After-action Conference Report on
AFRICA: CLIMATE CHANGE AND SAFEGUARDING HUMAN SECURITY

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Context
On November 29 and 30, 2022, in Naples, Italy, academics, experts, and practitioners from the African Union (AU), Economic Community of West African States (ECOWAS), the Intergovernmental Authority for Development (IGAD), NATO HQ, NATO SHAPE, NATO Allied Command Transformation (ACT), and Canadian, American, and European academic institutions met to discuss the challenges and consequences of climate change in West and East Africa.

The event was co-organized by the NATO Strategic Direction-South Hub and NATO ACT, as part of the NATO Open Perspectives Exchange Network (OPEN). OPEN is a network for understanding the modern security environment from other than military point of view run by NATO ACT's Plans and Policy Branch.

With 6 panels over 2 days (see Annex 1 for the program), the event examined how climate change affects and will continue to transform the African security environment. Through working together with African regional actors, NATO sought to establish a shared understanding of the current circumstances, and aimed to identify and promote opportunities for cooperation, security, and stability, notably in the G5 Sahel and Horn of Africa regions (see Annex 2 for the network).

Climate Change in Africa

The moderator of the event, Professor Bruno Charbonneau, established the baseline of the discussion by summarizing the key findings of the latest Intergovernmental Panel on Climate Change (IPCC) report on the current and future consequences of climate change in Africa.[1] IPCC reports are based on thorough reviews of the scientific literature. As such, they can be considered to reflect the scientific consensus, albeit imperfect ones that can still point us toward high or very high confidence conclusions.

Chapter 9 of the Working Group II report assesses the impacts of climate change on Africa specifically, looking at ecosystems, biodiversity, and human communities and reviewing vulnerabilities and the capacities and limits of the natural world and human societies to adapt to a transforming climate. Five general points need to be highlighted.

One, Africa is one of the lowest contributors to greenhouse gas emissions, being responsible for between 3 and 4% of global emissions, both in historical terms (last 200 years) and on an annual basis. Despite this limited impact, the African continent is set to suffer from some of the worse effects of climate change. It has already experienced widespread losses and damages attributable to human-induced climate change, including biodiversity loss, water shortages, reduced food production, loss of lives, and reduced economic growth.

Between 1.5 and 2°C of global warming, negative impacts are projected to become widespread and severe, affecting African food security, economic development, increased inequality and poverty, biodiversity loss, and increased human morbidity and mortality. Limiting global warming to 1.5°C is crucial, but most climate models are now predicting that the Paris agreement goal of 1.5°C is already out of reach. Climate Action Tracker predicts that in the best-case scenario (which assumes the full implementation of all announced emission targets), the world is heading toward a global temperature increase by 2100 of 1.5 to 2.3°C, while the scenario based on real world action is leading to +2.2 to 3.4°C.[2]

Three, exposure and vulnerability to climate change are multi-dimensional with socioeconomic, political, and environmental factors intersecting, impacting state functions and development models, and affecting the vulnerability of women, children, and the elderly in particular. According to Professor Charbonneau, countries and regions currently experiencing conflicts are thus notably vulnerable, given the potential cascading and multiplying effects that climate change and conflict can have on climate adaptation strategies and investments.

Fourth, even though adaptation in Africa has multiple benefits, the IPCC points out that it can only have moderate effects at reducing present-day risks, and that their efficacy at future warming levels is unknown.

A final general point specific to the African continent is how climate-related research in Africa faces severe data constraints, as well as inequities in funding and research leadership. Much research is produced outside of Africa, and climate and weather stations and instruments in Africa are lacking.

In terms of observed impacts and projected risks, the IPCC points to increased heat waves and drought on land, and doubled the probability of marine heatwaves around most of Africa. Increases in drought frequency and duration are projected over large parts of southern Africa above 1.5°C of warming, with decreased precipitation in North Africa at 2.0°C. Drought duration will double from approximately 2 months to 4 months in parts of North Africa, the western Sahel, and southern Africa.

Multiple African countries are also projected to face compounding risks from reduced food production (across crops, livestock, and fisheries), heat mortality and loss of productivity and flooding, especially in West Africa. Predictions of increased range and transmission of infectious diseases: above 2.0°C of global warming, distribution and seasonal transmission of vector-borne diseases is to increase, mostly in west, east and southern Africa. Global warming is expected to damage infrastructure and ecosystems, and to increase migration, although contrary to popular discourses, such migration is internal to African sub-regions and has increasingly followed patterns of rural to urban migration.

In climate security terms, there is increasing evidence linking increased temperatures and drought to conflict risk in Africa. Agriculturally dependent and politically excluded groups are especially vulnerable to conflict risks. Having said that, climate is one of many interacting risk factors, and its link to conflict demand more research.[3] There is also an important temporal dimension to the climate-conflict nexus: in the short term (until 2040), sociopolitical variables will remain key to

understanding conflict dynamics, while beyond 2040, global warming is predicted to become increasingly impactful.

This very quick summary of some of the key findings of the IPCC report set up the rest of the conference, pointing to the risks and challenges to human security in Africa. The already vulnerable and marginalized will become increasingly so, with gender, ethnic, and class dynamics informing patterns of, and pathways toward, more vulnerability and marginalization. This IPCC baseline, according to Professor Charbonneau, should inform the rapidly changing policy landscape of climate and human security.

Geopolitics of climate change in Africa

The baseline can ultimately shift depending on the results of global efforts at climate mitigation. In other words, the full impact of global warming on human security in Africa is dependent upon international climate diplomacy and governance.

Furthermore, Professor Charbonneau argued that all of it must be considered and analysed under the conditions of a rapidly transforming international system. The future of human security in Africa under climate change conditions will not be happening in a vacuum or outside a changing geopolitical environment. The ongoing transformation of geopolitics, geoeconomics and global governance will bring new challenges and opportunities for Africa, and arguably have direct consequences on the possibilities of preserving or promoting human security. While several issues could be highlighted, Professor Charbonneau emphasized two geopolitical points of tension or transformation.

The first issue can be framed around the debates surrounding the climate-conflict nexus. Does climate change lead to or cause armed conflict? Are climate wars real or a real possibility? At the risk of oversimplification, the debate has been between those who point to the bio- and geophysical effects of climate change on human systems, and those who argue that conflicts emerge from failures of governance. The question is the relative importance of climate effects versus human interactions. Yet, Professor Charbonneau argued that the significance of the debate is not found in figuring out the causal link or pathways (although important), or in finding what leads to conflict per se, but to the politics and practices of intervention that each side of the argument implicit carries. Put another way, what sort of international intervention does an emphasis on climate change, on governance, or on their relative importance, promote?

The question also points to the radical potential of global warming in transforming the practices of, and the power relationships involved in, conflict management, development aid, and humanitarian assistance. There is no avoiding climate change when it comes to discussion of conflict prevention, management, resolution, and reconstruction. These practices, policies, and associated relationships of power have a long history in Africa; and are usually tied to several other policy areas, like migration, human rights, climate justice, and so on. The question is thus about the future shape that will take international intervention and conflict management in Africa.

The second issue is what could be called the geopolitics of the energy transition. It includes the diplomacy and global negotiations of the COP annual meetings, but also the significant transformation of the global political economy coming from the inevitable decline of fossil fuels

and the rise of alternative energy sources. This economic and technological transformation will mean shifting centres of political and economic powers.

There is no certainty about the trajectory or endgame of these shifts, but one can already point to at least two consequences for Africa. One, as can be observed since the invasion of Ukraine and the subsequent European energy crisis, several governments and corporations are looking at the African continent as an alternative source of oil and natural gas. While this represents an economic opportunity for Africa, it runs contrary to the objective of climate mitigation. Two, the transition to a "green economy" can accelerate the extraction of critical minerals from African soil. Again, this represents both opportunity and risk, as the history of extractive industries in Africa suggests. In both cases, Africa faces the challenges of extractivist modes of development, and extractivist international relations, which will impact African global relationships and human security objectives and practices.

In short, climate change and the transformation of geopolitics will bring severe risks and challenges to West and East Africa, from food production, water quality and accessibility, land use, energy production and distribution, to international relations. What is the future of African human security under such conditions? In debating this question, participants to the conference discussed the multilateral approaches to climate change, ECOWAS and IGAD's approaches, space capabilities related to climate change, gender and climate change, and the issue of radicalization under climate change conditions.

Multilateral approaches

Rene Heise (NATO HQ) argued that, while NATO has recognized environmental challenges since 1969, it still needs to better understand what is coming with climate change. Climate scenarios, simulations, wargaming, and such exercises that combine science and training will be very useful, even necessary, to prepare and adapt to the transforming that comes with global warming. NATO's emerging climate security agenda is a good start, much like the December meeting between NATO, the IPCC, and the World Bank. However, when it comes to Africa, there is a need for more data, more research, and more African research capacity.

Elvis Paul Tangem of the Green Wall Initiative at the African Union Commission pointed out that the African continent has little capacity to manage extreme weather events, whether drought or flooding. The fragility of African economies is also to be considered, given how climate conditions could destabilize economic flows, supply chains, and livelihoods. Fragile economies could create cascade effects, inducing migration or facilitating the recruitment of recruits by extremist groups.

Lilian Daphine Lunyolo of UN Climate emphasized the need for nature-based solutions to mitigating and adapting to climate change, but also pointed out that we must recognize their limits. Cities and infrastructure need to be redesigned and made resilient to climate extreme. From a human security perspective, climate change can indeed have a multiplying effect on migration and conflict, but assumptions about these effects should not lead policy. For instance, migration tend to be from rural areas to urban centres, and from low-rise to high-rise land. While some African asylum-seekers entering Europe are moving because of climate related issues, one must understand who they are. Africa has the youngest population. African youth under climate conditions also face

their people's heritage, family obligations, and various limiting parameters that incapacitates their ability for self-support. Hence, they often have nothing to lose.

Julie Amoroso-Garbin of the United Nations Framework Convention on Climate Change (UNFCCC) presented the UN's approach, found in the "Our Common Agenda" report of the UN Secretary General.[4] The Our Common Agenda report looks ahead to the next 25 years and represents the Secretary-General's vision on the future of global cooperation. The call for an inclusive, networked, and effective multilateralism is, or should be according to the UNSG, the foundation for better responding to the challenges and impacts of climate change. On adaptation and resilience, national plans could be entry points for the prevention or management of conflict. For improving synergistic effects on the climate-conflict nexus, the UN encourages nations to come through on the 100-billion commitment to the adaptation and resilience agenda. This should also be linked to the Loss and Damage agenda that was agreed upon at COP27 in Sharm El-Sheikh, Egypt. In this context, there are at least two entry points for NATO and international organizations. One is to fund, promote, and enhance research. Better data, analyses, and understanding are primary conditions for early-warning systems. Two, peacebuilding activities need to be transformed through the incorporation of climate adaptation strategies. This will not only prepare communities and nations for what is coming, but present opportunities for dialogue and conflict resolution strategies. The environmental peacebuilding agenda—built around the idea that environmental challenges do not necessarily mean conflict over resources but offer the possibility for cooperation and collaboration—should thus be encouraged and mainstreamed.

African approaches: ECOWAS and IGAD

Participants largely agreed that there is much work to be done regarding climate research, mitigation, and adaptation in, with, and for Africa. Yet, African regional organizations like ECOWAS and IGAD have started integrating climate change into their conflict analysis approaches and early-warning systems.

Valence Kadja Kouame of the Economic Community of West African States (ECOWAS) Commission said that the President of Ghana championed the climate issue, leading to the organization's regional climate strategy of April 2022.[5] Prior to that, its Early Warning and Response Network (ECOWARN) was set out in Article 58 of the revised 1993 ECOWAS Treaty, and its establishment and functioning defined by the Protocol, Relating to the Mechanism for Conflict Prevention, Management, Resolution, Peacekeeping and Security of December 1999. The implementation of ECOWARN begun in 2003 and has largely focused on the effects of climate change on transhumance.

Dr Linda Ogallo and Dr Sunday Angoma Okello of the Intergovernmental Authority on Development (IGAD) discussed the challenges of climate change and the capacity to face them in Eastern Africa. The region has seen more severe and frequent droughts that feed into the compounding risks coming from the COVID-19 pandemic, the rise of grain prices, massive cattle death, and increasing wildfires. The impact of these events includes an increase in the number of food insecure persons, of internally displaced persons (IDPs) and refugees, and changing cross-border transhumance routes—together also increasing the conflict incidents and the risks of climate-induced conflict. In Eastern Africa, according to IGAD, the maps of climate extreme and conflict incidents overlap.

From IGAD's perspective, there are four pathways or climate-conflict scenarios possible:

1. Climate change has severe economic impacts that lead to conflict or insecurity.
2. Climate change has severe economic impacts that lead to migration patterns that lead to conflict or insecurity.
3. Climate change has severe economic impacts that are exacerbated by or affect social and cultural factors that lead to conflict or insecurity.
4. Climate change has severe economic impacts that create more poverty and marginalization and/or governmental fragility that lead to conflict or insecurity.

IGAD's Conflict and early-warning and early-response mechanism (CEWARN), established in 2002, collects data from the field, SMS, media and social media, official statistics, GIS, and structural conditions to make risk assessments on the basis of the likelihood of incidents and their likely impact.

IGAD has thus historical and behavioural data for the 2003-2015 period that it used to find correlations with their environmental data on forage, rainfall, and vegetation. One key finding was a correlation between an increase in vegetation and a decrease in conflict incidents, while instances of drought and lack of water access showed an increase in conflict incidents. According to IGAD's analysis, the impact of climate on conflict is observable in the competition over water and pasture for cattle, in livestock theft, in places where there is "governance instabilities", high unemployment, poor policy, governance, legal protection or administration of justice and rule of law for land use and rights.

For Dr Matthew Adepoju, of the National Space Research and Development Agency of Nigeria, and Ahmed Baraka, space exploration and technology can and should provide some technical solutions to the challenges of the climate crisis.

Gender and climate change

Ladele Ijeoma of Femwise Africa and of the University of Ibadan, as well as Cristiana Finch, Head of the Gender and Security Division at the Geneva Centre for the Democratic Control of Armed Forces, argued that the climate crisis is not gender neutral. UN Security Council Resolution 1325 added the Women, Peace, and Security (WPS) agenda to UN missions and operations, with some success, but much remains to be done when it comes to climate change. The climate-conflict-gender nexus points to the higher risks that women face under climate conditions.

As such, international organizations should address environmental damages along with climate-related issues. The good governance and management of natural resources, and land use policy, should be emphasized, while gender equality roles in environmental and climate-related issues must prioritize in order to avoid, they argued, the militarization or securitization of environmental and climate policies. Climate finance goals and projects should help and empower women, with agricultural small and climate-smart projects.

Extremism and climate change

Professor Samuel Henkin of the National Consortium for the Study of Terrorism and Responses to Terrorism (Washington, D.C.) examined the climate change impact on the factors and drivers leading to extremism in Africa. According to professor Henkin, there is too much approximation and speculation on the topic. Policy agendas often push toward certain conclusions despite the lack of evidence.

The current understanding of the relationship between climate change and extremism is that there is no direct link between the two and too much oversimplification. At best, climate change is an indirect cause of extremism, although climate-related issues can be instrumentalized by extremist groups for recruitment or propaganda purposes.

There is little doubt that climate change creates new human security risks and threats. Bio- and geophysical factors interact with human systems and behaviour, but the narrative about the root causes of armed conflict misleads many into thinking about a causal relationship between climate change and conflict. The root causes approach is more subtle and admits complexity. It is arguably more helpful to think in terms of a non-linear spectrum: the links and relationships between structural conditions (political, economic, social, environmental, historical), facilitating drivers (human systems), motivational factors (individual and group psychology, behaviour, etc.), and triggering causes (for instance, a climate extreme event).

Hence, for professor Henkin, climate change can exacerbate structural conditions, multiply and intensify drivers and enabling factors, and produce opportunities for violent extremist groups. In this context, climate security experts will point out to two ways of understanding (good) governance: as the art of government and as the management of natural resources (the latter being the heritage of environmental studies). The distinction but also the relationship between the two suggest the possibility of action and policy targets.

Adam Sandor analysed the dynamics of rebel armed groups recruitment in the Sahel as a case study that problematizes the narrative and common assumptions made about the link between extremism and climate change. In the West African Sahel, historical patterns of land use (and land laws), agriculture-focused development, decentralized state power, social and geographic mobility, and more compose an intricated picture that complicates the conflict-climate nexus.

He identified several socio-political dynamics that explain why some people can join armed rebel groups in the West African Sahel. One is the general distrust toward the national government and its military and civilian officials. Sahelian governments have had limited success in providing basic services to their peoples. Government officials have the reputation to instrumentalize laws, when not accused of corruption, for personal gains. In Mali, the military has a history of abuse in the northern parts of the country. The courts have favoured farmers over herders. And since the start of the conflict in Mali in 2012, several Sahelian governments have proven ineffective in protecting their citizens from the violence of extremist groups.

A second reason is the desire for protection. As security risks mount, the desire for protection from (other) armed groups, government abuse, cattle theft, common banditry, or else rises. There is ample evidence that armed groups in parts of the Sahel offer the protection that national

governments cannot or will not provide. This desire for protection can at times be tied to the desire for revenge. A decade of armed conflict has led to the further fragmentation of local communities and groups. Faced with the lack of justice, protection, or recognition, potential recruits can join armed groups to get back at local authorities or rival communities or groups. There has been an increasing ethnic factor to this fragmentation, especially as the Fulani groups have been accused (even by Bamako) as being terrorists.

Another element that can explain the formation of, and the recruitment for, armed rebel groups in the West African Sahel is the lack of opportunity and sustainable livelihoods. Material incentives are understandable for those with a lack of option, but social incentives should not be discounted. The lack of, or limited possibility of, changing one's social status and condition has played a role in recruiting for extremist groups.

All these dynamics suggest that, while not dismissing its significance as a global condition, the relative importance of climate change must be, at the very least, properly assessed. This is especially crucial when it comes to formulating policy and concocting conflict management and resolution mechanisms.

Discussion

Discussions and debates among the participants brought up several issues of relevance. Here are four that seem of high importance, both for pursuing this discussion and for informing NATO's climate security agenda.

One, it is worth repeating and emphasizing that climate change changes everything, but that not everything is or should be about climate change. Climate change changes everything in the sense that it is inevitable, that it will continue to transform our planet and ecosystems in the next century to come and beyond, and the scale of the geophysical transformations will affect (and is already affecting) human systems, relations, power structures, and more. Having said that, it does not mean that everything should be about climate change. This is the climatization risk. The risk is that all issues and areas of global politics become "climatized", about climate change, but in effect dilute, dismiss, or avoid the climate crisis.[6] One could point to the examples of the gender or radicalization agendas where, at times and in some places, the concepts became buzzwords instead of fundamentally being inserted into, and transforming, policy and practice. Climate change is to be taken seriously as it impacts policy frameworks, thinking, programs, and practices. Donor-recipient relations increasingly demand a mainstreaming of climate change, which should involve a rethinking and redesign of practice and objective and not a superficial revision of policy narratives.

Two, there is a growing acknowledgement and agreement that climate change is important, even urgent. It has increasingly significant effects and impact on human affairs, including security and the risk of conflict. Yet, in security terms, there is little to no agreement about what to do about it. What is or should be climate security? What is or should be human security under climate change conditions? What does it mean in practice? Whose security is it or should it be about? These are politically sensitive and ethical questions that will inevitably influence policy and practice. Depending on one's answers, policy and priorities will differ. Climate diplomacy might be about state and corporate interests, but it cannot avoid the ethical dimension.[7]

Third, there is a broad and important need for more research, education, training, awareness, and outreach activities on the science and on the global politics of climate change. Like several speakers claimed, climate change is often still misunderstood, and its consequences underestimated. The causes, the effects, the spatial and temporal scales, and the political, economic, and social consequences are very different from any other challenge that human societies have faced. There is an urgent need for novel thinking and news ways of doing. Specifically, there is also an urgent need for specialized knowledge on the local or regional impacts of climate change, and for improving the conversation between climate scientists and social scientists.

Last, NATO's climate security agenda is in its early stages. At a minimum, it will contribute to better awareness and to the adaptation efforts for military operations. Perhaps more significantly, NATO will need a better understanding of how climate change is transforming the geopolitical environment within which it operates. This means better knowledge of the close neighborhood (West, North, and East Africa; the "Eastern flank"; Arctic) and the codependent relations between that neighborhood and the effects of climate change on NATO members states. The risks of mass instability, armed conflict, mass death, disruption of supply chains, energy crises, pandemics, social and political polarization are all too real, but will demand differentiated responses given their context-specific dynamics.

Recommendations

For NATO Strategic Direction-South Hub and NATO ACT:

- Organize events like the one summarized by this report on a *regular basis* to maximize awareness and impact, and as such create a community of shared interest.
- During these events, invite and involve more academic researchers in order to promote exchanges and discussion between them, policymakers, and practitioners.
- When it comes to climate change, encourage innovation in thought and practice. Do not be afraid of controversy.
- Develop a capacity to plan and organize climate change simulations that involve experts, practitioners, and officials.
- For ACT: if possible, fund research efforts, for instance through NATO's Science & Technology Association, like those of the Research Task Group on The Effects of Climate Change on Security (reference SAS-182).

Annex 1: Conference Program

DAY ONE – Tuesday, 29 November 2022		
Times (Local)	**Topic**	**Description**
0800 – 0855	Arrival and registration	Travel from Hotel to location (5 minute walk)
0900 – 0905	Admin Remarks	OPR (Maj Landgraf-Cant) gives admin details for the day
0905 – 0920	Opening remarks	NSD-S Hub Dir & ACOS SPP welcome
0920 – 0930	Introduction to the Study Day	Moderator sets the scene
0930 – 1100	**Session 1 MULTILATERAL APPROACHES TO CLIMATE CHANGE**	**NATO HQ Climate SME covering NATOs' 2030 and Climate change Plan.** **AU Climate SME covering Climate change.** Discussions and questions.
1100 – 1130	Coffee Break	
1130 – 1300	**Session 2 ECOWAS APPROACH TO CLIMATE CHANGE**	**Climate change prospects and main challenges.** **Climate Change action plans and security implications.** **Resilience capabilities to mitigate impact, food security, energy security, migration, conflict.** Discussions and questions
1300 – 1400	Lunch	
1400 – 1530	**Session 3 IGAD APPROACH TO CLIMATE CHANGE**	**Climate change prospects and main challenges.** **Climate Change action plans and security implications.** **Resilience capabilities to mitigate impact, food security, energy security, migration, conflict.** Discussions and questions
1530 – 1600	Summary of the Day	Moderator
1600 – 1615	Dispersal	Return back to Hotel

DAY TWO – Wednesday, 30 November 2022		
Times (Local)	**Topic**	**Description**
0800 – 0815	Arrival	Travel from Hotel to location
0900 – 0915	Introduction to Second day	Moderator sets the scene for the second day
0915 – 1045	**Session 4 Climate change and Space capabilities: African perspective.**	• **Capabilities and monitoring mechanism of Climate change in Africa.** Discussions and questions
1045 – 1115	Coffee	
1115 – 1245	**Session 5 Gender and Climate change**	• Effects that climate change has on members of different genders. Discussions and questions
1245 – 1330	Lunch	
1330 – 1500	**Session 6 Climate and Radicalization**	• How Climate change contributes to radicalization. • The implications going forwards. Discussions and questions
1500 – 1530	Coffee	
1530 – 1600	Summary and key findings	Chaired by moderator
1600 – 1630	Closing remarks	Allied Command Transformation and NSD-S Hub
1630	Dispersal	End of Event

Annex 2: Climate Change Conference Network

Name	Organization	Email Address
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Ms Manale Abou Dagher	American University of Beirut	https://www.linkedin.com/in/manale-abou-dagher-045bb314/
Mr Ahmed Baraka	Space Generation Advisory Council - Regional Coordinator for the Middle East	https://www.linkedin.com/in/ahmed-baraka-090779119/
Dr Matthew Adepoju	Nigerian National Space Research and Development Agency	https://www.linkedin.com/in/dr-matthew-adepoju-12731212/
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Ms Lilian Daphine Lunyolo	UN Climate Change	https://www.linkedin.com/in/lilian-daphine-lunyolo-3b2799115/

Endnotes

[1] Trisos, C.H., I.O. Adelekan, E. Totin, A. Ayanlade, J. Efitre, A. Gemeda, K. Kalaba, C. Lennard, C. Masao, Y. Mgaya, G. Ngaruiya, D. Olago, N.P. Simpson, and S. Zakieldeen, 2022. *Africa. In: Climate Change 2022: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change* [H.-O. Pörtner, D.C. Roberts, M. Tignor, E.S. Poloczanska, K. Mintenbeck, A. Alegría, M. Craig, S. Langsdorf, S. Löschke, V. Möller, A. Okem, B. Rama (eds.)]. Cambridge University Press, Cambridge, UK and New York, NY, USA, pp. 1285–1455. Available here: https://www.ipcc.ch/report/ar6/wg2/

[2] Massive gas expansion risks overtaking positive climate policies | Climate Action Tracker

[3] See Bruno Charbonneau, 'The Climate of Counterinsurgency and the Future of Security in the Sahel', *Environmental Science and Policy* 138 (Dec), pp. 97-104. https://doi.org/10.1016/j.envsci.2022.09.021

[4] Our Common Agenda | United Nations

[5] Regional Climate Strategy (ecowas.int)

[6] See The climatization of global politics: introduction to the special issue | SpringerLink

[7] For an analysis of the different narratives on climate security and their consequences, see Matt McDonald, 2021. *Ecological Security: Climate Change and the Construction of Security*, Cambridge University Press. https://doi.org/10.1017/9781009024495

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NATO OTAN — 29 & 30 NOVEMBER 2022 — NAPLES ITALY