because people had not been in the area long enough to see changes over time.<sup>12</sup>

Post-conflict and during recovery, the Angolan Government has made firm commitments to tackling climate change. However, some of the strategies, such as the promotion of biofuels as an adaptation measure, have been viewed with scepticism, as they may, in fact, exacerbate both environmental degradation and conflict. This commitment to promote biofuels presents risks in terms of unfair land acquisition, competition with food production, deforestation and competition for water supplies. More generally, the rent-seeking nature of the Angolan Government, which is hugely dependent on the export of natural resources including oil, makes its climate change strategies less credible.

At a local level, conflict has also had an impact on people's livelihoods and resilience to climate change, as Sykes reported from Cassole, on the south of Rio Cubia. Government intervention resulted in forced movement of people, with the stated aim of moving them nearer to existing services. However, aside from the aggressive approach to this relocation, the intervention also had long-term negative effects, including making access to croplands more difficult for those who were moved.<sup>14</sup>

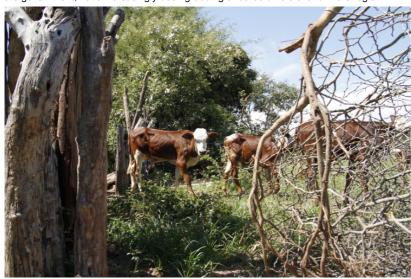
Access to resources, land and water are often a source of conflict in Angola. Climate change has been described as having a 'multiplier effect', and its impact, such as resource scarcity, may provoke tensions and conflict.

This has been experienced by the Christian Aid team in Angola, where access and ownership of water pumps have led to confusion and conflict. While Angola possesses abundant groundwater reserves, accessing these reserves requires pump technology, and during periods of drought and other sources of water becoming unavailable, these become the only secure source of water. Pumps are frequently located on land belonging to large farmers, and it is not always clear whether it is the government or the farmer who has installed the pump. This confusion over ownership and access rights can lead to exploitation and conflict, as

illustrated by the case where a farmer asked the community for land allocation in exchange for access to the solar power pump on his land. When the community refused, the community found that the solar panels had mysteriously disappeared. In other cases, water pumps have been installed along roadsides, apparently to ensure the visibility of the donor that sponsored its construction – not where they might actually be needed by herders – and are frequently poorly maintained.

There is also a **gender dimension with regard to water and land access** in Angola. Men and women have different priorities with regard to land and water. Men herd cattle, and therefore prioritise water for them, while women keep smaller animals, such as goats, and tend vegetable gardens, and would prioritise water for these activities, as well as for cooking, drinking and washing. While the war often gave women greater responsibility for agricultural production, this was not accompanied by enhanced rights to land.

**Below:** Calves belonging to Kakhandy Kapolo, a nomadic Nyaneka herder in Huila province, south-west Angola. He lives in Ndongue, Gambos municipality, where nomadic herders have been grazing their cattle and travelling to seasonal pasture for generations. However, a new wealthy class of landowners, who are often either connected to or part of the government, have increasingly been grabbing swathes of fertile land in the region.



Access to land is also important for the **agro-pastoralist communities**, who move large herds of cattle from one grazing ground to another in seasonal cycles. Access to land is essential for their livelihood and for their survival in times of drought. Increased enclosure of land – both private and by the government for protection of national parks – has led to difficulties in transhumance livelihood of pastoralists and their access to traditional grazing land.

Sykes points out that historically, transhumance was not a problem either during the war or under the colonial regime. In periods of intense hunger, caused by poor rains or war, pastoralists had access to the national park on the understanding they would not eat or destroy native plants or animals. Since the end of the war, however, more land has been enclosed and the government is now trying to fence Bicuar National Park, preventing access by pastoralists. In times of drought and hunger, this will undermine the traditional resilience system that they have had for years.

Christian Aid's partner Associação para Construir Comunidades (ACC) secured a victory in halting this plan and defending the rights of pastoralists' transhumance access with the creation of a buffer zone surrounding the national park, to be granted to farmers who would 'defend' conservation.

# Approaches to supporting climate and conflict resilience in Angola

Christian Aid Angola uses a very broad framing of resilience, to include both economic resilience and resilience to violence as well as environmental shocks. While it does not explicitly include conflict resolution in PVCA, it considers that it takes a holistic enough approach that conflict concerns are adequately represented. It uses power and conflict mapping as part of the monitoring and evaluation process for the Irish Aid-funded programme.

For resilience to both violence and climate vulnerability, Christian Aid Angola emphasises the importance of working with local partners, as they understand the people and the circumstances, and are well respected and connected in their local communities. Christian Aid can then assist them in creating networks with other local, national or international human rights organisations, for mutual support and stronger advocacy. For example, ACC has created a representative group for pastoralists, while another partner, Promaica, has brought together pastoralist women with women from nearby communities, who help them to create gardens, use adaptive crops and establish seed banks. Other activities undertaken by Christian Aid's partners include training communities in climate resilient strategies as well as non-violence and peaceful resolution of potential conflict situations such as land demarcation.

As identified in Christian Aid's Angola programme strategy, there is a need to further link land rights with climate change adaptation. Struggles to ensure tenure to land could be wasted if that land then becomes degraded by the effects of climate change, or conversely, when people are not willing to invest in climate change adaptation measures if they have no security of tenure.

## Case study two: Mali

In brief: Mali, along with the rest of the Sahel region, has always been vulnerable to extremes of temperature, and climate change is likely to lead to further drought and irregular rainfall. Until 2012, however, Mali was considered a relatively stable democracy, better placed than many of its neighbours to tackle the effects of climate change. This illusion was shattered with the 2012 uprising in the north, followed by a coup d'état in the capital, which has led to continuing violence, especially in the northern regions. Christian Aid programming in Mali illustrates some of the difficulties in building resilience in fragile contexts: while Christian Aid has identified the need to find new partners in the north of Mali, security concerns make this extremely challenging. Christian Aid in Mali has also identified the need to consider unusual actors (who may be involved in illegal or violent activities) when assessing and power-mapping particular contexts.

#### **Country context: conflict and violence**

Mali is an extremely poor country, ranking among the lowest in the world on the Human Development Index, with a life expectancy at birth of 58 years. Independent since 1960, Mali experienced an early 'Arab Spring' when, in 1991, a military coup overthrew a dictator and ushered in a new democratic system. As a result of this, Mali was considered a model of relatively good governance and stability for 20 years. This reputation was shattered in 2012, as state control over the northern part of the country started to crumble in face of a complex separatist-criminal-jihadist rebellion in a territory populated by a traditionally pastoralist community with a long history of conflict with the Malian state. This was followed by a military coup in the capital, Bamako, in March 2012.

Although a power transfer to an interim civilian government was negotiated within a month, fighting continued in the north, with the Malian government only regaining control 10 months later, with the assistance of a French-led international intervention. Although a peace agreement was signed in 2015, violent armed conflict continues to be a feature of Malian public life.

# Country context: climate change vulnerability and impact

Mali is a vast landlocked country, covering the Sudano-Sahelian semi-arid regions in the south and centre and stretching deep into the Sahara Desert in the north. The Sahelian region as a whole is characterised by a large variability in temperature and rainfall, which has led in the past to successive droughts and floods. Both Sahelian and Saharan zones also experience increasingly more frequent strong winds.<sup>16</sup>

Drought and irregular rainfall are expected to continue in the future due to climate change. The average temperature in Mali is expected to rise by between 2.71 and 4.51°C by 2025, while rainfall could decrease by 8 to 10% by 2025.<sup>19</sup>

**Below**: Villagers from Soumoli break stones to build a stone wall. The community has been taught how to build bunds, dykes and *zais* to retain water in the soil and prevent erosion. As a result, harvests have improved. In 2014, the young men in the village did not need to migrate to find work because the village was able to grow enough food to be self-sufficient.



While climate models for the region produce mixed results, it is certain that with a rapidly growing population of around 17.5 million,<sup>20</sup> the vast majority of whom rely on farming or pastoralism to survive, Malians are very susceptible to drought and resource scarcity. The Government of Mali estimates that the Sudano-Sahelian zone of south-central Mali is very likely to be the region most affected by climate change, and it is also home to more than 90% of Mali's population.

# What are the links between climate vulnerability and violent conflict in Mali?

Mali provides a striking example of how complex and uncertain predicting the nexus between violent conflict and climate change can be.

For the first decade of the 20th century, Mali was considered to be relatively well placed to handle the twin challenges of climate change and violent conflict. In 2007, a thoroughly researched global study of climate change and violent conflict compared Mali to Chad, as countries with similar climate challenges and concluded: 'Mali's relatively good governance, economic performance and political stability since the civil war ended in 1995 all suggest that it is much better placed than Chad to respond in an effective and timely way to the challenge of climate change, by adapting crops, and preparing to handle potential resource conflicts through traditional mediation.'<sup>21</sup>

Unfortunately, the international community had underestimated the potential for widespread armed conflict – the 2012 armed conflict witnessed more acts of violence than all the years from 1997 to 2011 combined,<sup>22</sup> and while political violence peaked in 2012/13, armed conflict continues at an elevated rate.<sup>23</sup>

Drawing links between violent conflict and climate change also needs caution. For example, Benjaminsen warns against drawing direct a link between the outbreak of conflict in 2012 and climate change, and argues that although the 2012 rebellion occurred during

a prolonged drought, this was not the key contributing factor in causing the rebellion, but rather that the anger at central government policy and practice – including embezzlement of drought relief funds – were to blame.<sup>24</sup> Christian Aid's analysis of the rebellion focuses on why very few Malians stood up to defend their democracy. It concluded that the regime which appeared relatively stable from the outside in fact 'based its power more on patronage and less on popular support', highlighting the importance of democracy delivering for the poor.<sup>25</sup> However, in Mali, climate change clearly has the potential to act as an aggravator of the multiple causes of conflict, and cannot be overlooked in analysing the conflict which continues to plague the country.

In parallel with the situation at national level, and possibly linked to it, is the growing violence between farmers and pastoralists. Many observers contribute this to increased desertification and drought leading to **increased competition for land between pastoralists and farmers.** It is interesting, however, to note the differences in how this is framed. Rozen and De Carvalho refer to pastoralists being forced from their traditional grazing grounds into valleys where conflicts arise with farmers; Mohamed Kanoute highlights that farmers are planting their crops further afield, including in grazing lands.<sup>26</sup>

While Rozen and De Carvalho see this pastoralist/farmer violence as largely separate from clashes between the state and armed groups, Benjaminsen points out that it was pastoral marginalisation that was at the root of the Tuareg rebellion which triggered the 2012 civil war. He contends that farmer-herder conflicts are linked to the state's pastoral and land tenure policies, which generally favour farmers and squeeze out pastoralists.<sup>27</sup>

In an ongoing research project, Toulmin is comparing current conditions in central Mali to 30 years ago. She describes how, in the 1980s, farmers dug wells in order to attract visiting herders, whose animals then provided fertile dung for growing crops. Now, with pressure on land – as a result of a huge Chinese sugar cane concession, relations between herders and farmers have become strained. She recounts: 'The villagers said then [in the early 1980s] "land is so abundant the bush can never finish". But in 2005, when I asked the same question, they said: "the bush is finished". They have gone from abundance to land scarcity in less than 30 years.'<sup>28</sup>

The government decision to grant 20,000 hectares of land to the Chinese sugar cane company has been hurting farmers and herders alike, as the deal has been driving farmers off their land without the promised compensation. The sugar cane plantation was further extended in 2014, leading to intense pressure on land. The negative impacts of the sugar cane plantation extended beyond the land grab, since the sugar cane attracts quelea birds who nest in the cane and feast off cereal fields for up to 10km around. As farmers move further afield, increased farmer-herder conflicts inevitably arise.<sup>29</sup>

Another aspect is that it appears likely that **easy access to arms plays a role in exacerbating pastoralist/farmer violence**, just as it did in triggering the 2012 rebellion. While the Malian state regained control over northern territories in 2013, no disarmament of rebel forces has taken place, and increasing numbers of people became

involved in illicit trading, including in arms. As such, access to weapons became commonplace, and farmers and herders in Mali are increasingly arming themselves, leading to greater intimidation, livestock raiding and retaliatory shootings.<sup>30</sup>

# Approaches to supporting climate and conflict resilience in Mali

As evidence has shown, Rozen and De Carvalho rightly conclude that: 'Options for addressing the relationship between drought and violence in Mali cannot rely on traditional crisis responses, and should consider the day-to-day realities of those most affected. Communities should be offered the tools and knowledge to respond to climate shocks and avoid violence; but beyond pragmatic resilience building, conflict-prevention efforts must recognise the need for action on root causes.'31

The eruption of conflict in 2012 threw many promising development efforts, including Christian Aid's programmes, into disarray. A Center for Climate and Security report highlighted how, in 2012, humanitarian organisations foresaw and were well prepared for the drought and to provide relief, but they could not have foreseen the rapid deterioration of the political system. The report's authors argue, as have many others, that in fact, the warning signs were all there – but these are only evident in hindsight.<sup>32</sup>

At the time of the rebellion, Christian Aid had just begun to implement a new Sahel framework to cover Mali, Senegal, Burkina Faso and Niger. However, the onset of violent conflict meant that Christian Aid found itself evacuating staff from field offices.<sup>33</sup>

Security continues to be an issue. Christian Aid's current Sahel Programme Agreement identifies the need for new partners and a new plan of action in the north of Mali, but the security concerns make identifying and building relationships with new partners extremely challenging. Christian Aid have also identified the need to be aware of unusual actors – those who might be involved themselves in illegal or violent activities – as they may play a vital role in communities where state control is weak or absent.<sup>34</sup>

There is a clear understanding of the interlinked nature of conflict and climate change in Christian Aid's analysis of the situation in Mali. In a project proposal for resilience and sustainable peace work in Douentza in central Mali, the various conflicts which affect the region are enumerated – conflicts over resources, farmer/herder conflicts, religious and leadership conflicts – and it is pointed out that these conflicts, often latent, could be re-activated or amplified by the ongoing political instability.

As discussed above, the events of 2012, took many observers by surprise. However, as Femia and Werell conclude: 'A number of the drivers of instability in Mali, such as certain long-standing political grievances, the free flow of heavy weapons and international terrorist organizations, drought and the climatic changes that exacerbate that drought, can now be identified with a reasonably high degree of certainty. These should be the focus of national, regional and international efforts to resolve the conflict in Mali, reconstruct its institutions of government, and improve the security and resilience of its population.'35

## Case study three: Honduras

In brief: Honduras is highly vulnerable to extreme weather events, including hurricanes and tropical storms, and large-scale deforestation has worsened vulnerability to landslides and floods. Attempts to increase resilience have to take into account extremely high levels of societal violence. Christian Aid has worked with partners in Honduras on resilience in urban areas, where they note that social capital is particularly lacking. This is tackled through the formation of community-based emergency response committees. In such settings, addressing violence directly may cause people to become fearful or defensive, but tackling environmental resilience with integrated conflict sensitivity may be a more successful approach.

#### **Country context: conflict and violence**

Honduras is sometimes overlooked in debates on climate change and violent conflict, since it has not been in a situation of 'armed conflict' since military rule ended in 1981. It is, nonetheless, an extremely violent country, with the murder rate among the highest in the world.<sup>36</sup>

There are a number of underlying issues to this societal violence. Christian Aid research points to the 1996 US immigration law that allowed the government to strip foreign-born residents of their citizenship and deport them to their countries of origin if they were sentenced to a year or more in jail. In Honduras, this led to the import of international gang culture, bringing with it rampant violence and extortion. The 2009 coup d'état further weakened national institutions, and increased political persecution, corruption and police impunity.

In 2015, the murder rate was 85.5 per 100,000 residents. In San Pedro Sula, the slum in which Christian Aid's partners work on urban resilience, the rate is 173, reportedly the highest in the world outside a war zone.<sup>37</sup>

# Country context: climate change vulnerability and impact

Honduras has a hot tropical climate, changing gradually from hot tropical in the lowlands to temperate in the highlands. Rainfall is very variable throughout the country, ranging between 900 and 3,300 mm depending on region. Temperature ranges between 10°C in the highlands to 31°C in the southern plains. An increase in temperature of 0.8° and a decrease in rainfall of about 6% is expected by 2020, causing water stress and drought. The latter, combined with heavy rain and strong wind, increases erosion and desertification, especially on the lower slopes where much of the cereal crops are grown. It is estimated that rainfall could further decrease to between 20 and 25% by 2050 and that most of the country will have become hotter and drier.<sup>38</sup>

Honduras is also exposed to climate-related extreme events such as hurricanes, tropical storms, floods, droughts and landslides that devastate crops and critical infrastructure. Honduras ranks highest in the world on the Climate Risk Index. Between 1996 and 2015,

Honduras experienced a total of 61 extreme events related to climate, with devastating damage to both human life and capital and structural assets.<sup>39</sup> Climate change will increase the frequency and severity of such extreme events.

Honduras' mountains used to be covered in tropical rainforest, but large-scale deforestation has led to changing rainfall patterns and poorer soils. It has also has increased the danger of floods and landslides, especially during the annual hurricane season (June-November). In mountainous areas, tropical storms often trigger landslides, especially in areas that have lost their forest cover. In low-lying coastal plains they cause serious floods. Poor communities are hit time and time again. Hence, natural disasters can severely hinder communities' progress, even wiping out existing development work, and displacing people, leaving them vulnerable and insecure.

# What are the links between climate vulnerability and violent conflict in Honduras?

A number of issues underlying societal violence are briefly discussed in the section above. It is tempting to add extreme weather events to this list, in particular Hurricane Mitch, which destroyed an estimated 70% of the country's crops and infrastructure, causing more than 10,000 deaths and \$3 billion in damage, significantly setting back Honduras' development process.<sup>40</sup>

Clearly, Hurricane Mitch had a devastating effect on Honduras. However, as Beth Tellman et al put it 'disasters do not deterministically lead to more violence'.41

This is illustrated by comparative research on two communities established in the aftermath of Hurricane Mitch, Divina and España.<sup>42</sup> Both communities had comparable socio-economic demographics, were from the capital Tegucigalpa, and both were resettled in the Amarateca valley, north-east of Tegucigalpa. However, a five-year study (2004-9) showed that while Divina enjoyed a low crime rate and high civic participation, España had almost three times the crime rate and homicide was commonplace, whereas it was non-existent in Divina during the study period.<sup>43</sup>

Tellman et al comment: 'As with Divina, an NGO helped create a community vision, but was less engaged in the maintenance of that vision. As a result, residents returned to the social structures they had known in Tegucigalpa.'44 It is worth noting, however, that even España's high homicide rate was less than half of that of Tegucigalpa.45 The authors conclude that social capital is key in preventing violence following climate shock, and that enhancing social capital must therefore be a central pillar in addressing climate resilience and violence prevention together.

# Approaches to supporting climate change and resilience in Honduras

While Angola and Mali provide insight into climate shocks and violence in rural settings, the work of Christian Aid's partners in Honduras on urban resilience allows us to explore how these links play out in an urban setting.

Development agencies, including Christian Aid, are keenly aware of the role of social capital in addressing violence and resilience in Honduras, highlighting that there is often less social cohesion in urban settings, and that the weaker the solidarity and common identity, the greater the propensity to violence and to affiliate with a gang.

The project on urban resilience also highlighted that approaches which tackle environmental resilience and integrate conflict sensitivity may be more successful than approaches that attempt to tackle violence directly. Even using terms such as 'conflict prevention' may cause people to become defensive or feel fearful, because it references violent experiences. At a national level, advocacy on climate resilience and mitigation may be better received than advocacy on violence prevention.

This climate of fear also revealed some limitations to the participatory power mapping and PCVAs typically carried out by Christian Aid – participants could be afraid to speak freely because of fear of infiltration. It was not possible to carry out a household survey in advance of the PCVA, as it would have been rejected by some households and by gang leaders. One suggested modification was to leverage the network of community mobilisers to provide a power mapping in advance of the more participatory exercise, in order to identify where potential differences might lie.

Security was a huge issue in carrying out the urban resilience work, and was accomplished by extensive support from Christian Aid security teams. However, such an approach in dealing with high risk areas would not be replicable across Christian Aid's programmes.<sup>46</sup> Christian Aid partners relied on community leaders as interlocutors with gang members, rather than engaging with them directly.

A funding extension to the urban resilience programming allowed selected PVCAs to be reviewed and adjusted in light of Christian Aid's recent **ICPR methodology**. Of the three case study countries, Honduras is the only one which has already provided training to partners on Christian Aid's ICPR approach, starting in 2016. This allowed partners to build on their conflict sensitivity capacity, updating risk management plans for the communities selected.

## **Conclusion**

This paper has given some insight into the conclusions drawn by the first paper on climate change and violent conflict,<sup>47</sup> by exploring climate vulnerability, violence and conflict in three different countries where Christian Aid is active – Angola, Mali and Honduras. It attempted to throw some light on what the links between climate and violence might be, but more importantly, looked at how best to tackle these two challenges in tandem.

The conclusion is that a thorough and comprehensive contextual analysis with capable and trusted partners and with the communities, in combination with building or enhancing social infrastructure, is key to building resilience to climate-related shocks, while tackling and preventing violence and building peace.

Part of this process, and one that may well provide an uncontroversial entry point for enhancing social capital that ultimately leads to a reduction in violence and conflict, is a community-based analysis of climate risks. This can bring together local knowledge of change together with external climate science, building confidence between communities and local government services. It also highlights possibilities for joint action on climate risks that address the environmental degradation that can drive conflict. Building resilience to the extensive climate risks that communities often prioritise then leads to increased resilience to intensive risks, both climate and conflict, when they occur.

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