Journal of Strategic Security

Volume 13
Number 4 *Vol. 13, No. 4 Climate Change and Global Security*
Article 3

NATO and Collective Environmental Security in the MENA: From the Cold War to Covid-19

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pp. 28-44

Recommended Citation
Al-Marashi, Ibrahim and Causevic, Amar. "NATO and Collective Environmental Security in the MENA: From the Cold War to Covid-19." *Journal of Strategic Security* 13, no. 4 (2020) : 28-44.
DOI: https://doi.org/10.5038/1944-0472.13.4.1804
Available at: https://digitalcommons.usf.edu/jss/vol13/iss4/3

NATO and Collective Environmental Security in the MENA: From the Cold War to Covid-19

Abstract

The Covid-19 pandemic emerged as a global security risk, and national security institutions scrambled to manage a threat, not emanating from states or non-state actors, but from the environment. The pandemic serves as an empirical case to explore "anthropogenic strategic security," or how security doctrines can anticipate and mitigate natural disasters, resulting from humanity's exploitation of ecology and environment. This qualitative study addresses the question as to whether the NATO possesses the imaginative and institutional capacity to manage environmental risks resulting from climate change. By employing constructivist theory, this article argues that the Alliance needs to adopt holistic norms and approaches towards security. By expanding its identity and mission, it should adopt policies that task its constituent parts to serve as a de-facto "Climate Alliance Treaty Organization," particularly in the MENA region, which is extremely vulnerable to environmental risks. A review of past NATO statements, meetings, and institutions provide the key findings, demonstrating that the Alliance's past experience in aiding non-members, such as in the Balkans and South and Central Asia, has endowed the Alliance with the infrastructure, experience, and mechanisms for strategic partnerships with MENA nations on climate mitigation strategies.

Introduction

Corona Virus Disease 2019, or Covid-19 for short, serves as an example of an independent variable, a natural phenomenon emanating from the environment, posing an exogenous, global shock to the national security of every state, albeit with varying degrees of intensity. The epidemic in Wuhan, China took on pandemic proportions, reaching Italy. The North Atlantic Treaty Organization (NATO) did not invoke Article 5 of its charter to come to this member's aid, as it had not come under attack from another nation-state or non-state actor, but rather a viral pathogen inflicting a national disaster. Nonetheless, NATO's military assets were activated, notably its Strategic Airlift International Solution Programme, to deliver medical supplies to beleaguered members. This precedent demonstrated how NATO, which emerged as a Cold War collective security institution among nation-states to deter an alliance of other nation-states, had evolved to deal with challenges emerging because of natural phenomena. This deployment in response to Covid-19 informs this qualitative study, which questions whether NATO can leverage its experience to deal with a similar environmental independent variable—climate change. While not fully integrated into its operating doctrine, the Alliance, as this article argues, does have the latent capacity to manage environmental risk, including potential disruptions caused by climate change. The Alliance has expanded its mandate to adapt to this role incrementally, aiding nonmembers in the Balkans, South, and Central Asia. This article further argues that the Alliance needs to reimagine and integrate climate change mitigation planning into its strategic culture and security doctrine, and second, expand its mandate to the Middle East and North Africa (MENA) region. This area forms NATO's southern flank and is particularly vulnerable to climate risk.[1]

This article addresses a gap in the security studies literature on NATO, which are usually situated within the realist or liberal schools. Debates in this literature argue whether NATO is an ossified and irrelevant institution inherited from the Cold War or has adapted to counter a resurgent Russia, as well as non-state actors such as the Taliban and the Islamic State of Iraq and Syria (ISIS).[2] In contrast, constructivist theory, often summarized by Wendt's assertion that "anarchy is what states make of it," provides an analytical lens to examine how NATO reimagines, reinvents, and reconstructs its identity.[3] Covid-19 demonstrated that NATO states must

prepare for environmental catastrophes as security risks. By employing constructivist theory, this article argues that the Alliance needs to adopt holistic norms and approaches towards security. By expanding its identity and mission, it should adopt policies that task its constituent parts to serve as a de facto Climate Alliance Treaty Organization (CATO), particularly in the MENA region, which is extremely vulnerable to environmental fluctuations. Reinventing itself in this regard, NATO should implement lessons from the pandemic and other regions to adopt policies that proactively mitigate environmental risks in the MENA, rather than allowing them to exacerbate transnational terrorism and refugee flows. Thus, NATO should serve not only as an alliance to manage the anarchy that is a systemic condition of the international system, but needs to reimagine environmental risk leading to actual anarchy in the global south, which addresses the second contribution of this study.

The North Atlantic Treaty Organization's identity is manifest in its title, defined as both northern and transatlantic, yet erratic weather patterns, and viruses are natural phenomena that do not respect national borders or continents. For example, weather systems in the Sahara influenced the 2019 heatwave that struck Europe and North America, while some Gulf cities endured the highest temperatures on Earth in June that year.[4] Taking this argument further in constructivist terms, the divide between Europe and the MENA region is a geopolitical, geo-economic, and Eurocentric construct that sets the two regions as binary opposites. Hence, any severe instability in the MENA region, climate risks included, represents a security concern for NATO member states.

This article also draws upon both strategic security literature and environmental studies. According to Paul Crutzen, the Anthropocene represents a temporal juncture when humankind achieved the agency to modify and influence Earth's bio-geophysical systems in fundamental and detrimental ways.[5] More succinctly, the Anthropocene is when the trajectory of modernity threatened nature, creating risks that undermines modern society, which Ulrich Beck describes as a risk society.[6] Covid-19 emerged due to the confluence of the rise in the consumption of animal proteins and increased expansion into the wilderness, putting humans into closer contact with animal vectors of novel viruses. Climate related institutions, particularly in the United Nations (UN), fear that the pandemic detracts attention from climate policy.[7] This article argues that

they are not mutually exclusive. Security cultures and institutions, both national and collective, need to develop anthropogenic security strategies, reimagining either viruses or floods and droughts due to climate change as transnational environmental risks. This requires nations and collective security institutions to adapt to risks that do not emanate from either state or non-state actors, yet anticipate when political actors can exacerbate environmental risks, either intentionally or inadvertently. For example, on the state level, the failure of the local authorities in Wuhan to heed medical warnings of a novel virus and coordinate its response with Communist Party authorities in Beijing led to an eventual pandemic. Non-state actors such as the ISIS recruited internally displaced persons dislocated by droughts in Syria and Iraq, and weaponized water, using dams to stop the downstream flow of the Tigris and Euphrates rivers, while providing water supplies to local populations in return for their allegiance.[8]

This article's qualitative approach conducts a document review of NATO statements, meetings, and institutions to provide a recent history of the Alliance, demonstrating how it incrementally integrates environmental security into its mission. The first section addresses the theories connecting climate change and international security on an ideational level and the resistance to such linkages. Second, it makes a case for climate change as a transnational environmental risk, examining disruptions to MENA's environment in the present and future. The article's findings in the following section demonstrate that NATO possesses the infrastructure and experience for collaboration with MENA partners on climate mitigation strategies and concludes with policy recommendations of how such a partnership can develop. From a constructivist perspective, NATO has the potential to set new norms in the age of anthropogenic security, achieving soft power by using hard power military assets in a strategy that combines a responsibility to protect the environment and vulnerable populations, while providing disaster relief and scarce resource management.

Theorizing Environmental Risk and International Security

As the scientific evidence of climate change mounted by the late eighties, an academic debate emerged, focusing on the potential securitization of the environment. In the early nineties, Deudney and Käkönen expressed skepticism that national security institutions could mitigate climate

change, as militaries seek to manage political violence, not the environment, thus warning against its militarization.[9] In 1995, Levy countered that the environment does constitute a security issue, necessitating states to securitize climate change.[10] The debate continued into the 21st century, with Matthew questioning ontologically the conflation of the environment and national security.[11] McDonald provides an ideational study of the linkages of the environment and national security in policy debates, with Oels' delineating three schools that had developed that were proponents, opponents, or neutral about this securitization process.[12] In another vein, Homer-Dixon examines how scarcity due to environmental degradation would contribute to conflict escalation and destabilization in fragile states.[13] If climate changes pose an existential risk to states or an entire regional system, the question emerges as to what security institutions could manage this challenge. In 2016 Lippert's doctoral thesis for the RAND Corporation argued NATO's qualifications to counter this problem in the MENA and Arctic regions.[14] Our use of anthropogenic strategic security comes from Dalby linking climate change with international security within the temporal epoch of Anthropocene.[15] Sayre examines institutions such as the UN and climate change when analyzing the "politics of the anthropogenic."[16] This article updates Lippert's work, specifically focusing on the Alliance's potential in dealing with these risks in the MENA region, and situating the crisis of Covid-19 within Dalby's and Sayre's anthropogenic framework.

In terms of the policy literature, the 2007 Center for Naval Analyses' study serves as a seminal document, setting the agenda of linking climate change and international security amongst policy elites in the Washington beltway. The Center for Naval Analyses' Military Advisory Board comprised of former American military commanders, categorized climate change as a nontraditional threat multiplier, affecting the global security landscape in the coming decades.[17] Policy, popular science, and academic literature developed scenarios predicting how rising sea levels would threaten to flood coastal cities and droughts would undermine food production systems, exacerbating the security situation in already unstable, and resource scarce regions. These events would subsequently result in large-scale migratory flows, border militarization, and ensuing resource conflicts, insurgencies, and terrorism, with the potential to influence the socioeconomic and political security of one or more nation-states.[18]

Joshua Busby and Nina von Uexkull argue that the language of threat multiplier served its purpose then of linking climate change and security. However, a combination of other factors exists within particular nations, or other dependent variables, which exacerbate domestic security when climate disruptions occur. Policy makers need to factor in these combinations to diminish the negative security consequences of climate change. They state that societies with a history of conflict, agricultural dependence, water deficits, and political exclusion, where ethnic or religious groups have no representation in government, are prone to instability due to climate change.[19] In the MENA region, Iraq, Syria, Libya, and Yemen meet all of these conditions.

Scholars analyze NATO through either realist or liberal lenses, which serves as the theoretical bases of traditional security studies. Both schools are also embedded in national security and military cultures and doctrines. Climate change represents a conceptual dilemma for state centric realists as a transnational environmental risk does not respect sovereignty or borders.[20] Even though NATO is a multilateral alliance, the political and military leaders of various constituent nations, such as Turkey or the United States under Trump, exhibit a realist outlook acting unilaterally against Iran or the Kurds in Syria, respectively. Trump's zero-sum worldview exemplifies a realist distrust of other states and the need to maximize America's relative power. Trump is skeptical of multilateral cooperation and human induced climate change, resulting in his June 2017 withdrawal from the Paris Agreement.[21] On the contrary, French President Macron launched the Make Our Planet Great Again initiative, a variation of Trump's Make America Great Again electoral campaign slogan. Macron established a platform to support researchers, entrepreneurs, associations, and nongovernmental organizations (NGOs) to mitigate climate change, without American involvement, an approach that exemplifies the liberal school's rejection of unilateral power politics through promoting international cooperation. [22]

Thus, leaders of NATO member states have different positions on climate change, based on these worldviews. Johnston defines NATO as a collective security organization through which member states "consult together on any issues they may choose to raise and decide on political and military matters affecting their security."[23] Taking Wendt's constructivism as a

basis, this article analyzes the potential of NATO as a collective body to envision and address anthropogenic risk in the past, present, and future. While this article argues climate change is an objective phenomenon, constructivists would argue that it is crucial to examine how nations, including NATO member states, perceive national security, shaped by ideas, collective values, culture, social practices, and identities.[24] Their identities shape these actors' decisions, which result from the social practices and norms that they hold.[25] Haas employs constructivist theory to demonstrate how the scientific consensus on climate change compels political elites to develop a policy to address this challenge, specifically focusing on these actors working through the UN.[26]

When states failed to anticipate environmental risk proactively, whether it is a pandemic or sea level rises or hurricanes, military assets provide immediate disaster relief. By adopting the term anthropogenic security, this article argues that human activity threatens nature, rather than vice versa. In terms of situating this article in the debates mentioned above, rather than conceiving the environment as a threat, this article examines the security strategies that can mitigate Gaia's Revenge.

Global Environmental Security Dilemmas and the MENA Region

Compared to the mid-1900s, global temperatures have risen yearly due to the increase in greenhouse gas emissions.[27] Entering the 2020s, atmospheric carbon dioxide concentrations rose past 400 parts per million from the preindustrial era to 280 parts per million.[28] These trends will lead to changing temperatures, altering weather patterns to the detriment of human life, ranging from diminishing global water and food supplies as a result of droughts, to sea-level rise and coastal flooding. A confluence of these problems could lead to the displacement of populations and armed conflicts. This section examines each of these scenarios on a global level and its effect on the MENA region, which is particularly vulnerable to climate change.[29]

As the region entered a new decade, civil wars continued in Yemen, Libya, and Syria, the latter's raging since 2011. ISIS remnants continued to strike in Iraq and Syria. Egyptian-Ethiopian tensions erupted over the latter's dam on the river Nile. The Israeli-Palestinian peace process proved to be

moribund. Covid-19 added another shock to this region, contributing to the collapse of Lebanon's financial system and the drop in oil prices, hurting every rentier state in the region. Just one of the aforementioned political problems, the Syrian civil war, led to refugees fleeing to Europe, peaking in 2015, sparking a continent-wide political divide and contributing to the rise of far right parties. A Columbia University study concluded that temperature increases in 103 developing countries would lead to a surge in asylum applications to Europe.[30] From both a human security perspective, as well as domestic politics of each European member, NATO should prepare proactively to deal with the climate risks listed below that that could lead to displacement and other humanitarian catastrophes.

The first environmental security dilemma facing the MENA region is the availability of water. The region is home to five percent of the world's population, which has access to one percent of renewable water supply. Total water availability per capita is several times less than the world's average and will worsen due to increased temperature and demand. According to the Aqueduct Water Risk Atlas' country ranking, a disproportionate number of water stressed and water depleted countries are in MENA, while every country in the region suffers from freshwater shortages for agricultural, industrial, and domestic use.[31] Iraq provides an example of political tensions related to water access. In Basra, mass protests erupted in 2018 and 2019 over reliable water services, leading to clashes with government security forces and Iraqi militias. The freshwater reserves of the capital of Yemen, Sana'a will most likely be depleted by 2030.[32]

The availability of water for the agricultural sector relates to the second environmental dilemma, food security. A one degree Celsius temperature increase would undermine global food security, reducing staple crop yields, such as wheat by six percent, rice by 3.2 percent, maize by 7.4 percent, and soybeans by 3.1 percent.[33] On average, the MENA region imports 50 percent of its wheat and barley, 40 percent of its rice, and 70 percent of its maize needs.[34] Swain and Jägerskog estimated that between 2010 and 2030, the region's reliance on food imports would increase by 64 percent, exposing it to supply and price risks.[35]

Droughts have led to food shortages, compelling rural populations to migrate from the countryside to urban centers, placing an additional burden on already stressed economic systems.[36] In the first decade of the 21st century, both Iraq and Syria suffered from consecutive droughts. Syria endured droughts from 2006 to 2011, combined with poor political and ecological practices that drained its aquifers, leading to one of the many grievances contributing to the outbreak of its civil war.[37] The annual consecutive drought days in Libya increased from 101 in the mid-20th century to 224 in the 21st, combined with diminishing desert aquifers reserves because of unsustainable use.[38] Yemen is also a net food importer, and depletion of its aquifers depletion has aggravated its humanitarian crises, including a cholera outbreak and famine.[39]

To exacerbate matters, while suffering from water shortages and relying heavily on imports to stabilize food supply, the MENA region's population is growing. The United Nations estimated that the region's population would increase from 517 million today to 754 million in 2050.[40] Population growth will increase industrial activity and energy demands, and a higher reliance on water intensive animal products, placing additional pressure on both water and food resources. According to one observer, Iraq served as a template of what the UN has deemed "climate apartheid," where only the wealthy could afford food, water, and electricity to run an air conditioner.[41]

The third environmental security dilemma is a rise in sea levels. On a global level, as the average temperature continues to rise, melting ice caps threaten to flood close to 300 million coastal inhabitants.[42] The World Bank estimates that this risk would affect 43 port cities in the region — 24 in the Middle East and 19 in North Africa.[43] Among the cities are Abu Dhabi, Dubai, Manama, Doha, Basra, and Yemen's second largest city of Aden, where an estimated 33-centimeter sea-level rise by 2050 would flood 12 percent of the city's households, incurring a loss of $2 billion.[44] A sea-level rise of 15 centimeters would inundate the Egyptian Nile delta cities of Alexandria, Edku, Port Said, Kafr-El-Sheikh, Damietta, Mansura, and Damanhur, dislocating millions of people.[45] In Iraq, sea-level rise has led to saltwater intrusion in Basra's canals and streams, 300 kilometers upward through Shatt al-Arab waterway, killing crops, livestock, and fish.[46] To make matters worse, the legacy of Saddam Hussein's political ecology left Iraq particularly vulnerable to climate change. Hussein

commanded the draining of the southern marshes, the site of an antigovernment uprising since 1991. This order led to the disappearance of several freshwater lakes and increases in soil salinity. Even with attempts to restore the marshes, Saddam's actions left a legacy that made it easier for saltwater intrusion from the Gulf to Basra.

International organizations and Western states and actors would need to work with their MENA regional counterparts, not in the form of environmental neocolonialism, but through authentic collaboration to manage these shared risks. Depletion of freshwater supplies, drought, and sea level rise have the potential of destabilizing the region, exacerbating existing conflicts and leading to even more internally displaced peoples and refugees. The North Atlantic Treaty Organization has already developed collaborative partnerships with the European Union (EU) and the UN. Collectively these institutions can provide a platform for cooperation in the region, as the next section will discuss.

Climate Alliance Treaty Organization's Future Climate Mitigation Role in MENA

The North Atlantic Treaty Organization's engagement with environmental security began with establishing specific institutions and continued with summits and meetings acknowledging climate change as an anthropogenic risk. In the late 1960s, it established a Committee on the Challenges of Modern Society (CCMS), a scientific research body focusing on defense related environmental issues. In 2006, the Science for Peace and Security (SPS) Programme incorporated the CCMS. The new SPS sought to promote dialogue and practical cooperation between NATO states and partner nations to further scientific research, technological innovation, and knowledge exchange.[47] The Alliance officially recognized the threat posed by climate change in its 2010 Strategic Concept, addressing it as a policy area within the Emerging Security Challenges division.[48] In 2013 NATO's Green Defense framework integrated climate change into its operations, seeking energy efficiency and environmental sustainability.[49] The 2014 Wales Summit tasked the NATO Response Force (NRF), a multinational unit of land, air, and maritime assets, to conduct disaster relief and protect critical infrastructure not just in member states, but also in partner countries, including in the MENA.[50] By 2015, NATO's Parliamentary Assembly adopted Resolution 427 on Climate Change and

International Security, which officially acknowledged the anthropogenic role in greenhouse gas emissions.[51] These NATO decisions demonstrated that by the 21st century, the Alliance had responded to the global norms reflecting concerns about climate change and sought to adapt to an age of anthropogenic security risks. Nonetheless, the first policy recommendation would be for NATO to establish a centralized climate change focused organization within the Alliance, similar to the status of the weapons of mass destruction in NATO's organizational structure.

The North Atlantic Treaty Organization has been present in MENA ever since Turkey joined the Alliance in the early 1950s, with its Anatolian territory situated primarily in the region. While some MENA states might see NATO's deployment in Libya 2011 as a Western violation of national sovereignty, other nations in the region have sought security agreements with the Alliance. In the mid-1990s, NATO initiated the Mediterranean Dialogue as a platform for cooperation with Jordan, Egypt, Israel, Morocco, Tunisia, Algeria, and Mauretania.[52] The 2004 Istanbul Cooperation Initiative expanded this relationship with Bahrain, Qatar, Kuwait, and the United Arab Emirates.[53] Such agreements include joint exercises in maritime security, counter-piracy, non-proliferation, and energy security, but not climate related domains per se. The Alliance's Training Mission in Iraq has played a crucial role in the post-invasion efforts to stabilize the country, strengthening the nation's security forces, particularly against ISIS. Israel has an agreement with NATO in the areas of disaster management and logistical engagement.[54]

As a multinational organization, NATO is better suited to be a CATO in the MENA region as opposed to individual states within the Alliance. Furthermore, Middle Eastern states do not have a legacy of cooperation on a regional level to address environmental risk, particularly over shared water resources. Regional security organizations such as the Arab League or the Gulf Cooperation Council primarily serve symbolic purposes, and others failed to come to fruition, such as the "Arab NATO."[55] Middle Eastern states do not necessarily need a regional organization to mitigate climate change and can take advantage of the resources an alliance like NATO brings to the region.

In terms of implementing policy between NATO and MENA, the SPS Programme can coordinate planning on the macro-scientific level. The

Alliance's Euro-Atlantic Disaster Response Coordination Centre (EADRCC) has the potential of implementing coordination and policies in the region. The actual military assets on the ground include the NRF, to deal with immediate catastrophes, and units akin to Provincial Reconstruction Teams (PRT) to manage long-term projects.

The Science for Peace and Security Programme served as a platform in which the Alliance can foster cooperation between NATO member states and MENA partner nations, supporting scientific research and technological innovation. In the past, the SPS Programme provided funding to researchers at the Ben-Gurion University of the Negev, University of Colorado, and the Hashemite University of Jordan to develop desalination technology.[56] In the future, the SPS Programme can develop projects in tandem with the private sector, such as tech companies, academia, and national-level development agencies in both member states and the MENA, to address environmental security risks.

The Euro-Atlantic Disaster Response Coordination Centre and the NRF have come to aid both member and nonmember states. The North Atlantic Treaty Organization Response Force provides humanitarian assistance to the United States following Hurricane Katrina in 2005.[57] In 2006, the NRF aided Pakistan after a devastating earthquake, and the EADRCC coordinated a 90-day airlift operation, delivering tons of relief material during Pakistan's 2010 monsoon floods.[58] In 2014, 21 NATO members provided humanitarian aid, helicopters, rescue teams, medicine, blankets, and tents across Bosnia and Herzegovina during its devastating floods, while the Alliance's troops on the ground worked in tandem with Bosnian civil and military organizations.[59]

During a humanitarian crisis, as Covid-19 demonstrated, military assets provide immediate relief. Opposed to the European Union, NATO responded with aid more effectively to overwhelmed member states, such as Italy and Spain when they requested it. Turkey airlifted medical aid packages, consisting of personal protection equipment, disinfectants, and 450,000 masks to Spain and Italy.[60] In Luxembourg, the Alliance provided field hospital tents with 200 beds to treat patients.[61] In Italy, NATO staff worked with a local 3D printing startup to convert snorkeling masks into emergency ventilators.[62] As a part of NATO's Strategic Airlift International

Solution Programme, Ukrainian Antonov cargo planes delivered 48 tons of medical material to help Slovakia.[63]

In terms of the policy, first, the EADRCC civil emergency response mechanism and NRF military assets should maintain operational preparedness through practice exercises with MENA states to deal with natural emergencies, ranging from sudden flooding to fires emerging due to dry seasons, as was the case of Lebanon in 2019.[64] Second, the EADRCC should participate more actively in the UN climate-focused projects such as the World Environment Situation Room, a project within the Big Data Initiative, incorporating geo-referenced and remote sensing information, collected from statistics and artificial intelligence.[65] The Science for Peace and Security Programme could also collaborate with data collection with research centers, NGOs, and universities, ultimately enabling NATO to anticipate future risks.

During NATO's mission in Afghanistan, PRTs served as small units of military and civilian personnel working with Afghan authorities on humanitarian reconstruction and military security. All member states leveraged their technical competence to assemble PRTs to work on building hospitals, roads, and water supply networks. In terms of NATO's policy for water security, these PRTs' ability to provide water in the arid terrain of Afghanistan is noteworthy. The Alliance has supported integrated water resources management for a wetlands restoration project in the Aral Sea basin of Kazakhstan and Uzbekistan.[66] The North Atlantic Treaty Organization can leverage this experience to repair the water purification facilities in Iraq, particularly Basra, and mitigate its current water crises. Still, the Alliance needs to collaborate with sustainable development and water resource NGOs, such as the World Resources Institute, which established a Water, Peace, and Security Partnership research consortium, creating novel water related security risk models and big data tools.[67]

This section demonstrates that NATO has the technical and military capacity to operate as a CATO in Central Asia, South Asia, and the Balkans. The Alliance has incorporated humanitarian responses to earthquakes, fires, hurricanes, floods, and pandemics into its doctrine. While these actions are reactions to natural calamities, NATO has also adopted proactive measures such as management measures to prevent

rapid freshwater supplies These actions serve as a template for future operations in the MENA region. In this capacity, the Alliance has assumed a hybrid role quite different from its Cold War functions and more suited to challenges such as Covid-19 and future anthropogenic risk.

Conclusion

The Alliance's security doctrine evolved since the Cold War from deterring the Soviet military to peacebuilding in the Balkans and combatting the Taliban and ISIS. In addition to these missions and deterring Russia, NATO has also adopted humanitarian intervention in its post-Cold War mission, dealing with anthropogenic security challenges. This article examined NATO and its institutional capacity to manage environmental fluctuations in the area most vulnerable to its southern flank, the MENA region. On a regional level, climate change will adversely affect food and water security, and rising sea levels threaten coastal cities. The combined effects have the potential to foment resource conflicts, economic collapse, public disorder, climate migrants, and stimulate a resurgence of terrorism, affecting the security of the MENA and Europe, if not global security akin to the threat posed by ISIS.

In terms of the policy to manage the challenges as mentioned above, besides symbolic agreements, NATO will need to strengthen its security agreements with the MENA countries. The Alliance has the resources to offer MENA countries technical expertise to develop sustainable environmental infrastructure. In this regard, NATO's existing institutional framework can implement the four policy recommendations to address anthropogenic security risks. First, the SPS Programme serves as an initiative that will be critical to developing climate change related research, coordinated with MENA partners. Second, the EADRCC has proven itself as a coordinating body to deal with disaster response, directing NRF forces to face catastrophes in the past, and can serve a similar role when climate change causes future crises. Third, units akin to the PRTs in Afghanistan can work on long-term projects, in tandem with MENA national authorities, to develop the infrastructure to adapt to climate change fluctuations, particularly water resource management. Finally, NATO should ultimately create an overarching body that coordinates these measures and units, to guide the body in its CATO role,

which would have a positive impact in the MENA region, as well as on the global level.

Endnotes

[1] There are various definitions of the MENA region. This article followed the World Bank classification encompassing the following countries: Algeria, Bahrain, Djibouti, Egypt, Iran, Iraq, Jordan, Kuwait, Lebanon, Libya, Morocco, Oman, Palestine, Qatar, Saudi Arabia, Syria, Tunisia, the United Arab Emirates, and Yemen. The article did not include Turkey, since it is a NATO member state, but included Sudan and Israel.

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