

Climate Change and Security Implications

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ABSTRACT: Climate change is arguably the first truly global security challenge in that, according to UN reports, only 11 out of the current 193 UN member states do not currently experience its impact in one form or another. In this sense, the Alliance includes in its policies the risks generated by the stress of climate change and orients its security strategies to take into account the impact of climate change. Continuous information, the approach based on prevention and resilience as well as the responsible determination of the energy independence that can be provided by renewable resources are some of the impactful measures in limiting these changes.

KEYWORDS: climate change, security, conflict, climate security, natural disasters, NATO

Introduction

Climate change does not occur in a vacuum; in many areas of the world, they are accompanied by a decrease or rapid increase in population, a lack of resources or an increase in the price of energy. Analytically, it is difficult to separate the effects of climate change from other factors, such as food shortages, migration, ethnic tensions, and other issues that could generate violence. However, the potential impact of climate change on water, energy and agriculture will turn this process into a central driver of change, tension and conflict. An unsettling conclusion follows from this: the impact of climate change has combined effects on various societal dimensions and thus becomes a threat to the global economy, society as we know it today, collective security and global order in the first half of the 21st century.

Is climate change a direct cause of current instability and conflict?

Experts agree that over the past century, climate variability, hazards and trends have affected armed conflicts that have broken out in some countries. However, research conducted in recent years in the field suggests a relationship between global warming and the outbreak of future conflicts in different areas of the world. Or, to put it another way, global warming is among the most common causes of tension and conflict that humanity is dealing with today. They agree that there are other factors far more influential than climate change. In the mentioned study, starting from a list of 16 factors determined by the collective of researchers each, the expert ranked the factors based on the degree of uncertainty regarding their influence in the outbreak of conflicts. Climate variability and/or change is low on the list of most likely conflict factors, and experts rank it as the most uncertain in its influence, not surprisingly. We believe that assessing the outcomes of climate change are difficult to quantify, but may have large consequences relevant to the decision-making processes of today's leaders.

Researchers (Mach et al. 2019) found that intensifying climate change is likely to increase the risk of future armed conflict within countries, estimating that climate change or climate variability has influenced between 3% and 20% of the risk of armed conflict over the past century. The study also found that if global emission rates are not reduced, the risk of climate-induced violence is five times greater.

Some leaders have since committed to reducing greenhouse gas emissions, but the world is facing new risks and variables in national and international security, and in this context, it appears that it is not yet ready to slow warming to set levels through the Paris Agreement in 2015 (United Nations / Framework Convention on Climate Change 2015). Even the new emissions targets set by governments around the world are not strict enough to prevent global warming of more than 1.5 degrees Celsius by the end of the century, the aforementioned report says.

Extreme weather events, exacerbated by accelerated sea and ocean level rise, will particularly affect some areas – including Europe, South Asia, Southeast Asia and the Western Hemisphere. When we say extreme weather events, we mean a series of climatic manifestations such as thermal stress, tropical cyclones, cold waves, heat waves or drought that leave behind significant damage. The disasters produced by these weather events are difficult to place on a chart of severity or relevance and experts hesitate to pronounce on this. "It's very difficult to make a selection because we've had many extraordinary events: the record in western Canada with a temperature of 49.6 degrees Celsius is just one of them" (Bojariu 2021). Regarding heat waves, the one in China should be mentioned here, but also the 2021 record in Sicily, of 48.8 degrees Celsius, as well as the fact that these extremes are no longer rare events and have become common in recent decades.

Water and food insecurity compounded by heat waves, droughts and floods are already increasing the risk of conflict in countries such as Egypt, Ethiopia, Iraq and Jordan, which have already been dealing with these phenomena for a significant period of time. The global threat assessment also highlighted the risk of tensions between Russia and China as sea routes open up in the Arctic and the rush for natural resources at the top of the world increases. "Food insecurity and water stress are also possible consequences of climate change. Where these factors interact, the rationale holds that tensions could increase competition for scarce resources; escalation could further limit access to resources, causing previously unaffected people to face scarcity and, in the process, increasing the likelihood of conflict." (Scheffran and Battaglini, 2011; Schellnhuber 2022).

Extreme weather events are increasing in frequency and intensity. Thus, the occurrence of an increasing number of tropical cyclones, severe storms and tornadoes, coastal flooding or long periods of drought causes extensive damage to infrastructure, arable land, habitat and raw materials for the food industry and more and creates conditions for insecurity and instability. The resulting hunger, drought or pollution forces migration, exacerbated by the expansion of transnational criminal and extremist activity, and border tensions will be a recipe for conflict." (Auffhammer et al. 2014).

If we refer to Romania, the extreme phenomena were numerous, heavily publicized and increasingly associated with climate warming. The resulting conclusions consist in the fact that natural disasters can weaken the capacity to ensure national security and can increase the need for international collaboration and partnerships. Among the effects we can list a weak response to the energy crisis caused by the Russian-Ukrainian war, the increase in international migration and implicitly the decrease in Romania's population, or the increase in competition for livelihood options. These topics are also researched in their relationship with specific elements of security as it emerges from the specialized literature. The issues posed by these two critical aspects of climate security-the role of the Arctic and the transboundary and international nature of the problem-are discussed with remarkable frequency by researchers trying to model the link between climate change and security.

We can conclude that climate change is rarely seen as a direct cause of instability and conflict, but experts generally consider this process a "threat multiplier", a phenomenon that can aggravate or exacerbate other sources of instability and conflict, such as competition for natural resources or ethnic tensions. Discussions generally fall into two areas: the impact of warming on conflicts between nations and between ethnic groups within nations, and the impact of warming on military infrastructure and operations. The idea that a warming planet threatens stability across the globe is not new. The primary and secondary socio-economic impact can affect all geographical areas, but we find it more intense in low-income countries, where government finances are not very strong, where the management of natural disasters is not done at a sufficiently efficient level and the involvement of institutions is uneven.

The impact of climate change on security

As we know, when we say “climate change” we go beyond the idea of climate, because the impact is much broader and the challenges much more diverse. It's a triad of main challenges, and here we're talking about solving the energy problem that, as we know, contributes to about 80% of global human emissions (Climate Change Summit 2022).

A second challenge is air pollution and statistics say that there are at least 5 million premature deaths every year because of this. This raises a significant public health issue, one that is much less on the current agenda than it probably should be. The third element of the triad is the poverty of energy sources. Currently, approximately 3 billion people cook with biomass and a billion people do not have access to electricity. (Climate Change Summit 2022). These statistics actually hide an energy poverty that is very closely related to human development.

During the last decade, Romania, together with other states of the North Atlantic Alliance (NATO), recognized the direct influence of the climate on security. However, NATO's involvement in climate and environmental security is modest. NATO's efforts are mainly directed towards maintaining basic awareness of the issue, sponsoring and participating in events or providing assistance to partner countries. However, at the level of the Alliance, the impact of climate change on security was studied; the bottom line is that climate change is one of the defining challenges of our time.

In this sense, NATO recognizes climate change as a “general challenge of our time” that will measurably increase security risks and “will worsen as the world continues to warm” (Nato.int 2022). It calls for a fundamental transformation of the Alliance's approach to security and establishes NATO as a leading international organization in understanding and adapting to climate change. In this sense, NATO leaders adopted at the 2021 Brussels Summit the New Strategic Concept of NATO which recognizes, for the first time, the security implications of climate change as a major security challenge in the next decade. The new Strategic Concept directs the Alliance to respond to current security threats and challenges and to develop politically and militarily so that it is ready to respond to future threats and risks.

If we analyze the effects of climate change, we can affirm the fact that they shape our geopolitical environment and influence the behavior of the state. For example, oil-exporting economies will have to deal with failing assets as they switch to other energy sources, while mineral-exporting countries could benefit from a green transition. Another area where conflict risks need to be mitigated is the extraction of raw materials, desertification or the opening of new shipping lanes. It should be noted that geopolitical risk is determined more by climate change events acting in one region, which then cause ripple effects on neighboring countries or even more distant countries. We can state that geopolitical factors are increasingly influenced by the direct effects of climate change and lead to increased instability and geostrategic competition.

Another result is exacerbating countries' structural weaknesses, such as weak sovereign finances, health care security or low emergency response capacity, as well as causing social unrest. It is also relevant that extreme weather events put pressure on the ability of governments to fulfill their promises and force reprioritization of policies and finally climate change can increase tensions between countries, for reasons related to water, air, pollution or environmental degradation.

At the level of the countries within the Alliance, the opinion that climate change makes it difficult for the armies to fulfill their objectives and missions is unanimously accepted. Extreme climate events such as sea level rise, rapid changes in precipitation patterns test the resilience of critical military infrastructure and affect the effectiveness of military capabilities; they can also create harsher conditions for military and humanitarian operations and missions.

The implications of climate change include drought, soil erosion and marine degradation, processes that can lead to famine, flooding, loss of land and livelihoods, and which disproportionately impact poor, vulnerable or marginalized populations and may exacerbate the fragility of the state and fuels the conflicts in the area. For a security community like the Alliance, which reacts to and manages crises and conflicts, anticipating the effects of climate change would not seem difficult to assess. Thus they could have a particular impact in the future and could massively affect vast areas of the world, such as sub-Saharan Africa or the Middle East and Central Asia, territories where the Alliance has been little engaged.

However, environmental challenges have been addressed from a research perspective within NATO for over half a century and during this time a number of environmental standards and guidelines have been developed. In this sense the Strategic Concept of 2010, a green defense framework adopted in 2014, climate issues being highlighted in the declarations adopted since Lisbon 2010. From these documents it follows that NATO takes into account the impact of climate change on security with the well-stated aim of - successfully fulfill its three core tasks: collective defense, crisis management and cooperative security.

In 2021, NATO's foreign ministers approved the NATO Agenda on Climate Change and Security (Nato.int 2021), where it is established that "NATO will become the main international organization in terms of understanding and adapting to the impact that climate change has on security" (Idem). The NATO Agenda results in formulating a realistic, ambitious and concrete target for the reduction of greenhouse gas emissions by NATO's political and military structures and facilities, and assessing the feasibility of a goal of complete elimination of emissions by 2050. In this therefore, a regular high-level dialogue on climate change and security issues is required.

If we analyze the reactions of the European Union (EU) to the increasingly visible effects of climate change, we can bring to attention the latest report of the Intergovernmental Panel on Climate Change (IPCC) from which it follows that "global warming causes increased changes, and in some irreversible cases of precipitation, ocean and wind patterns in all regions of the world. For Europe, the report predicts an increase in the frequency and intensity of extreme weather events, including marine heat waves, and warns that a 2°C rise in temperature will have critical effects on nature and people" (Council of the EU 2022). In this sense, EU leaders have adopted the objective of achieving a climate-neutral EU by 2050. The European Council emphasized that the transition to climate neutrality significantly influences economic growth, markets, job dynamics and technological development.

The European Green Deal provides the blueprint and roadmap for the EU to turn its climate ambitions into reality. But the far-reaching effects of Russia's attack on Ukraine by triggering a global energy crisis pose an indirect threat to the EU's climate goals. It is well known that this conflict has imposed energy insecurity and dependence on fossil fuels. World leaders found themselves caught between ambitious goals to move away from fossil fuels and the immediate political and economic pressures of war. Also, the Russo-Ukrainian war demonstrated that climate change adds another dimension to the link between militaries and fossil fuels, which have seen a resurgence during wartime.

As a result, fossil fuel companies are now lobbying hard for long-term infrastructure investment that risks derailing world leaders from recently agreed international climate goals. Supporting this view, Jennifer Morgan, Ambassador-at-Large for Climate Change in the German Foreign Ministry and former president of Greenpeace International, says that "we are in a moment of massive disruption due to the invasion, and this is either a big risk or an opening big on the climate." The bottom line is that one of the most pressing challenges facing European leaders today is how to lessen their dependence on Russian energy while accelerating the fight against the climate crisis.

Conclusions

Most of the time, when it comes to doing things about climate change, we tend to become reluctant because we perceive these actions as interfering with our comfortable lives that depend on using cars in our daily lives, the use of technical devices in the house that we can use at our discretion, working continuously on our computers whenever we want, recycling software or flying to all the holiday destinations. However, it is well known that it is human action that can change the course of events. Immediate, rapid and large-scale reductions in greenhouse gas emissions and net-zero CO₂ emissions have the potential to limit climate change and its effects.

Regarding the global effectiveness of measures taken against climate change, according to Founders Pledge and Johannes Ackva, there are 3 main pillars that can change the game: climate finance - a pillar that if targeted to areas where carbon emissions are increasing and which will prove its effectiveness; policies in the field from countries with developed economies that have credible, domino effects in other states as well as the energy innovation currently taking place in a growing energy market with low coordination and heavily influenced by ongoing conflicts. Because by triggering a global energy crisis, the war in Ukraine represents an indirect threat to global climate goals.

It is nothing new that in this troubled security context, NATO countries are planning to increase their military budgets, with Germany announcing an increase of 100 billion euros. Military spending is carbon intensive due to the dependence of many military capabilities on fossil fuels. The logic goes that action to limit global warming to 1.5 degrees Celsius will require a full energy transition through renewables, meaning there will be less money to be made from fossil fuel exports. So, we expect to find as collateral damage of this war in Ukraine and those arising from the climate agenda. What could be done? It is time to take a serious look at the energy independence that renewable resources can offer and make the case for solar and wind power that seems stronger than ever.

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