



# SPREADING DISEASE, SPREADING CONFLICT?

COVID-19, CLIMATE CHANGE AND SECURITY RISKS

This in an independent analysis provided by:



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## Spreading disease, spreading conflict?

COVID-19, climate change and security risks

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## SUMMARY

The COVID-19 pandemic has profound global impacts. Since the beginning of January 2020, there have been almost 30 million confirmed cases of COVID-19, and almost one million deaths, according to the World Health Organization (WHO). While all countries have been affected, COVID-19 is hitting especially hard those that were already struggling with poverty and conflict. The lockdown measures and travel restrictions caused millions to lose their jobs and incomes, exposed inequalities in access to basic services and resources, and heightened the risks to safety and human rights for many. What is worse, the full brunt of the pandemic may only be felt much later.

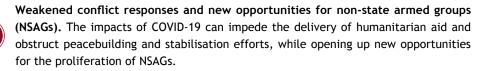
Many of the contexts affected by the pandemic are also experiencing the impacts of climate change, which have and will continue to exacerbate situations of fragility and conflict. There is widespread agreement among security experts that climate change is a risk multiplier and obstacle to peace. It adds to and compounds challenges such as increased resource demands and rapid population growth and urbanisation, thus exacerbating existing fragility and conflict risks. At the same time, climate change has not stopped for COVID-19 as the massive wildfires, record droughts and floods, unprecedented heat and storms that we have seen in 2020 remind us.

At this intersection of health, climate and conflict risks, four key pathways through which COVID-19 can exacerbate climate-related security risks stand out:



**Increased pressure on livelihoods and resources.** The combination of COVID-19 and climate change impacts can put additional stress on livelihoods and resources, and reduce adaptive capacity, which in turn can exacerbate conflict risks.

**Negative impacts on migration as an adaptation strategy.** Measures to contain the spread of the COVID-19 pandemic can increase the precariousness of living and health conditions for migrants and refugees in host countries, while also restricting migration as an important coping strategy.





**Increased risks in urban environments and violent protests.** In poor urban areas, adding pandemic-related stress to climate pressures might increase the risk for violence and instability.

2

At the same time, the COVID-19 pandemic offers another opportunity to talk about how interconnected risks, including those created by climate change, can contribute to insecurity and conflict. Taking these risks and their interconnectedness into account is essential not just to build back, but to **build back better**. This requires:



**Integrated analyses of risks and vulnerabilities**, using context-specific assessments and disaggregated data at multiple levels to capture the links between the impacts of COVID-19 and existing socio-economic, political and environmental drivers of fragility and conflict, including climate change.



**Multi-sector and inclusive approaches** that focus on promoting more resilient livelihoods, strengthening health systems, expanding social safety nets, and addressing exclusion and marginalisation, particularly in urban areas.



Additional and long-term funding from governments and international donors to support projects and investments that foster integrated approaches to simultaneously address climate-related security risks as well as COVID-19 impacts and overall health risks.



More attention to community-level action and organisations to capture their experiences in addressing interconnected risks and building resilience, and to inform multilateral and donor strategies.



A renewed commitment to multilateralism from governments which, despite being the first responders when crises hit, should overcome nationalist agendas and work within and towards international frameworks, drawing on the contributions of civil society, businesses, academia, and other sectors.



### INTRODUCTION

The COVID-19 pandemic is having profound global impacts on both rich and poor countries. At the time of writing (September 2020), the United States (US) had the highest number of infections (over 6.5 million), closely followed by India (over 5 million) and Brazil (over 4 million) (WHO, 2020). Other emerging markets are also struggling to contain the spread of the virus - the Philippines being one such example, despite implementing strict lockdown measures at the onset (Pitlo, 2020).

Meanwhile, COVID-19 is aggravating the situations of those countries that were already struggling with poverty and conflict. For instance, in the Democratic Republic of the Congo, the movement restrictions imposed to contain the spread of COVID-19 risk bringing even more food insecurity to a country where malnutrition is already pervasive due to drought, flooding and pest infestation, as well as decades of conflict and the prevalence of other diseases such as malaria, cholera and Ebola (WFP, 2020).

Regardless of development status, the full brunt of the pandemic may only be felt much later. This will be the case especially in those countries with limited healthcare systems, largely informal economies, poor governance and other pre-existing challenges. The pandemic may further weaken these economies, increase unemployment, worsen livelihood insecurity, and undermine government legitimacy, thereby feeding into political instability, fragility and conflicts.

Moreover, the COVID-19 pandemic is making inequalities more visible. In developing countries, the crisis is hitting vulnerable populations especially harder; even in advanced economies, we are seeing higher rates of mortality among marginalised groups (UN, 2020e). It also bears the potential of exacerbating them. The International Labour Organization (ILO) warned that 1.6 billion workers in the informal economy – nearly half of the global workforce – stand in immediate danger of having their livelihoods destroyed (ILO, 2020b).

In many contexts where the pandemic is hitting hard, climate-related impacts are already exacerbating situations of fragility and conflict. In some parts of Sub-Saharan Africa, droughts often coincide with violence through a combination of existing social and political tensions (see for example Detges, 2017). These are the same areas where measures to curb the spread of the pandemic may also further intensify conflicts and threaten ongoing peace efforts, for instance, by causing the loss of livelihoods for millions of people, as well as triggering popular uprisings, food shortages, terrorism, the cessation of ongoing peacebuilding operations, and an increase in gender-based violence (Herrmann, 2020). Indeed, the pandemic is likely to affect the same drivers of conflict as those from climate change.

What is more, climate change has not stopped for COVID-19, but has continued to worsen, and its impacts are becoming increasingly visible and dramatic. Following a temporary decline caused by the lockdown and economic slowdown, emissions have soon started heading in the direction of pre-pandemic levels. The world is set to see its warmest five years on record - a trend that is likely to continue - and is not on track to meet agreed targets to keep global temperature increase well below 2 °C or at 1.5 °C above pre-industrial levels (WMO, 2020). On top of the COVID-19 pandemic, massive wildfires, record droughts and floods, unprecedented heat, and worsening storms have havocked a wide range of countries in 2020, from the US to Australia, Brazil, India, Bangladesh, Sudan, and South Africa (see for example Gleick, 2020; Najjar, 2020; Phillips et al., 2020).

In this paper, we explore how COVID-19 compounds the known climate-fragility risks, with a specific focus on contexts that are already characterised by situations of fragility and conflict. We then suggest entry points to respond to these evolving risks, and how we can 'build back better' from the pandemic, while at the same time tackle the climate crisis.<sup>1</sup> Our analysis is based on a review of the existing literature on climate, fragility and security risks, to which insights from emerging evidence and literature on the impacts of COVID-19 are added. Given the novelty of the topic, we supplement the still-scarce primary evidence and academic studies with available grey literature, newspapers articles and social media. We recognise that the COVID-19 pandemic is still very much unfolding, and that things may change significantly during and after the time of writing. Hence, this paper focuses on identifying general pathways that could be applied to different contexts and periods.

1 The concept of "build back better" is used here in relation to recovery from the impacts of the COVID-19 pandemic, and not to disaster reconstruction or disaster risk reduction. Accordingly, "building back better" entails social and economic recovery from COVID-19, which does not aim to return to the ex-ante status quo, but to achieve improvements in a variety of areas through reconstruction and mitigation. Such areas include additional efforts on climate change mitigation, sustainable development, and improved resilience to future shocks, as well as increased environmental and social protection and inclusive economic growth. This is line with the usage of this term by the UN and UN Secretary General (see for example UN, 2020c).



# HOW IS COVID-19 INTERACTING WITH CLIMATE-FRAGILITY RISKS?

In this section, we outline key short-term impacts of the pandemic, before moving on to highlight the importance of contextually understanding COVID-19, and linking it to existing risks and societal dynamics.

#### Global trends

Familiarity with the immediate local and national impacts of the COVID-19 pandemic has been an unavoidable reality for much, if not all, of the world's population. With a continuous rise in global cases, new hotspots and dynamics are likely to emerge, even after the successful development of a vaccine or treatment (Lawlor et al., 2020; Scudellari, 2020). Global impacts are and have been highly diverse, even within individual countries and regions, yet there are a number of overarching trends:

- Responses to the pandemic stretch services and resources, possibly beyond their limits. For example, health care systems are under evident strain, and large economic stimulus packages - where they are possible - have incurred significant amounts of new government debt (e.g. Inman and Wearden, 2020).
- Mobility restrictions, lockdowns and other public health measures have significant social, economic and psychological impacts on individuals, as the pandemic has impacted people's ability to earn incomes, follow their usual livelihoods, and meet and care for friends and family. With this comes a loss of remittances, economic hardship and, after restrictions are lifted, a lingering uncertainty over the stability of the current situation if new work can be found at all, and if old livelihoods can be taken up again (e.g. Nandi and Swamikannu, 2020). This is also likely to have negative psychological effects, ranging from increased general distress and loneliness, to higher risks for mental illness (Pfefferbaum and North, 2020).
- Governmental priorities have shifted. COVID-19 has bound governmental attention to the containment of the disease and to responding to its human and economic consequences, which include using military and strict border controls. With these new priorities, any limitations in resources, implementation delays, or shortages in staff can severely limit progress on former priorities, such as education and environmental and social protection. Diverted media attention, and a focus on the need to induce economic growth at all costs, raise the risk that governmental work in other areas is weakened or rolled back entirely. While COVID-19 has also created narratives and policy attention for 'green recovery' and 'build back better', it is yet to be seen which route policymakers around the world will take (e. g. UN, 2020d; UNEP and ILRI, 2020).

Although these three impacts were especially visible during the early days of the pandemic, in reality they capture key dynamics that continue today (UNSC, 2020). Even where restrictions have been largely lifted, resurging case numbers might make new measures necessary and the above trends more pronounced (BBC, 2020). At the same time, this list is too limited to capture the effects of the pandemic on conflict, livelihoods and security. To this end, it is important to place COVID-19 within the appropriate local context and link its impacts to existing and future opportunities, pressures and risks with which it will interact.

#### Multiple burdens

The impacts of COVID-19 are largely felt through what we refer to as 'multiple burdens'. As travel restrictions, physical distancing requirements and reductions in available resources limit the response capacities of national agencies and international humanitarian actors, the pandemic is making it harder to deal with underlying challenges and newly emerging crises, thus worsening their impacts. For example, emergency responses to the locust outbreaks in

East Africa, the Horn of Africa and the Arabian Peninsula faced access and supply challenges, with the Food and Agriculture Organization (FAO) stating that "the [ ... ] pandemic has [ ... ] affected the supply of pesticides, with delays already experienced due to reduced manpower and the postponement of the delivery of purchased orders" (FAO, 2020; Johanniter, 2020; Reliefweb, 2020). Meanwhile, the presence of multiple and simultaneous pressures might increase the disease burden, for instance by facilitating a more rapid viral spread or lowering medical capacities, as in the case of South Sudan, where experts have warned that the virus, coupled with escalating violence, could lead to the collapse of the country's already

fragile health system (UN, 2020f). These multiple burdens can be present in a variety of forms and may range from weak and largely informal economies to natural disasters and environmental pressures. These are not just possible scenarios, but have already materialised in some places, and are clearly emerging in others.

**Climate change contributes to these burdens** because of the potential scale and breadth of its impacts, all of which complicate responses to COVID-19. Slow-onset changes and "These multiple burdens are not just possible scenarios, but have already materialised in some places, and are clearly emerging in others."

especially the increased frequency and intensity of natural disasters threaten livelihoods and create a need for humanitarian responses and resources (IPCC, 2014). Over the past few months alone, severe floods and rains in India, Sudan and elsewhere have destroyed crops and caused displacement (Zargar, 2020; Najjar, 2020); meanwhile the hurricane and fire season continues in the US, potentially bringing further extreme weather and destruction in the coming months (NOAA, 2020). These impacts add pressure on social systems and governments, which are already under strain, and further complicate responses to other types of risk, as has happened in Bangladesh, where Cyclone Amphan has set back rural infrastructure development, which was key to COVID-19 recovery plans (Majumdar and DasGupta, 2020). Moreover, the loss of livelihoods and agricultural land from these events might reverberate through supply chains, markets and food prices, and cost economies and governments millions of dollars. The poorest tend to be hit the hardest - in India, children in areas prone to disaster are twice as likely to live in poverty (ODI, 2019) - environmental risks do not discriminate between income groups. As their impacts are felt across society, the containment of COVID-19 might have to take second place during emergency responses, even as the disease continues to spread.

But multiple burdens go well beyond climate change and can also take the form of **conflict** - destroying health infrastructure, decreasing trust in government responses, and exposing many to the difficult living conditions in internally displaced people (IDP) or refugee camps (ICG, 2020). They can add to **gender inequality** - reducing women's access to critical information and decision-making, and exposing them to increased domestic violence during lockdowns (Kinyanjui, 2020). They can also manifest in **economic hardship** - with the informal sector and migrant workers facing additional impacts from public health measures (ICRISAT, 2020).

These burdens add to situations that make COVID-19 harder to contain, while COVID-19 increases, compounds and multiplies their impacts - trapping people in a vicious cycle. These compound risks, if not understood and addressed pre-emptively, can threaten the stability of states and societies today, as well as in the decades ahead. In the next section, we turn to examine how the virus might affect those areas in which climate change, fragility and conflict are already interacting. Wherever we highlight the interplay of climate change and the pandemic in this paper, we also need to keep in mind the risk of multiple burdens increasing the disease's impact while severely lowering response capacities - this is a risk in and of itself.



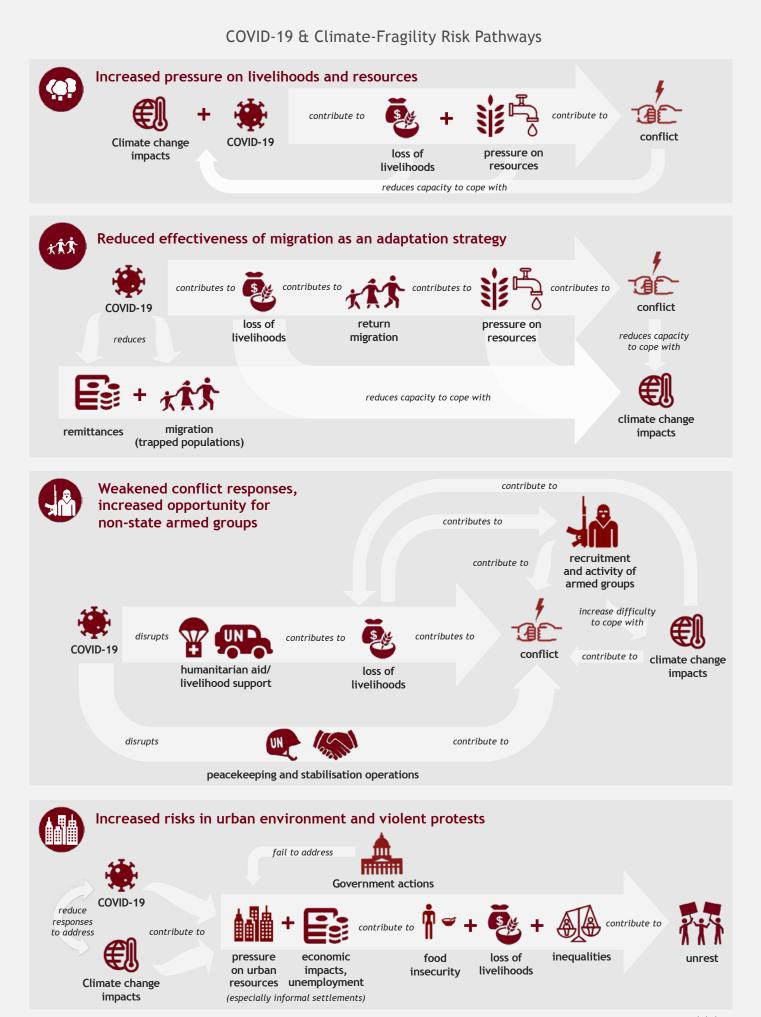
# COVID-19 risks compounding climate-fragility risks: four pathways

There is widespread agreement among security experts that climate change is a risk multiplier and obstacle to peace, adding to challenges such as increased resource demands, and rapid population growth and urbanisation, thus exacerbating existing fragility and conflict risks (Rüttinger et al., 2015). Most scholars agree that the relationship between climate change and conflict is multifaceted and context-dependent. In other words, climate change impacts raise different challenges under different conditions (Detges et al., 2020). Despite persisting areas of contention on methodology, modelling assumptions and on the relative importance of climate as opposed to non-climatic drivers of conflict, researchers have identified various sets of possible risks and complex interactions of climate and security challenges, also described as pathways.

Within the scope of this paper, we consider how the **COVID-19 pandemic is impacting on and modifying these pathways**, particularly in contexts that are already characterised by situations of fragility and conflict. COVID-19 can exacerbate climate-fragility risks in four key ways, by:

- Putting additional stress on livelihoods and resources, and reducing adaptive capacity;
- Reducing the effectiveness of migration as an adaptation strategy;
- Setting back conflict responses and providing opportunities for NSAGs;
- Increasing the risks in urban environments and for violent protests.

It is important to stress that our analysis does not reflect all aspects of the debate, but focuses on those that will have the most policy impact for national governments as well as development and humanitarian aid. In the following sections, we analyse the impact of the COVID-19 pandemic on these climate and security risk pathways in more detail, based on the evidence provided by the available - although still limited - literature and media sources.



SPREADING DISEASE, SPREADING CONFLICT? HOW IS COVID-19 INTERACTING WITH CLIMATE-FRAGILITY RISKS?



#### Increased pressures on livelihoods and resources

COVID-19 can exacerbate climate change-induced impacts on livelihoods and (natural) resources, thus adding to existing vulnerabilities and stressors, and reducing coping capacity. Climate change is endangering the livelihoods of many people who depend directly on natural resources, for example by reducing grazing land and drying up water resources. It also threatens jobs across climate-sensitive economic sectors. This is especially the case in rural areas, where smallholder agriculture is largely dependent on rainfall, and where other human drivers of land degradation, such as overly intensive farming, are at play (German Environment Agency, 2019). Especially in those areas where governance is weak and certain groups are already marginalised, conflicts over natural resources such as land, water and firewood might flare up, and different user and social groups can be put at odds with one

another. Additionally, people will be pushed to search for alternative sources of income, many of which are illicit, such as the cultivation of opium poppy in Afghanistan, which has increased as a response to climate and conflict pressures (Brown, 2019; Vivekananda et al., 2019; Detges et al., 2020).

The COVID-19 pandemic adds to these pressures, making legal livelihood opportunities sparser and less lucrative; just like climate change, this might push individuals to take up illicit livelihoods or criminal activity. In the shortterm, public health measures to contain the spread of the virus "are drying up work and incomes particularly in urban areas, and are likely to disrupt agricultural production and supply routes, leaving millions to worry how they will get enough to eat" (Dahir, 2020). Many of those jobs that are "The COVID-19 pandemic will have long-lasting economic and social effects, potentially pushing a further 176 million people below the poverty line and doubling levels of food insecurity in the developing world in 2020."

> GOPINATH (2020), WORLD BANK (2020) AND FSIN (2020)

most impacted are informal, and they often employ a high number of women and girls, creating a marked gender difference in impacts (Mukhtarova, 2020). But the pandemic will also have long-lasting economic and social effects, heavily slowing or entirely reversing economic growth

in countries worldwide (Gopinath, 2020). It could push a further 176 million people below the poverty line (World Bank, 2020), and double the levels of food insecurity in the developing world in 2020 (FSIN, 2020). Some impacts and losses are more regionally pronounced. For example, tourist destinations are experiencing widespread shortages of hard currency, with Costa Rica and Morocco looking at a possible 2% loss in GDP or more from tourism alone (Strauss, 2020). Already fragile and conflict-affected countries are especially impacted by these economic impacts and face a strong case of multiple burdens (IMF, 2020) - and potentially a vicious cycle of insufficient response capacities and ever increasing health impacts.

Poverty and economic crises also contribute to a reduced resilience to climatic shocks and hinder adaptive capacities. As climate change adaptation often requires surplus resources (IPCC, 2014), acting against its looming and present threats might become impossible for many countries during the outbreak of a pandemic. Economic losses might also induce governments to roll back environmental protection in the hopes of jumpstarting economic growth (UN, 2020d). Even without such direct dismantling of protection, a diversion of focus and resources can lead to new environmental harm - such is the case in Indonesia, where reports of land grabbing have increased since COVID-19 hit (Jong, 2020). This might contribute to increased conflict around land and water access, and serve to weaken climate change mitigation and adaptation - which would be a risk in and of itself.

However, there can be even more complex and unforeseen linkages between the environment, pandemic and conflict. For example, the absence of tourism has given illegal loggers and poachers opportunities to expand into new areas. Deforestation rates have increased and there are multiple reports of increases in poaching in Southern and Eastern Africa as well as South Asia (Price, 2020; Roth, 2020; WWF, 2020). This can create conflicts with local communities (whose support poachers often rely on), law enforcement, and security personnel of protected areas (Godbole, 2020). Financial flows from illegal poaching and logging could also benefit other forms of illicit economic activities and organised crime. Unemployment or the loss of livelihoods also drive (unsustainable) natural resource use and maladaptation strategies, such as bush meat poaching and illegal logging for personal use (Price, 2020). While subsistence-based activities such as these are less likely to strengthen illegal groups, they can nevertheless cause environmental harm, with negative social consequences that might lead to community and inter-group conflict for food, land access and other resources.

More research into understanding these linkages is needed but currently restricted. However, they serve to highlight that many of the effects that we need to incorporate into our analysis lie beyond immediate view. This could lead us to underestimate the interplay of livelihoods and COVID-19 in a climate-changing world.

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#### Negative impacts on migration as a climate change adaptation strategy

Different forms of human mobility<sup>2</sup> have served as important 'coping strategies' for dealing with climate change; their effectiveness could be hampered by the impacts of the COVID-19 pandemic. Migration strategies for adapting to climate change include rural-urban migration, where rural residents migrate to cities in search of greater job opportunities and better access to public services such as health and education. This can improve the livelihood security and welfare of migrants and their communities of origin by increasing their income, providing remittances to their families at home, and reducing the strain on resources in rural communities. In Bangladesh, an estimated 400,000 people move to Dhaka every year, with more than 80% of them citing environmental reasons for the move (Day, 2020). The

success of these strategies in reducing vulnerability largely depends on a range of contextual factors, such as the socioeconomic conditions, demographic trends, and existing policies and governance systems, as well as the security situation in the country or region. However, COVID-19 is now creating new challenges for migrants and their home and destination communities. For example, a new forecasting software developed by the Danish Refugee Council (DRC) has predicted that more than one million people have fled their homes across the Sahel as a result of the increasing conflict, unemployment and human rights abuses brought on by the fallout from COVID-19 (Hodal, 2020).

"According to a new forecasting software, more than one million people have fled their homes across the Sahel as a result of the increasing conflict, unemployment and human rights abuses brought on by the fallout from COVID-19."

HODAL (2020)

At the same time, **mobility can also create conflict risks**. In the Lake Chad, increasing migration, both in-country and out of the region, coupled with worsening climate change, has heightened pressure over natural resources. This has exacerbated clashes and violence between communities, and contributed to fuelling the already ongoing conflicts in the region

2 The International Organization for Migration (IOM) distinguishes between three forms of human mobility: migration, displacement and planned relocation. Migration refers to people moving within or outside their country for a variety of reasons, for example in search of employment or education, or to reunite with family members. Displacement is understood as forced movement due to a disaster. Planned relocation concerns communities that had to be moved to a safer place in light of irreversible changes to their environment or hazards (Melde et al., 2017).

(Vivekananda et al., 2019). Receiving cities in developing countries often lack the infrastructure and basic services to cope with sudden or large influxes of new residents (Flavell et al., 2019). For example, in the urban areas of India, 53% of women migrants had no access to safe drinking water and were forced to gather water from pumps or public taps; 20% of them were also reported to have no access to a toilet area (Day and Carius, 2020). When this is the case, not only are migrants at a greater risk of being discriminated and marginalised, but the risk of tensions, riots and civil unrest can also be heightened (IOM, 2020c).

In many cases, responses to the COVID-19 crisis have increased the precariousness of living and health conditions of migrants and refugees, and resulted in the violation of their rights. Extensive reporting has shown that the pandemic has exacerbated pre-existing social and economic disparities, and that migrants are among the groups facing the additional burdens of stigmatisation and discrimination (IOM, 2020a; van Dorn et al., 2020). In Lebanon, several municipalities held Syrian refugees to a tighter curfew than other foreigners or Lebanese residents, undermining their ability to get health care and access information on how to protect themselves against infections (Human Rights Watch, 2020). Moreover, lockdowns and movement restrictions imposed as a response to the COVID-19 pandemic have exacerbated the already dire living conditions of refugee camps, making it even more difficult to observe the principles of social distancing and hygiene rules. In Jordan's Zaatari camp, lockdowns prevented people from working at all - meaning no food or income to pay for even basic necessities (Amnesty International, 2020). In Idlib, Syria, hundreds of thousands of people live in camps, sometimes with several families sharing a single tent, and without access to facilities with clean water and soap (Collard, 2020).

Migrants returning home as a consequence of the pandemic can add pressure on scarce resources in climate-vulnerable areas, increasing conflict risks. The lockdowns and travel restrictions that governments enacted in an attempt to reduce the spread of COVID-19 have "triggered large flows of return migration, with migrants returning home in response to the adverse impact of the virus on economic activity and to avoid being stranded overseas" (IOM, 2020b). India has deployed commercial jets, military aircraft and naval warships to conduct the world's largest ever peacetime repatriation, bringing up to 1.8 million migrant workers, students and citizens back to the country (Kotoky and Sen, 2020). Meanwhile, Nepali officials have estimated that up to 400,000 people would return from abroad (Banerji et al., 2020). These returning migrants will all need to find alternative livelihoods to the ones they had in the host country; this could increase the pressure on scarce resources in climate-vulnerable areas and hence create tensions with host communities. They are also at risk of being stigmatised due to fears that they may bring the virus with them upon their return (Beech, 2020). For example, many Senegalese migrants, many of whom paid large sums to fishermen to bring them back from Europe when the pandemic began, were prevented from docking by local Senegalese residents (Kringelbach, 2020). Moreover, migrants returning home often do so by undertaking dangerous journeys, which exposes them to heightened safety risks. For example, Venezuelans who had fled the country's political crisis to work in the informal economy in Colombia have been forced to return home, often on foot, leaving them at risk of human trafficking and attacks by armed groups (R4V, 2020).

**COVID-19 is trapping people in places where their safety, health or livelihood is at risk.** There is evidence that many of the world's most vulnerable people are unable to escape the sudden and direct physical impacts of disasters, as well as the conditions of poverty, famine and conflict exacerbated by climate change. Drivers of immobility still need to be fully understood, but we do know that the impacts of climate or environmental pressures may deprive them of the means, and/or erode their capacity, to use migration as an adaptation strategy (Zickgraf, 2018). COVID-19 responses are now restricting mobility yet further for vulnerable populations. In West Africa, where drivers for migration persist but refugees and migrants face difficulties to move between countries, the dependency on smuggling services has reportedly increased, and smugglers are demanding higher fees and have started using more dangerous routes (MMC West Africa, 2020). The risks associated with smuggling services are exemplified by a recent incident

in which smugglers abandoned a group of migrants in the Sahara desert while seeking to reach Libya (Reuters, 2020). Many countries have also imposed particularly tough restrictions on vulnerable migrant communities and workers, such as those in the seasonal agriculture sector. In April 2020, more than 14,000 asylum seekers were stuck in border cities in northern Mexico. Similarly, hundreds of Rohingya refugees drifted at sea for months, unable to dock in Malaysia because of the country's fight against COVID-19 (Zickgraf, 2020).

Moreover, the pandemic is affecting migrant workers' incomes and, by consequence, remittances to their families in their home communities and countries. The World Bank predicted that remittances to low and middle income countries will decrease by 20% - 110 billion USD - this year due to COVID-19 (RCTF Secretariat, 2020). At the local level, a drop in remittances, which typically go straight to families and households, directly undermines their resilience to climate impacts, for example, by reducing financial resources that could have been used in times of disasters (Knomad, 2020). Interruptions to payments also have an impact at the national level, as remittances account for a significant proportion of GDP in many countries.<sup>3</sup> This adds up to the loss of jobs caused by full or partial lockdown measures, which has a particularly negative impact on migrant workers, who account for almost 5% of the global workforce (ILO, 2020a). Migrants are in fact more likely to work in sectors that have seen significant job losses as a result of COVID-19, such as manufacturing and hospitality (IOM, 2020a), or to be employed in the gig economy or the informal sector, exposing them to sudden losses in income (Guadagno, 2020). For example, an estimated 700,000 migrant workers in Thailand - employed mostly in tourism, services and construction - were among the first to lose their jobs when the COVID-19 pandemic started in late March 2020 (Thanthong-Knight, 2020). These dynamics risk reversing the progresses that have been made in poverty reduction over the last few decades, and hampering efforts to achieve the Sustainable Development Goals (SDGs), especially for the more vulnerable migrant and refugee communities.

**<sup>3</sup>** According to the World Bank, international remittances account for over 5% of GDP in 66 countries, and in some of the world's most climate vulnerable countries like Haiti, Honduras and Nepal, they account for over 20% (Garcia Mora and Rutkowski, 2020). There are no official figures for global domestic remittance payments (i. e. from urban to rural areas within the same country), but if these are taken into account remittance flows are likely to be higher.



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#### Weakened conflict responses and new opportunities for NSAGs

In countries ravaged by conflicts and climate-security risks, the COVID-19 pandemic poses an additional security burden. Although recent research has shown that COVID-19 can lead to a temporary decline in armed conflicts, mostly due to strategic decisions by armed groups to account for logistical and financial constraints, this is usually only short-term (Ide, 2020). For the most part, conflicts will probably be sustained or even intensify in the long-term, with parties exploiting state weaknesses and/or the fact that international attention has been diverted by COVID-19 (Ide, 2020).

One concern is how the lockdown measures impede the ability of governments and civil society organisations to deliver livelihood support and humanitarian aid. This could put populations at risk of being "left behind", especially those who live in remote locations or who rely on mobility for their livelihoods (REF, 2020). We see this dynamic playing out in the peripheral regions of Colombia for example, where organised criminal networks often engage in environmental crimes such as illegal logging and mining (Abdenur and Rüttinger, 2020). The

lockdown measures and closure of schools imposed in the country to stem the pandemic have made it more difficult for civil society organisations to provide educational support for children in rural isolated communities, making these children more susceptible to recruitment by armed groups (Piñeros and Léon, 2020; Taylor, 2020).

Similarly, the mobility restrictions imposed to combat the spread of the virus are obstructing peace building and stabilisation efforts. These efforts, which include

international mediation, conflict resolution mechanisms, peacekeeping missions and security assistance, require mobility to operate effectively and are thus negatively impacted by travel restrictions (ICG, 2020). While movement restrictions are necessary to protect the health security of both peacekeeping staff and civilians, the ability of missions to meet their mandated targets and benchmarks will be impacted in the medium and long-term (de Coning, 2020). Peacekeeping operations in parts of Sub-Saharan Africa, for example, are already feeling the

"The pace at which peace operations have had to make significant changes to the way they work ... has been unprecedented."

DE CONING (2020)

brunt of these restrictions: in the contested region of Abyei at the Sudan-South Sudan border, travel restrictions have delayed the deployment of additional peacekeeping units into the region (Herrmann, 2020). Likewise, the African Union mission in Somalia (AMISOM) has had to suspend staff rotations and deployments, and all personnel movement restricted only to those that were deemed essential (de Coning, 2020). Similar measures were also adopted by other UN missions such as those in Mali (MINUSMA) and in Lebanon (UNIFIL) (de Coning, 2020).

Another worrying trend is how the COVID-19 pandemic opens up a 'window of opportunity' for the proliferation of NSAGs. In countries where governments are already struggling to cope with multiple drivers of fragility, the COVID-19 pandemic may (further) draw the government's attention and resources away. This can create a vacuum that NSAGs can use to increase their legitimacy and public trust by 'filling the void' left behind by the state (Burke, 2020; ICG, 2020; Mustasilta, 2020), particularly in places where lockdown measures have resulted in negative consequences such as soaring unemployment rates and closure of public facilities (UNODC, 2020). The Taliban, for example, have been riding on this trend in Afghanistan, where years of conflict have left the country highly vulnerable to climate change (Brown, 2019). In contrast to the government's initially weak response to the virus, the Taliban were proactive in disseminating public health information and enforcing quarantine measures, which, as observers have pointed out, were simply a propaganda tool to bolster public support for their cause (Jackson, 2020). In Mexico, several drug trafficking cartels performed traditional government functions, such as distributing aid to poor neighbourhoods - with their respective groups' logos on the aid packages - and providing financial assistance to businesses in need (UNODC, 2020).

There are, however, exceptions to this trend: some groups have been countering COVID-19 measures, claiming that such measures are against their faith and principles. This trend is equally worrying, as it could **slow efforts to combat the pandemic and restore livelihoods, making it harder, by extension, for people to adapt to other stressors such as climate change**. Boko Haram is one such example. While using the pandemic as a propaganda tool to drive recruitment - by claiming, for example, that their hideout in the Sambisa forests is a "safe haven against the pandemic" - the group has also described all lockdown and social distancing measures as "evil" and a "pretence to stop Muslims from practicing their faith" (Kishor, 2020). As a result, the group has gone so far as to seek out and disrupt the efforts of both international and local health care and aid workers (Paquette and Alfa, 2020). These dynamics are particularly worrisome as the livelihoods of people living in regions where Boko Haram is active, such as the Lake Chad, are already facing the compounding effects of climate change and conflict (Vivekananda et al., 2019).



SPREADING DISEASE, SPREADING CONFLICT? · HOW IS COVID-19 INTERACTING WITH CLIMATE-FRAGILITY RISKS? 16



#### Increased risks in urban environments and violent protests

**COVID-19 presents an additional risk for city dwellers.** Around 90% of all people diagnosed with COVID-19 live in urban areas<sup>4</sup> (UN, 2020a). Studies suggest that in regions with higher air pollution, more COVID-19 infections and related deaths occur (Winter, 2020). Whilst there is no evidence for a causal link, this might point towards the role that environmental factors, such as air quality, could play in explaining the higher number of COVID-19 cases in urban areas. The health risks posed by COVID-19 converge with climate risks that people

living in cities are already experiencing, including rising sea levels, changes in precipitation patterns, flooding and more extreme temperature and weather events, such as cyclones (UN-HABITAT, 2011). Rising temperatures can also increase the risk of heat-related diseases, possibly adding pressure on hospitals and health services that are already struggling to cope with the surge of COVID-19 patients.

#### The economic impacts of COVID-19 are drastic especially for people living in informal settlements, where most find

"In the wake of the pandemic, urban segregation and migration could increase, furthering inequalities and interfering with development and climate goals."

UN (2020A)

employment in the informal economy. Projections indicate that the relative poverty of informal workers in lower- and low-income countries might increase by up to 56% due to COVID-19 restrictions, if no alternative income is available (ILO, 2020b). Studies estimate that in Africa and Latin America, earnings in the informal sector decreased by around 80% in the first months of the pandemic (UN, 2020b). For example, 81% of people living in informal settlements across Nairobi reported at least a partial loss of jobs and income since the COVID-19 pandemic started (Biau, 2020). The suspension of public transport that was ordered in cities around the world to contain the spread of the pandemic was an important factor accounting for job losses, as public transport is crucial especially for the urban poor who cannot work from home. Moreover, the transport sector also employs hundreds of thousands of city dwellers (Calnek-Sugin and Heeckt, 2020), and is key for more climate-friendly transport in cities (UN, 2020a).

<sup>4</sup> It should be noted that this finding could be due to better data availability for urban areas. Further research will be needed to examine if this remains valid.

The COVID-19 pandemic can add pressure to already strained basic services in urban settlements. People living in informal urban settlements often already lack basic services, such as water supply and sanitation - for example, only 47% of the urban population in Africa can use hand-washing facilities at home, and only 55% have access to private sanitation (UN-HABITAT, 2020). Strained resources such as water, which are already under pressure from climate impacts, might be in higher demand due to the pandemic. This could increase water stress and further impede pandemic prevention (ILO, 2020b). Whilst many countries provided water for free during the pandemic, it is unlikely that governments can maintain this practice in the longer term, thus risking a further rise in COVID-19 cases, particularly in densely populated areas (Root, 2020).

As informal urban settlements are often located in high-risk areas that are prone to natural disasters, residents are more exposed to the impacts of climate change, such as changing precipitation patterns, flooding, storms and sea-level rise (Satterthwaite et al., 2018). The **COVID-19 pandemic can hinder disaster responses in urban settlements** (Randall, 2020). For example, when Cyclone Amphan hit South Asia in May 2020, authorities were caught in the dilemma of having to decide whether to prioritise evacuation over distancing, i. e. taking the risk to further spread the virus in overcrowded shelters, or put residents at risk of the cyclone in their homes. Moreover, authorities feared that the cyclone could pollute water sources, thereby threatening water supply, which was urgently needed to adhere to hygiene measures (NowThis News, 2020). Similarly, in South Africa, social distancing in informal settlements, which was already hard to implement before the pandemic, was further challenged by extremely heavy floods in the period between March and May 2020 (Phillips et al., 2020). Worsening conditions in urban areas have been shown to potentially increase the likelihood and severity of violence, as well as increase levels of crime (Muggah, 2012). Adding the impacts of the COVID-19 pandemic to the pile might only exacerbate these dynamics.

The COVID-19 pandemic has also contributed to making inequalities in cities more visible, and even widening them especially when government responses have been weak. For example, public water services in many developing countries already typically favour better-off households over poorer ones. As an illustration, in Ethiopia, Mali, Niger, El Salvador and Bangladesh, the richest 20% receive more than half of all water and sanitation subsidies from the government, and only 6% of subsidies go the poorest 20% (Andres et al., 2019). Lower access to water resources may therefore make it difficult for the urban poor to comply with hygiene requirements to contain the spread of the virus. Residents in the poorer neighbourhoods of Accra, Ghana expressed concerns of being more at risk of the virus due to the rationing of water supply (Amankwaa, 2020). In cases where higher water demand due to the pandemic interacts with climate change impacts, overall access to clean water - and hence protection from infection – could be further undermined. In turn, this can cause frustration and eventually lead to unrest.

Frustration and unrest can also be caused by governments failing - or being perceived to fail - to implement the promised relief measures to secure livelihoods during the lockdown. Violent protests that have been triggered by COVID-19-related restrictions are already occurring around the globe. In Nepal, predominantly urban youths expressed their anger over the government's response in containing COVID-19 in the country (Pradhan, 2020). Similarly, youths in Kenya were protesting favouritism of an employment programme developed to reduce the impacts of the pandemic on the job market (Waititu, 2020). Similar risks exist for the distribution of essential supplies such as food and water by the government. Many authorities provide water or food to the urban poor to prevent food riots (UN-HABITAT, 2020), but often this provision is not equally distributed among the poor (JEI et al., 2020), and it remains unclear for how long governments can sustain these subsidies. These trends could be exacerbated by the effects of climate change on food prices, which has already proven to be a factor for violent unrest in urban settings, such as those during the Arab spring or in Sudan (Detges et al., 2020).

### **BUILDING BACK BETTER, BUT HOW?**

The COVID-19 pandemic has offered yet another opportunity to talk about how interconnected risks, including those created by climate change, can contribute to insecurity and conflict. Taking these risks and their interconnectedness into account is essential not just to build back, but to **build back better**. As stated by the UN Secretary General at the launch of the UN Comprehensive Response to COVID-19 in April 2020, "coming out of this crisis will require

a whole-of-society, whole-of-government and whole-of-theworld approach driven by compassion and solidarity" (UN, 2020c). This paper has explored ways in which COVID-19 compounds climate-fragility risks, with a specific focus on contexts that are already characterised by situations of fragility and conflict.

From our analysis, we identify five entry points to respond to these evolving risks and to 'build back better' both from the pandemic itself and the climate crisis. We recommend governments and bilateral and multilateral donors to:

"Coming out of this crisis will require a whole-of-society, whole-of-government and whole-of-the-world approach driven by compassion and solidarity."

UN (2020C)

Integrate analyses of risks and vulnerabilities: Because of the strong links between the impacts of COVID-19 and existing socio-economic, political and environmental drivers of fragility and conflict, including climate change, the first step is to understand risks and vulnerabilities in an integrated and systemic way. This requires:

- Context-specific assessments that analyse climate and security risks, with a specific focus on COVID-19 impacts, such as the changing needs of different vulnerable groups, potential losses of livelihood and income at household level, changes in the overall economic and political situation, the return of significant groups of migrant workers, and impacts on remittances.
- Disaggregated data by sex, age and other metrics to develop targeted responses (including, but not limited to, climate change adaptation) that take into account the needs and vulnerabilities of different groups in society, such as women, men, children, elderly people, marginalised ethnic or religious groups, people living with disabilities, and people living in poverty. As these interconnected challenges cut across administrative and geographical borders, bringing together data from the local, national and regional levels will also be important.

Move to multi-sector and inclusive approaches: Climate-related security risks do not fit within the parameters of most existing institutions; even more so as we count in the impacts of COVID-19. Therefore, effective responses will be those crossing sectors and policy areas, in particular by integrating climate, health, development, humanitarian, stabilisation, and peacebuilding efforts - at local, national and regional/international levels. Priority should be given to:

- Integrated responses that focus on improving water, food, livelihood security and health, while also strengthening social cohesion between and within groups, and addressing exclusion and marginalisation.
- Exploring the opportunities created by the COVID-19 pandemic to redesign urban environments. The New Urban Agenda developed by the UN calls for integrating the principles of "better rebuilding"

"The New Urban Agenda developed by the UN calls for integrating the principles of "better rebuilding" not only during recovery, but also for urban planning."

UN (2017)

not only during recovery, but also for urban planning (UN, 2017). For example, making informal settlements more climate-proof through improved sanitation can

also help prevent the spread of diseases; designing more open green spaces can not only support social distancing during the current pandemic, but also help cool cities in summer and contribute to better air quality. This can help our cities recover from the current pandemic, while becoming more climate-resilient, equipped with better infrastructure and more inclusive health care and other services, as well as being safer and greener.

- Expanded social safety net approaches, which help to mitigate the impact of reduced remittance flows and returning migrants on climate change adaptation. This is important as the COVID-19 pandemic has made many coping strategies for dealing with climate change impacts less effective and viable.
- Actions to tackle these linked crises that are **inclusive and gender-responsive**. This would ensure that post-COVID-19 economies tackle the fundamental inequalities in society and end violence against women.

**B** 

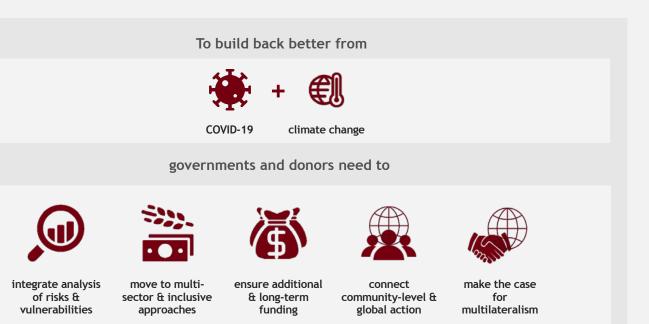
**Ensure additional and long-term funding:** At present, governments and bilateral and multilateral donors are largely diverting resources that are still needed for climate change adaptation to COVID-19 responses. However, given the compounding nature of these challenges, a redistribution of existing resources will not be enough, and additional funding, which integrates health, climate, and overall development and humanitarian funding, will be needed. To this end, governments and donors could:

- Look into injecting essential COVID-19-related funding into existing humanitarian support, with a focus on projects with a climate dimension or that foster integrated approaches to climate-related security risks, while at the same time addressing health risks.
- Work with the UN and other international donors such as the International Monetary Fund (IMF) and the World Bank, which have already started mobilising funds to address health system failures and economic jolts resulting from COVID-19, particularly in weak states, and offer financial aid and debt relief.
- Coordinate this funding with those directed towards climate change adaptation, e.g. the funding provided by international bodies such as the Adaptation Fund, Climate Investment Fund, Global Environmental Facility and the Green Climate Fund.
- **Connect community-level and global action.** COVID-19 responses have shown the importance of community-level mobilisation. Many grassroots groups have helped to fill the gaps left by slow government action, for example by improving handwashing facilities, and delivering food supplies and protective equipment. This reflects the larger trend of community-driven climate change mitigation and adaptation initiatives, which have taken root in many parts of the world in recent years. Grassroots actors are often better able to take into account conflict sensitivities, social conditions and cultural norms, and hence can put in place more effective responses to compounding risks. Moreover, they play an important role in addressing the needs of and giving decision-making power to those that are most vulnerable and at risk. Therefore, any efforts at 'building back better' should pay attention to these community-level action and organisations, and better connect them with global dialogues aimed at fostering cooperation. This will require governments and donors to:
  - Capture experience from community and local level responses to the COVID-19 pandemic, which can inform broader efforts to build resilience, including to climate impacts and fragility;
  - Foster partnerships between local organisations, decision-makers and stakeholders across different contexts to encourage the exchange of knowledge and lessons learned from their efforts in addressing these risks; international organisations can play an important role in convening these debates and ensuring they inform multilateral and donor strategies and funding.

Strengthen local governance. Local governments have a very important role to play
in addressing the risks posed by the interaction of the COVID-19 pandemic and climate
change. It will be especially crucial to support them in designing longer-term planning
processes in an integrated and cross-sectoral manner, including health, environment,
climate, and urban planning. Importantly, these processes should allocate time and
funding to support consultations with affected communities, as this can help to
ensure that measures address their specific needs, avoid social conflict and protect
human rights.

Make the case for multilateralism. The COVID-19 pandemic has been a stark reminder that its impacts, like the impacts of climate change, have a global reach, and hence the most effective solutions are through international cooperation, and not through narrow nationalist agendas. Governments have a first responsibility to implement responses to fight the impacts of the pandemic within their own borders. However, their ability and willingness to work together towards a stronger and more inclusive multilateral system - and drawing on the contributions of civil society, business, academia, and other sectors - will be critical not only to address current challenges, but also to bring about systemic changes towards more resilient and inclusive societies.

#### Recommendations



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### REFERENCES

Abdenur, Adriana Erthal and Lukas Rüttinger 2020: Climate-Fragility Risk Brief: Latin America and the Caribbean. Climate Security Expert Network. Berlin: adelphi.

Amankwaa, Godfred 2020: COVID-19 and 'Chasing for Water' - Water Access in Poor Urban Spaces. Retrieved 11.09.2020 from https://iwa-network.org/covid-19-and-chasing-for-water-water-access-in-poor-urban-spaces.

Amnesty International 2020: Global: Ignored by COVID-19 responses, refugees face starvation. Retrieved 17.08.2020 from https://www.amnesty.org/en/latest/news/2020/05/refugees-and-migrants-being-forgotten-in-covid19-crisis-response.

Andres, Luis A.; Michael Thibert, Camilo Lombana Cordoba, Alexander V. Danilenko, George Joseph and Christian Borja-Vega 2019: Doing More with Less. Smarter Subsidies for Water Supply and Sanitation. Washington, D.C.: World Bank.

Banerji, Annie; Jose Devasia and Gopal Sharma 2020: South Asia scrambles to bring home crisis-hit migrant workers. Retrieved 13.08.2020 from https://uk.reuters.com/article/health-coronavirus-sasia-migrants-idUKL8N2CU5GH.

Beech, Hannah 2020: Coronavirus Finds Fuel in a World of Migrants. Retrieved 13.08.2020 from https://www.nytimes.com/2020/04/10/world/asia/coronavirus-migrants.html.

Biau, Daniel 2020: The Post-Covid-19 Urban Challenge in Africa. Retrieved 07.08.2020 from https://covid19africawatch.org/urbanization-and-covid19-in-africa/#\_edn1.

British Broadcasting Corporation (BBC) 2020: Coronavirus: Israel considers nationwide lockdown as cases spike. Retrieved 11.09.2020 from https://www.bbc.co.uk/news/world-middle-east-54091894.

Brown, Oli 2020: Climate-Fragility Risk Brief: Afghanistan. Climate Security Expert Network. Berlin: adelphi.

Burke, Jason 2020: Opportunity or threat? How Islamic extremists are reacting to coronavirus. Retrieved 20.08.2020 from https://www.theguardian.com/world/2020/apr/16/opportunity-or-threat-how-islamic-extremists-reacting-coronavirus.

Calnek-Sugin, Talia and Catarina Heeckt 2020: Mobility for the Masses: The essential role of informal transport in the COVID-19 recovery. Retrieved 31.08.2020 from https://www.lse.ac.uk/cities/publications/blogs/mobility-for-the-masses.

Collard, Rebecca 2020: You Can't Practice Social Distancing if You're a Refugee. Retrieved 17.08.2020 from https://foreignpolicy.com/2020/03/20/you-cant-do-social-distancing-if-youre-a-refugee.

Coordination Platform for Refugees and Migrants from Venezuela (R4V) 2020: COVID-19 Flash Update - 29 May 2020. Retrieved 21.08.2020 from https://r4v.info/en/documents/details/76705.

Dahir, Abdi Latif 2020: 'Instead of Coronavirus, the Hunger Will Kill Us.' A Global Food Crisis Looms. Retrieved 07.08.2020 from https://www.nytimes.com/2020/04/22/world/africa/coronavirus-hunger-crisis.html?smid=nytcore-ios-share.

Day, Adam 2020: Case 1: Bangladesh. In: Day, Adam and Jessica Carius: Conflict Prevention in the Era of Climate Change: Adapting the UN to Climate-Security Risks. New York: United Nations University.

Day, Adam and Jessica Carius 2020: Conflict Prevention in the Era of Climate Change: Adapting the UN to Climate-Security Risks. New York: United Nations University.

de Coning, Cedric 2020: The Impact of COVID-19 on Peace Operations. Retrieved 18.09.2020 from https://theglobalobservatory.org/2020/04/impact-covid-19-peace-operations.

Detges, Adrien 2017: Droughts, state-citizen relations and support for political violence in Sub-Saharan Africa: A micro-level analysis. In: Political Geography 61, pp. 88-98.

Detges, Adrien; Daniel Klingenfeld, Christian König, Benjamin Pohl, Lukas Rüttinger, Jacob Schewe, Barbora Sedova and Janani Vivekandanda 2020: 10 Insights on Climate Impacts and Peace: A summary of what we know. Berlin: adelphi and Potsdam Institute for Climate Impact Research (PIK). Flavell, Alex; Susanne Melde and Andrea Milan 2020: Migration, environment and climate change: Impacts. Second report in the "Migration, environment and climate change" series. Dessau-Roßlau, Germany: Umweltbundesamt.

Food and Agriculture Organization of the United Nations (FAO) 2020: COVID-19 | 2020 humanitarian response. Retrieved 21.09.2020 from http://www.fao.org/emergencies/fao-in-action/stories/stories-detail/en/c/1297231.

Food Security Information Network (FSIN) 2020: 2020 Global Report on Food Crises: Joint Analysis For Better Decisions. FSIN.

Garcia Mora, Alfonso and Michal Rutkowski 2020: Remittances in times of the coronavirus - keep them flowing. Retrieved 13.08.2020 from https://blogs.worldbank.org/psd/remittances-times-coronavirus-keep-them-flowing.

German Environment Agency 2019: Migration, environment and climate change: Impacts. Second report in the "Migration, environment and climate change" series. Dessau-Roßlau, Germany: Umweltbundesamt.

Gleick, Peter 2020: The future has arrived. These explosive fires are our climate change wakeup call. Retrieved 18.09.2020 from <a href="https://www.theguardian.com/environment/2020/sep/11/the-future-has-arrived-these-explosive-fires-are-our-climate-change-wakeup-call">https://www.theguardian.com/environment/2020/sep/11/the-future-has-arrived-these-explosive-fires-are-our-climate-change-wakeup-call</a>.

Godbole, Tanika 2020: Coronavirus: South Asia sees rise in poaching during lockdowns. Retrieved 11.09.2020 from https://www.dw.com/en/coronavirus-south-asia-sees-rise-in-poaching-during-lockdowns/a-54090081.

Gopinath, Gita 2020: The Great Lockdown: Worst Economic Downturn Since the Great Depression. Retrieved 21.09.2020 from https://blogs.imf.org/2020/04/14/the-great-lockdown-worst-economic-downturn-since-the-great-depression.

Guadagno, Lorenzo 2020: Migrants and the COVID-19 pandemic: An initial analysis. Migration Research Series. Geneva: IOM.

Herrmann, Clarissa 2020: COVID-19: A threat to peace efforts in Africa. Retrieved 13.08.2020 from https://www.dw.com/en/covid-19-a-threat-to-peace-efforts-in-africa/a-53360584.

Hodal, Kate 2020: Covid to displace more than a million across the Sahel, new tool predicts. Retrieved 13.08.2020 from <a href="https://www.theguardian.com/global-development/2020/aug/11/covid-to-displace-more-than-a-million-across-the-sahel-new-tool-predicts">https://www.theguardian.com/global-development/2020/aug/11/covid-to-displace-more-than-a-million-across-the-sahel-new-tool-predicts</a>.

Human Rights Watch 2020: Lebanon: Refugees at Risk in COVID-19 Response. Retrieved 17.08.2020 from https://www.hrw.org/news/2020/04/02/lebanon-refugees-risk-covid-19-response.

Ide, Tobias 2020: COVID-19 and Armed Conflict. Retrieved 12.08.2020 from https://ssrn.com/abstract=3603248.

Inman, Phillip and Graeme Wearden 2020: Covid-19 drives UK national debt to £2tn for first time. Retrieved 11.09.2020 from https://www.theguardian.com/business/2020/aug/21/covid-19-drives-uk-national-debt-to-2tn-for-first-time.

Intergovernmental Panel on Climate Change (IPCC) 2014: Climate Change 2014: Synthesis Report. Contribution of Working Groups I, II and III to the Fifth Assessment Report of the IPCC [Core Writing Team, R. K. Pachauri and L.A. Meyer (eds.)]. Geneva: IPCC, 151 pp.

International Crisis Group (ICG) 2020: COVID-19 and Conflict: Seven Trends to Watch. Retrieved 14.08.2020 from https://www.crisisgroup.org/global/sb4-covid-19-and-conflict-seven-trends-watch.

International Crops Research Institute for the Semi-Arid Tropics (ICRISAT) 2020: Double burden of COVID-19: Declining livelihood opportunities and aspiration failure among poor people. Retrieved 11.09.2020 from <a href="https://www.cgiar.org/news-events/news/double-burden-of-covid-19-declining-livelihood-opportunities-and-aspiration-failure-among-poor-people">https://www.cgiar.org/news-events/news/double-burden-of-covid-19-declining-livelihood-opportunities-and-aspiration-failure-among-poor-people</a>.

International Labour Organization (ILO) 2020a: Social Protection Spotlight: Social protection for migrant workers: A necessary response to the Covid-19 crisis. ILO Brief. Geneva: ILO.

International Labour Organization (ILO) 2020b: COVID-19 crisis and the informal economy: Immediate responses and policy challenges. ILO Brief. Geneva: ILO.

International Monetary Fund (IMF) 2020: COVID-19 Poses Formidable Threat for Fragile States in the Middle East and North Africa. IMF Country Focus. Retrieved 11.09.2020 from <a href="https://www.imf.org/en/News/Articles/2020/05/13/">https://www.imf.org/en/News/Articles/2020/05/13/</a> na051320-covid-19-poses-formidable-threat-for-fragile-states-in-the-middle-east-and-north-africa.

International Organization for Migration (IOM) 2020a: COVID-19 Analytical Snapshot #6: Stigmatization & discrimination. Understanding the migration & mobility implications of COVID-19. IOM Research.

International Organization for Migration (IOM) 2020b: COVID-19 Analytical Snapshot #40: Returning migrants. Understanding the migration & mobility implications of COVID-19. IOM Research.

International Organization for Migration (IOM) 2020c: World Migration Report 2020. Geneva: IOM.

Jackson, Ashley 2020: For the Taliban, the Pandemic is a Ladder. Retrieved 13.08.2020 from https://foreignpolicy.com/2020/05/06/taliban-afghanistan-coronavirus-pandemic.

Johanniter 2020: Control of Locusts in Times of COVID-19. Retrieved 21.09.2020 from https://www.johanniter.de/die-johanniter/johanniter-unfall-hilfe/start/news/control-of-locusts-in-times-of-covid-19.

Jong, Hans Nicholas 2020: Land conflicts escalate with spread of COVID-19 in Indonesia. Mongabay Series: Global Forests, Indonesian Forests, Indonesian Palm Oil. Retrieved 11.09.2020 from https://news.mongabay.com/2020/04/land-conflicts-escalate-with-spread-of-covid-19-in-indonesia.

Justice & Empowerment Initiatives - Nigeria (JEI); Nigerian Slum/Informal Settlement Federation and Physically Challenged Empowerment Initiative (PCEI) 2020: Impact of Covid-19 on Lagos Informal Settlements and Vulnerable Urban Poor Populations: Report on Findings 1 April - 31 May 2020. Retrieved 07.08.2020 from

https://tumblr.us11.list-manage.com/track/click?u=197617b777471837e4d40a2ab&id=9a93718fa3&e=bdd609d111.

Kinyanjui, Njoki 2020: COVID-19: A double burden for women in conflict areas, on the frontline. Retrieved 11.09.2020 from https://www.un.org/africarenewal/web-features/coronavirus/covid-19-double-burden-women-conflict-areas-frontline.

Kishor, Nanda 2020: Terrorism and COVID-19: Brutality of Boko Haram in Africa. Retrieved 20.08.2020 from https://moderndiplomacy.eu/2020/08/09/terrorism-and-covid-19-brutality-of-boko-haram-in-africa.

Knomad 2020: Remittances in Crisis: How to Keep Them Flowing. Retrieved 07.08.2020 from https://www.knomad.org/covid-19-remittances-call-to-action.

Kotoky, Anurag and Sudhi Ranjan Sen 2020: World's Largest Evacuation Begins as Modi Brings Indians Home. Retrieved 13.08.2020 from https://www.bloomberg.com/news/articles/2020-05-05/world-s-largest-evacuation-begins-as-india-brings-back-citizens.

Kringelbach, Hélène Neveu 2020: From heroes to pariahs? Senegalese return migrants in the time of COVID-19. Retrieved 13.08.2020 from https://www.compas.ox.ac.uk/2020/from-heroes-to-pariahs-senegalese-return-migrants-in-the-time-of-covid-19.

Lawlor Ciarán; Josh Kellar, Emily Serazin, Andrew Rodriguez, Philip Berk and Ahad Wahid 2020: The Timelines and Implications for COVID-19 Vaccines. Retrieved 11.09.2020 from https://www.bcg.com/publications/2020/covid-vaccines-timelines-implications.

Majumdar, Boria and Sunipa DasGupta 2020: Let Bengal be heard: dealing with Covid and cyclone Amphan together. In: South Asian History and Culture 11(3), pp. 317-322.

Melde, Susanne; Frank Laczko and François Gemenne (eds.) 2017: Making mobility work for adaptation to environmental changes: Results from the MECLEP global research. Geneva: IOM.

Mixed Migration Centre (MMC) West Africa 2020: Quarterly Mixed Migration Update: West Africa. Quarter 2 - 2020. Retrieved 22.09.2020 from http://www.mixedmigration.org/wp-content/uploads/2020/07/qmmu-q2-2020-wa.pdf.

Muggah, Robert 2012: Researching the Urban Dilemma: Urbanization, Poverty and Violence. Ottawa: IDRC (International Development Research Centre).

Mukhtarova, Turkan 2020: COVID-19 and the Informal Sector: What it means for women now and in the future. Policy Brief. Georgetown Institute for Women, Peace and Security (GIWPS).

Mustasilta, Katariina 2020: From Bad to Worse? The impact(s) of Covid-19 on conflict dynamics. Brief 13. European Union Institute for Security Studies (EU ISS).

Najjar, Farah 2020: 'We lost everything': Thousands homeless as Sudan battles floods. Retrieved 11.09.2020 from https://www.aljazeera.com/news/2020/09/lost-thousands-homeless-sudan-battles-floods-200909102451318.html.

Nandi, Ravi and Nedumaran Swamikannu 2020: The double burden of COVID-19: Declining livelihood opportunities and aspiration failure among poor people. Retrieved 22.09.2020 from <a href="https://www.researchgate.net/">https://www.researchgate.net/</a> publication/341190000\_The\_double\_burden\_of\_COVID-19\_Declining\_livelihood\_opportunities\_and\_aspiration\_failure\_among\_poor\_people.

National Oceanic and Atmospheric Administration (NOAA) 2020: Busy Atlantic hurricane season predicted for 2020. Retrieved 11.09.2020 from https://www.noaa.gov/media-release/busy-atlantic-hurricane-season-predicted-for-2020.

NowThis News 2020: Deadly Cyclone Kills over 80 in India and Bangladesh [YouTube Video]. Retrieved 07.09.2020 from https://www.youtube.com/watch?v=31-661bfZ\_U.

Overseas Development Institute (ODI) 2019: Children in disaster-prone areas in India twice as likely to be living in poverty - new report. Retrieved 21.09.2020 from https://www.odi.org/news/877-children-disaster-prone-areas-india-twice-likely-be-living-poverty-new-report.

Paquette, Danielle and Ismail Alfa 2020: Boko Haram militants film murder of 5 aid workers helping to fight Covid-19 in Nigeria. Retrieved 20.08.2020 from https://www.iol.co.za/news/africa/boko-haram-militants-film-murder-of-5-aid-workers-helping-to-fight-covid-19-in-nigeria-6e166d63-5336-40fd-800c-de718ae98459.

Pfefferbaum, Betty and Carol S. North 2020: Mental Health and the Covid-19 Pandemic. In: New England Journal of Medicine 383, pp. 510-512.

Phillips, Carly A.; Astrid Caldas, Rachel Cleetus, Kristina A. Dahl, Juan Declet-Barreto, Rachel Licker, L. Delta Merner, J. Pablo Ortiz-Partida, Alexandra L. Phelan, Erika Spanger-Siegfried, Shuchi Talati, Christopher H. Trisos and Colin J. Carlson 2020: Compound climate risks in the COVID-19 pandemic. In: Nature Climate Change 10, pp. 586-588.

Piñeros, Erika and Carolina Loza Léon 2020: In Colombia, the Pandemic Provides Fertile Ground for Illegal Armed Groups. Retrieved 11.09.2020 from https://foreignpolicy.com/2020/08/05/colombia-coronavirus-pandemic-fertile-ground-illegal-armed-groups.

Pitlo, Lucio B. III 2020: Philippines' Covid-19 response still falling short. Retrieved 13.08.2020 from https://asiatimes.com/2020/08/philippines-covid-19-response-still-falling-short.

Pradhan, Tika R. 2020: Three youth protests in a week. Observers say government needs to take note. Retrieved 07.08.2020 from https://kathmandupost.com/national/2020/06/15/youths-took-to-the-streets-three-times-last-week-and-analysts-say-the-governmentneeds-to-take-note.

Price, Kiley 2020: Poaching, deforestation reportedly on the rise since COVID-19 lockdowns. Retrieved 11.09.2020 from https://www.conservation.org/blog/poaching-deforestation-reportedly-on-the-rise-since-covid-19-lockdowns.

Randall, Alex 2020: What does Covid-19 mean for people displaced by climate change? Retrieved 07.09.2020 from https://mondediplo.com/outsidein/covid-19-climate-change.

Reliefweb 2020: Recognizing COVID-19's impact on the FAO desert locust crisis response. Retrieved 21.09.2020 from https://reliefweb.int/report/ethiopia/recognizing-covid-19s-impact-fao-desert-locust-crisis-response.

Remittance Community Task Force (RCTF) Secretariat 2020: Remittances in Times of Crisis: Facing the Challenges of COVID-19. Retrieved 07.08.2020 from https://www.mfw4a.org/publication/remittances-times-crisis-facing-challenges-covid-19.

Research and Evidence Facility (REF) 2020: COVID-19 and mobility, conflict and development in the Horn of Africa. REF Briefing Paper. London: EU Trust Fund for Africa (Horn of Africa Window) REF.

Reuters 2020: Dozens of abandoned migrants rescued in Sahara. Retrieved 18.09.2020 from https://www.reuters.com/article/us-niger-migrants-idUSKBN25Z25H.

Root, Rebecca 2020: Utilities struggle to keep the taps on amid COVID-19. Retrieved 07.08.2020 from https://www.devex.com/news/utilities-struggle-to-keep-the-taps-on-amid-covid-19-97794.

Roth, Annie 2020: Poachers Kill More Rhinos as Coronavirus Halts Tourism to Africa. Retrieved 11.09.2020 from https://nyti.ms/2VjFZay.

Rüttinger, Lukas; Dan Smith, Gerald Stang, Dennis Tänzler and Janani Vivekananda 2015: A New Climate for Peace: Taking Action on Climate and Fragility Risks. adelphi, International Alert, Woodrow Wilson International Center for Scholars, European Union Institute for Security Studies.

Satterthwaite, David; Diane Archer, Sarah Colenbrander, David Dodman, Jorgelina Hardoy and Sheela Patel 2018: Responding to climate change in cities and in their informal settlements and economies. Paper prepared for the IPCC for the International Scientific Conference on Cities and Climate Change in Edmonton, March 2018. International Institute for Environment and Development (IIED).

Scudellari, Megan 2020: How the pandemic might play out in 2021 and beyond. Retrieved 11.09.2020 from https://www.nature.com/articles/d41586-020-02278-5.

Strauss, Delphine 2020: Virus resurgence could plunge emerging economies into debt crisis, warns IMF. Retrieved 11.09.2020 from https://www.ft.com/content/4da1ab53-bb92-4c87-895a-f827a517a627.

Taylor, Luke 2020: How Colombia's armed groups are exploiting COVID-19 to recruit children. Retrieved 11.09.2020 from https://www.thenewhumanitarian.org/news-feature/2020/09/10/Colombia-conflict-armed-groups-child-recruitment.

Thanthong-Knight, Randy 2020: Migrant Workers on Virus Front Line as Asia Returns to Work. Retrieved 21.08.2020 from <a href="https://www.bloombergquint.com/onweb/migrant-workers-on-virus-front-line-as-asia-returns-to-work">https://www.bloombergquint.com/onweb/migrant-workers-on-virus-front-line-as-asia-returns-to-work</a>.

United Nations (UN) 2017: New Urban Agenda. Habitat III Secretariat, UN.

United Nations (UN) 2020a: COVID-19 in an Urban World. Policy Brief.

United Nations (UN) 2020b: The World of Work and COVID-19. Policy Brief.

United Nations (UN) 2020c: UN Response to COVID-19. Retrieved 10.09.2020 from https://www.un.org/en/coronavirus/un-response.

United Nations (UN) 2020d: COVID-19 environmental roll back 'irrational and irresponsible': rights expert. Retrieved 11.09.2020 from https://news.un.org/en/story/2020/04/1061772.

United Nations (UN) 2020e: COVID-19 pandemic exposes global 'frailties and inequalities': UN deputy chief. Retrieved 18.09.2020 from https://news.un.org/en/story/2020/05/1063022.

United Nations (UN) 2020f: COVID-19 Potentially Greatest Threat to South Sudan's Already Fragile Health System, Special Representative Warns Security Council. Retrieved 21.09.2020 from https://www.un.org/press/en/2020/sc14221.doc.htm.

United Nations Environment Programme (UNEP) and International Livestock Research Institute (ILRI) 2020: Preventing the Next Pandemic: Zoonotic diseases and how to break the chain of transmission. Nairobi: UNEP.

United Nations Human Settlements Programme (UN-HABITAT) 2011: Global Report on Human Settlements 2011: Cities and Climate Change. London; Washington, D. C.: Earthscan.

United Nations Human Settlements Programme (UN-HABITAT) 2020: COVID-19 in African cities: Impacts, Responses and Policies. UN-HABITAT, UN Capital Development Fund (UNCDF), United Cities and Local Governments (UCLG) Africa, UN Economic Commission for Africa (UNECA).

United Nations Office on Drugs and Crime (UNODC) 2020: The impact of Covid-19 on organized crime. Research Brief. Vienna: UNODC.

United Nations Security Council (UNSC) 2020: Weakest, Most Fragile States Will Be Those Worst Affected by COVID-19 in Medium, Long Term, Humanitarian Chief Tells Security Council. Press Release. Retrieved 11.09.2020 from https://www.un.org/press/en/2020/sc14296.doc.htm.

van Dorn, Aaron; Rebecca E. Cooney and Miriam L. Sabin 2020: COVID-19 exacerbating inequalities in the US. In: Lancet (London, England) 395(10232), pp. 1243-1244. Vivekananda, Janani; Martin Wall, Florence Sylvestre, Chitra Nagarajan and Oli Brown 2019: Shoring Up Stability: Addressing Climate and Fragility Risks in the Lake Chad Region. Berlin: adelphi.

Waititu, Samuel 2020: Youth in Nyeri Demonstrate Over Kazi Mtaani Programme. Retrieved 07.08.2020 from https://www.kenyanews.go.ke/youth-in-nyeri-demonstrate-over-kazi-mtaani-programme.

Winter, Lisa 2020: Analysis Links Poor Air Quality to Increased COVID-19 Deaths. Retrieved 07.08.2020 from https://www.the-scientist.com/news-opinion/analysis-links-poor-air-quality-to-increased-covid-19-deaths-67738.

World Bank 2020: Projected poverty impacts of COVID-19 (coronavirus). Brief. Retrieved 21.09.2020 from
https://www.worldbank.org/en/topic/poverty/brief/projected-poverty-impacts-of-COVID-19#:-:text=Specifically%2C%20under%20the%20
baseline%20scenario,no%2DCOVID%2D19%20scenario.

World Food Programme (WFP) 2020: With conflict and Covid-19 deepening hunger in the Democratic Republic of Congo, more help is needed to save millions of lives. Retrieved 22.09.2020 from https://www.wfp.org/news/conflict-and-covid-19-deepening-hunger-democratic-republic-congo-more-help-needed-save.

World Health Organization (WHO) 2020: WHO Coronavirus Disease (COVID-19) Dashboard. Retrieved 18.09.2020 from https://covid19.who.int.

World Meteorological Organization (WMO) 2020: United In Science: A multi-organization high-level compilation of the latest climate science information. Retrieved 10.09.2020 from https://library.wmo.int/index.php?lvl=notice\_display&id=21761#.X1nT4J4zY2z.

Worldwide Fund for Nature (WWF) 2020: Mehr Wald geht durch Corona verloren. Retrieved 11.09.2020 from https://blog.wwf.de/wald-corona.

Zargar, Arshad R. 2020: Man rescued after clinging to tree for 16 hours to escape flooding that has killed 1,000 people. Retrieved 11.09.2020 from https://www.cbsnews.com/news/india-floods-bangladesh-deaths-millions-displaced-dramatic-rescue-caughton-video-today-2020-08-17.

Zickgraf, Caroline 2018: Immobility. In: McLeman, Robert and François Gemenne (eds.): Routledge Handbook of Environmental Displacement and Migration. London: Routledge.

Zickgraf, Caroline 2020: Were we all trapped? Reflections on immobility during a global pandemic. IOM Environmental Migration Portal. Retrieved 07.08.2020 from <a href="https://environmentalmigration.iom.int/blogs/were-we-all-trapped-reflections-immobility-during-global-pandemic">https://environmentalmigration.iom.int/blogs/</a> were-we-all-trapped-reflections-immobility-during-global-pandemic.