













Introduction

For a number of years now, climate change has been more prominent on the UN security agenda.¹ The underlying argument is straightforward: the potential impact of climate change on international peace and security is real and should not be underestimated. In recent years, both Sweden and Germany have used their non-permanent security seat to bring the issue to the fore. Other countries, such as Belgium, joined the Group of Friends of Climate Security to keep the theme high on the agenda.

If we translate the debate on the climate security nexus to a more operational level, we inevitably arrive at the question of whether and to what extent the fight against climate change should be included in the mandate of current and future UN peacekeeping missions. MINUSMA was the first UN peacekeeping mission for which the mandate was explicitly extended to include climate security aspects.² In the meantime, Germany is paying a climate security expert for the first time within the framework of the UNSOM mission in Somalia.³ In this policy brief, we apply the debate to the largest UN peacekeeping operation in the world so far, namely MONUSCO in DRC. In this region, too, initiatives linking conflict and environmental issues are not new. For example, as early as 1994, professors and students of the Institute Supérieur Pédagogique (ISP) de Bukavu set up an institute under the name Club des Amis de la Nature (CAN). On 20 December, the UN Security Council will have to decide on the possible extension of MONUSCO's mandate.⁴ Are there any possibilities for climate security aspects?

DRC, Climate Change & Conflict

On the African continent, it is mainly the Sahel region and the Horn of Africa that receive a lot of attention when it comes to climate-related security risks. Nevertheless, climate change is not a fiction in the Great Lakes region either, and in several cases there is geographical overlap between regions affected by conflict and climate change. This means that vulnerability is both caused by environmental factors and human action. Here, too, climate variability mainly results in an increased risk of temperature rises, more extreme weather events, and increased incidence of flooding. However, the climate predictions are not unambiguous. As far as rainfall is concerned, different models predict both an increase and a decrease. There is more consensus that rainfall will be more extreme, resulting in more extreme events (mainly droughts in the south and floods in central Congo). Temperature forecasts are slightly more consistent and point to an increase of 1 to 3C° by 2050. It is mainly these temperature rises that are considered to increase the risk of food insecurity due to temperature-related livestock and crop diseases. For agricultural activities, severe water stress is not anticipated in the East of Congo. Although strong urbanisation can lead to problems in urban centres. The Ruzizi plain in South Kivu and the peri-urban areas of Bukavu illustrate this reality well. Furthermore, it is particularly important that predictions can vary greatly from region to region. The analysis is therefore always very context-dependent.5



The cutting of the road led to a new mode of transport. Motorcycles and people are carried in boats on Lake Tanganyika.



Effects of flooding in the Ruzizi plain.

In the region, several aspects of the impact of climate change are already observable. For almost 5 years, heavy rains have repeatedly displaced riverbeds. This has resulted in the complication of territorial boundaries and boundaries between farmers' fields, resulting in conflicts. This is the case of the territory of Uvira and Kalehe. In April 2020, hundreds of houses were washed away by floods due to heavy rains and rising lake levels in the town of Uvira (south of Bukavu). Losses in human life and property were also recorded. The population and the local authorities did not hesitate to make the link between this phenomenon and climate change.



Lwanga, between Uvira and Makobola (Fizi): After heavy rains, Lake Tanganyika burst its banks and cut the road.

Furthermore, in a political context where the issue of land claims is resurfacing with great magnitude and ethnic background, climate change risks to enforce conflicts between herders and farmers, particularly in the Ruzizi plain. With climate change, cattle transhumance from the highlands to the lowlands is likely to take longer and lead to violence. While in the past conflicts between pastoralists and farmers were already recurrent, the current political context on land claims coupled with climate change and land scarcity may be an aggravating factor.

Finally, the mass influx of refugees since 1994 into Nord-Kivu (Goma, Kiwandja, Munganga) and South-Kivu (Bukavu, Honho, Inera, Kashusha, Nyamiragnwe, Uvira, Kiliba, Luvunfi, ...) cannot be ignored: since then, this human influx from Rwanda and Burundi has contributed to the accelerated destruction of flora and fauna. The Ruzizi plain and the city of Bukavu are particularly affected.

If the negative climate projections worsen in the future, this will mainly negatively affect agricultural production. In a country where agriculture accounts for about 40% of GDP and is the primary source of livelihood for about 70% of the population, the impact of climate change on the agricultural sector should not be underestimated. In addition, climatic factors can also have a negative impact on public health through poorer water quality, more malnutrition and food insecurity, and more waterborne diseases.⁶ Some of its effects can already be observed.

Meanwhile, there is international consensus that a direct causal link between climate change and conflict is unlikely. Climate change is rather defined as a risk multiplier: climate change can strengthen already existing risks – such as poverty, political marginalisation, migration, communal tensions, ... – and thus substantially increase the risk on violent conflict.

This is also the line best followed for the Great Lakes region, and the situation in Eastern Congo in particular.8 Congo's vulnerability is mainly of a socioeconomic and political nature: poverty, political marginalisation, limited or no access to basic services, and the systemic presence of armed groups are the main factors explaining insecurity and violence. But climate change can act as a risk multiplier and fuel violent conflict. The Ruzizi plain can already illustrate this (Kamanyola, Luvungi, Sange, Kiliba ...).

MONUSCO and the compound climate-fragility risks

According to the latest insights it is best to understand the complex link between climate and conflict around compound climate-fragility risks.9 Clustered in that way the complex interactions between climate change and important existing political, social, economic and environmental underlying factors of violence and conflict get a nuanced understanding. In below we will look at the Eastern DRC context and the MONUSCO mandate to identify some lessons learned about the climate security nexus and the potential role for UN peace missions.

COMPOUND 1: CLIMATE CHANGE AND LOCAL RESOURCE COMPETITION

A screening of MONUSCO related UN resolutions and reports uncovers from in the beginning a focus on the link between violence and conflict on the one hand and legal and illegal exploitation of natural resources by multinationals in collaboration with local armed groups and environmental crimes on the other hand. Already MONUSCO's mandate in 2010 identified the illegal exploitation of natural resources as one of the important drivers of conflict. Especially after the UNEP-MONUSCO-OSESG (2015) report this line of thinking further influenced conflict analysis and policy. It was stated that "the groundbreaking study released in February 2015 found that MONUSCO is no longer dealing with a political insurgency but mainly facing criminal groups involved in well organised large scale smuggling and laundering operations". The report continues and recommends that "MONUSCO modify its approach to stabilizing eastern DR Congo by tackling environmental crime as one of the key conflict drivers, with an expanded focus to include criminal networks".

However, the literature on the so-called 'resource curse' and greed as an explanatory factor for violent conflict is based on a narrow evidence base, is largely macro-oriented, overlooks the local level and fails to move beyond normative perspectives on the relation between natural resources and conflict.¹³

Therefore, a more holistic approach is needed to fully understand the complex link between natural resource competition and conflict. Whether increased competition over natural resources actually turns into violent conflict is

dependent on specific contextual factors such as (i) the history of the conflict, (ii) its dependency on natural resources, and (iii) inequality and marginalization (unequal access to resources).¹⁴

For example, a recent study by Vestby (2019) finds support for a link between deteriorating living conditions and the use of violence based on a household survey in thirty-five African countries. However, most studies indicate that there are important conditioning factors affecting where climate, or income shocks in general, increase conflict risks.¹⁵

The latest reports of the Secretary General on MONUSCO underscore the importance of such a more fine-grained analysis and should warn us for drawing simple causal relations between natural resource competition and violent conflict. The upsurge of clashes during last summer between armed groups to access natural resources in North Kivu is of a completely different nature than the tit-for-that militia attack strategy against civilians in South Kivu and Maniema provinces, which in turn is not necessarily linked to the Mai-Mai raids on Banyamulenge cattle and the Twirwaneho retaliatory attack on Kipupu. At the same time attacks around the mining sites in Bendera continued, but also inter-communal violence between Bantu and Twa ethnic groups in Nyunzu remain a source of concern.16 In a similar way solutions are also sought on a local level. MONUSCO has been supporting locally led initiatives for peace that e.g. resulted in the signing of a peace pledge by 42 traditional leaders in Mahagi territory and a road map adopted by 60 local leaders from the Alur community.¹⁷ However, also these bottom-up approaches or local peace deals have their limits.¹⁸

What all these examples illustrate is the fact that a complex web of hyper-local and inter-communal relationships are central in understanding if and how competition over natural resources can and has been initiating violence.

Finally, conflict analysis in Eastern DRC mainly focuses on illegal exploitation of 'conflict minerals', identified as the main resources for armed groups. Much less is known on resource competition over land and water – two resources that are more directly affected by climate change and with a substantial impact on the livelihoods of the entire population.

COMPOUND 2: CLIMATE CHANGE, LIVELIHOOD INSECURITY AND MIGRATION

DRC is a country whose agriculture production accounts for about 40% of GDP and agriculture is the primary source of livelihood for about 70% of the population. In a local study on Bukavu, for example, a majority of respondents (94%) indicated that agriculture is their primary source of income. This means that the large – rural – majority of the population has a livelihood based on rain-fed agriculture and is therefore climate-dependent. The same study also indicates that a vast majority (96%) of respondents confirms that the climate has indeed changed and has an impact on their livelihood. To a large extent, they refer to clearly visible changes for local farmers: longer droughts and changing rain patterns. The subjective experience and perception of climate change by the local farmer therefore matches the available data.

In a screening of MONUSCO related documents the link between conflict, climate change and livelihoods of the rural population is much less prominent. To a certain extent, this is logical, since MONUSCO focuses on armed groups and their livelihoods – environmental crimes related to exploitation of the so-called 'conflict minerals'. However, these armed groups recruit among the local population: farmers become rebels. Therefore, it is important to not only look at the pull factors (what has a rebel movement to offer) but also to the push factors (what drives people away from a living as farmer or other non-violent livelihoods). From such a push-perspective, access to land and water is a much greater problem for the local population than the violence related to the 'conflict minerals'. Land conflict is a major source of tension amongst societal groups, clans and families, and historical tensions over access to land have been there for centuries.²²

If we look at the coping capacity of the population to deal with climate change, we find a whole set of well-known strategies: diversification of crops and different crop varieties, diversification of income resources, reliance on forest products, the selling of land or other assets (e.g. livestock).²³ The shift to a violent-induced livelihood is therefore not the first option. Although there are recent studies that indicate that there can be a link between climate

shocks and the risk on violent conflict, there seem to be crucial contextual factors that explain why climate change does lead to a higher risk in some contexts and has no effect in other situations. Patterns of political marginalization and a previous history of violent conflict are two important factors. More in general, it seems that complex local social ties such as family and ethnicity are key in understanding if and how climate change increases the potential for violent collective action.²⁴

A specific factor that links climate change, livelihoods and the risk on violent conflict is migration. Migration is an important coping strategy when it comes to both climate change and conflict. Sadly enough, the region of the Great Lakes is illustrative on that point. At the end of 2019 DRC had more than five million internally displaced persons (IDPs) and hosted at the same time approx. 538.000 refugees from neighbouring countries (Burundi, CAR, Rwanda, South-Sudan). Important to notice is the fact that violence – and not climate change – remained the main reason for migration. (MONUSCO_2020214 p.6-7).²⁵ But substantial migration flows can have a devastating impact on the local environment. The installation of refugee or IDP camps does not only initiate potential conflict with the host communities but can also lead to an ecological disaster (the need for arable land, water use, the need for charcoal, ...). The Great Lakes region has been confronted with this since the Rwandan mass genocide in 1994.

In conclusion, one could argue that the main causal relationship is not climate change leading to violent conflict. Rather the opposite is true: it is the presence of violent conflict and the associated vulnerability that substantially reduces the resilience and coping strategy of the local population to deal with climate change effects. This means that protecting and creating sustainable livelihoods is both crucial in climate-sensitive peacebuilding (e.g. DDR programmes) and conflict-sensitive climate change adaptation (e.g. natural conservation).

COMPOUND 3: CLIMATE CHANGE, FOOD PRICE SPIKES AND FOOD INSECURITY

In the DRC 15.6 million individuals remain in need for humanitarian assistance. That is approximately one out of five Congolese.²⁷ 22.8 million are acutely food insecure, of which an estimated 3.4 million children are acutely malnourished.²⁸ This makes food insecurity a systemic problem.

Eastern DRC has a history of conflict directly affecting food prices. In 2012, for example, the M23 incursion stopped importation of beans, beef and tea from Rwanda, resulting in significant price increases of between 30% and 50% in Goma.²⁹ The fact that more in general conflicts in the Great Lakes region do no stop at borders explains the effect it has on cross-border trade, and therefore indirectly, on food prices and other commodities.

More recently, the COVID-pandemic lays a severe additional burden on the already difficult food security situation in Eastern DRC. During April in Goma, for example, the lock-down of the city combined with the closing of the borders resulted in price fluctuations up to +50% (potatoes), +57,9% (oil) or even +88,9% (salt). These rising food prices are in particular a challenge for the large refugee populations. They are not only confronted with price fluctuations, but also with confinement measures that results in the closing of markets and substantially decreasing the possibilities for trade.³⁰

And not only food price fluctuations cause problems. Also the negative impact of the COVID pandemic on the world wide economy (and more in particular China) indirectly affects the Great Lakes region through a drop in demand for copper. Yet another indirect effect is the fact that a drop in remittances from relatives abroad should also be anticipated. More in general the Sub-Saharan African region will suffer from its first economic recession in the last 25 years due to de COVID pandemic.³¹

Also MONUSCO is affected by the COVID pandemic: the mission has taken preventive measures to minimize the risk of spreading the virus through their movements. Also, the rotation of military personnel is reviewed and potentially comes under pressure. In the meantime, hostile reactions from the local

population towards MONUSCO staff are increasing, since COVID is primarily seen as a problem coming from abroad (similar to the Ebola outbreak). On the other hand, MONUSCO is supporting the fight against the virus through sensitization and where possible supporting humanitarian assistance.³²

COMPOUND 4: CLIMATE CHANGE AND EXTREME WEATHER EVENTS

Local studies in Eastern DRC support the fact that climate change is mostly experienced through the increase of extreme weather events. A survey identified drought as the most frequently (45%) reported shock. By comparison, only 2% reported exposure to floods. Also qualitative data support this view. A study near Bukavu provided a consensus (96%) that climate change is visible, with changing rainfall patterns and increasing droughts as the most visible impacts. This prioritization of changing rainfall patterns and droughts again reaffirms that the vast majority of households earn their livelihood on the basis of rain-fed agriculture. What is also interesting to notice is that the local population acknowledges that their traditional knowledge is not sufficient any longer to support good agricultural practices since climate has changed, and that they do not know why the climate has changed. Local knowledge, observations and weather forecasting systems are no longer necessarily accurate to predict how seasons will evolve in the future.

Although the occurrence of climate change and extreme weather events in the Great Lakes region is undeniable, the link with violent conflict is less clear. One particular study tries to analyse the link between climate-related shocks (mainly droughts) and supporting and/or participating in violence.³⁶ What was already clear is confirmed: i.e. climate-related shocks do not cause violence in a direct way, but rather play out through the negative impact these shocks have on agricultural livelihoods and already existing social tensions and/or histories of conflict. A clear illustration is for example the Ituri province, in which a long-standing conflict between Hema and Lendu manifests itself around access to land. If climate-related shocks reduce the potential of arable land, this will potentially amplify the existing conflict and violence between the Hema and Lendu. However, this does not necessarily lead to violence, since local groups do have different coping strategies to deal with the climate-related shocks and have potential conflict-resolution mechanisms that are used to deal with their

negative effects. However, not much is known about these different options, and why in some circumstances violent options do overcome the non-violent options. In that sense, it is important to not only focus on underlying vulnerabilities to understand the link between extreme weather events and violence, but rather to focus on the resilience – the totality of coping strategies – of the local populations to deal with them.³⁷

COMPOUND 5: UNINTENDED CONSEQUENCES OF CLIMATE AND SECURITY POLICIES

In several ways both climate and security policies can have unintended negative consequences on the climate-security link. A first issue is the environmental footprint of the MONUSCO mission itself. Already in 2012 the United Nations Environment Programme (UNEP) published a report on 'greening' the Blue Helmets (UNEP) in an effort to minimize the negative environmental footprint of UN peace missions on their environments.³⁸ By adopting creativity, technology and transformational behaviour peace missions can contribute to saving energy and water use and waste production, which in turn can support the health of both staff and local communities while also reducing the risk on conflicts with the host communities. In its mandate renewal in 2019 the MONUSCO peace mission is explicitly requested to consider the environmental impacts of its operations and take appropriate steps to manage them.³⁹

In the same report UNEP also underscores the important link between natural resource management and conflict. After conflict, natural resources are in many cases the main assets available to kick-start the economy in order to bridge the humanitarian-development-peace nexus. An efficient management of these natural resources is therefore a crucial step in mitigating or fuelling the conflict. As illustrated under point 1 on the link between violence and natural resource management MONUSCO has focused on the 'conflict minerals' fuelling local violence in different ways. However, we also warned for this limited focus on natural resources that finance armed groups. It was argued that the management of land and water has a much greater impact on a much larger part of the local population, because the vast majority of households survive on rain-fed agricultural livelihoods. On top of that, these livelihoods are also more affected by climate change.

In line with the previous argument is the more general search for climate-sensitive peacebuilding. DDR campaigns are a good illustration on that point. The demobilization and reintegration of armed group combatants remains a top priority for MONUSCO.40 However, how to assure sustainable reintegration, in particular in the case of agricultural livelihoods? A joint UNEP-UNDP study indicates that an average of 50% until 80% of ex-combatants opt for reintegration support in the agricultural sector.⁴¹ However, reintegration in the agricultural sector is confronted with structural and long-term barriers that are not easily solved during a DDR programme. The clearest example is access to land. A DDR programme cannot organize a land reform process, yet ex-combatants receive a reintegration packet (training, seeds, material, start-up capital) but are blocked because they do not have access to land once they return to their community of origin (land was sold, given to family members, or grabbed by community members). In addition, sustainable agricultural livelihoods also depend on other structural factors such as access to markets, access to credit, water rights, transport and dispute resolution. However, the study also indicates that investments in infrastructure can lead to a win-win situation because it offers low-skilled employment opportunities for ex-combatants while also reconstructing infrastructure that support a more sustainable management of natural resources in the future (reforestation, restoration of rivers and watersheds, etc.).

On the other hand, we should also warn for the militarisation of environmental policies. The conservation programmes for the Virunga national park are illustrative for the potential negative effects of what is called the 'green militarisation' of development. Because development projects are based on a soft counter insurgency approach such programmes have militarizing effects on the conservation of natural resources.⁴² Conservation priorities also conflict with the fact that using these natural resources is an important coping strategy of the surrounding communities to survive and feed their families. This is not to say there is an easy trade-off, but one should be aware of the conflicting interests and the need for more conflict-sensitive environmental policies. This is not only true for conservation activities but for climate change mitigation and adaptation programmes in general: they can have negative side-effects on local livelihoods that intensify existing and new social tensions.⁴³

Recommendations

On the 20th of December 2020 the current mandate of MONUSCO takes and end. In all likelihood, the mandate will be extended, but new emphases may be added, and an exit strategy will be given more prominence. What lessons can we draw from the climate security nexus, how it has manifested itself in the Great Lakes Region to date, and what role MONUSCO has played, and possibly can play, in the future?

- Consider, both in MONSUCO strategy and operations, a more **in-depth understanding** of the complex connection between climate change and violent conflict in the Great Lakes region. Compared to the Sahel and the Horn of Africa, we still know too little about the climate security nexus, and how it manifests itself in the Great Lakes Region. This is all the more challenging because the mutual impact between climate change and violent conflict is very much context-specific.
- 2 | Consider a shift towards a broader peacebuilding approach within which it is possible to roll out an even more multi-dimensional approach than is already the case today. This should enable to guarantee a better alignment towards the humanitarian-development-peace nexus. This will demand more collective and pro-active planning within and between the different sectors, silo's and organisations than before.
- 3 Consider, in line with the previous point, more **regional cooperation and synergy**. The Great Lakes region is par excellence an example showing us that both violent conflict and climate change does not stop at borders. The arrival of the new UN Regional Strategy presents an opportunity to align across regional borders.
- 4 Consider how MONUSCO can actively play a role in **data collection** and analysis. Accurate climate change and environmental information is often missing or not widely available. Several important local institutions and material are lacking (e.g. weather forecasting systems, or provincial and national climate change observatories). Also the collection and integration of local knowledge remains a challenge.

- 5 | Consider if and how MONUSCO could play a more substantial (logistical) role in (**natural**) **disaster management** and respond to extreme weather events. MONUSCO has played a role in the response to the Ebola outbreak and is also integrating COVID-related activities in its planning.
- 6 Consider and upscale its efforts to facilitate **humanitarian access** and ensure safe delivery of humanitarian assistance to those who need it. Especially the protection of refugee and IDP camps can be mentioned here.
- 7 | Consider a more climate-sensitive approach towards the **DDR programmes**, more in particular taking into account the more structural barriers confronted with when re-integrating ex-combatants in the agricultural sector (access to land, water rights, ...).
- 8 Consider the risk for a 'green' militarization of development through a too narrow approach to the climate-security nexus that can set aside non-military solutions. In particular conservation programmes can be mentioned. More in general, climate change adaptation measures should become more conflict-sensitive and assure that a conflict analysis is integrated at the beginning of programming processes.
- 9 Consider a broader approach to the link between violent conflict and natural resource competition, since a substantial part of local resource competition is linked to land conflicts. This is not to say that there is no problem with 'conflict minerals' financing armed groups and the proliferation of illegal livelihood strategies.
- **10** Consider and manage effectively the **ecological footprint** of the MUNOSCO mission itself.

Endnotes

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