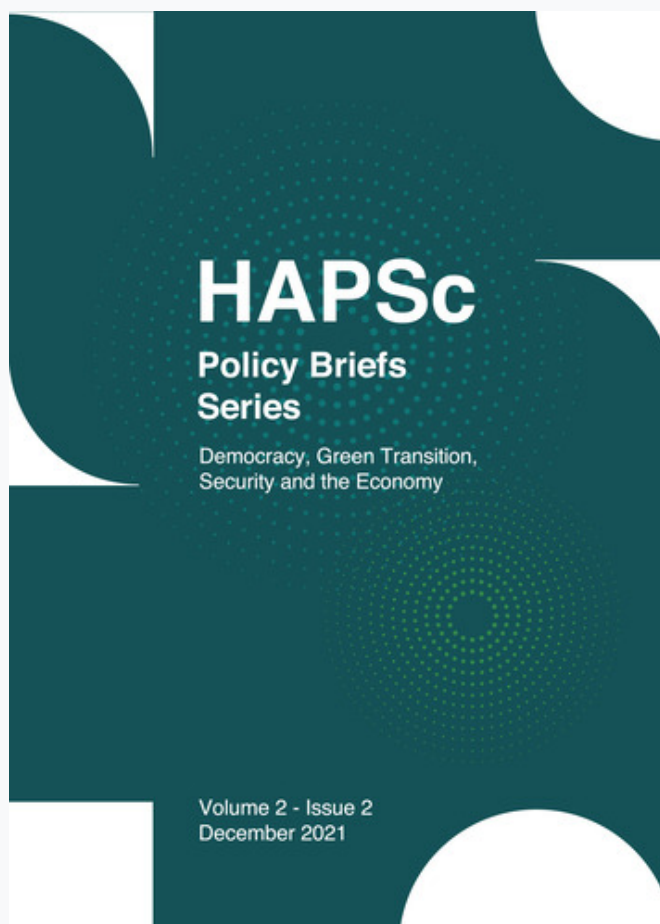


## HAPSc Policy Briefs Series

Vol 2, No 2 (2021)

HAPSc Policy Briefs Series



### Climate Change: A Newly Established Contributor to Terrorist Actions

*Ioanna Kechagia, Eirini Makariou, Marina Spiliotopoulou*

doi: [10.12681/hapscpbs.29507](https://doi.org/10.12681/hapscpbs.29507)

Copyright © 2021, Ioanna Kechagia, Eirini Makariou, Marina Spiliotopoulou



This work is licensed under a [Creative Commons Attribution 4.0](https://creativecommons.org/licenses/by/4.0/).

#### To cite this article:

Kechagia, I., Makariou, E., & Spiliotopoulou, M. (2021). Climate Change: A Newly Established Contributor to Terrorist Actions. *HAPSc Policy Briefs Series, 2*(2), 206–215. <https://doi.org/10.12681/hapscpbs.29507>

# Climate Change: A Newly Established Contributor to Terrorist Actions<sup>1</sup>

Ioanna Kechagia, Eirini Makariou, Marina Spiliotopoulou<sup>2</sup>

## Abstract

Although climate change and terrorism are two terms that are mostly analyzed separately, they tend to be two global threats in a feedback loop relationship. Climate change causes fragility and instability because of the lack of natural resources and the vulnerability of human security. Considering this situation, NSAGs (Non-State Armed Groups) take advantage of this fragility and proliferate. In order to be established, they even attempt to earn the support of the local population. Food insecurity, water/land scarcities caused by climate change lead to intense poverty of the local population. As a result, they are more vulnerable to the recruitment of NSAGs, which promise them economic incentives. Various case studies demonstrate that NSAGs, such as Boko Haram in Lake Chad, exploit and manipulate the local population to impose their regime. For this purpose, NSAGs use strategically natural resources such as water, by using them as weapons or by forbidding access to these vital resources. Governments have attempted to control this exacerbation of terrorist actions in the environmental framework but the solution of the problem demands the collaboration of multiple actors. Policy makers will be able to address these challenges by building resilient societies that engage people with their problems.

**Keywords:** Climate change; terrorism; human security; NSAGs; natural resources; national security; environment; eco-terrorism; violent attacks; humanitarian aid

## Introduction

Climate change and its consequences pose international security at serious risks. Climate change differentiates from global warming and it is defined as any significant change in the measures of climate lasting for an extended period of time (Lytle, 2021). It is heavily connected with national security, which is exceptionally vital in this study. The conditions prevailing in certain areas where there is lack of water, land and other natural resources, lead to a general instability. In the last years, there has been a worrying increase of the instability caused by those scarcities, leading to an inextricable link between environmental and national security. The effects of climate change and environmental collapse are already visible in several conflict areas around the world, but the main question that arises is to what extent climate change affects the operation of terrorist organizations.

This research starts by a brief presentation of the extent of climate change in our times and its impact on human security. The second chapter illustrates how climate change can pose as a contributor to

---

<sup>1</sup> To cite this paper in APA style: Kechagia, I., Makariou, E. & Spiliotopoulou, M. (2021). Climate Change: A Newly Established Contributor to Terrorist Actions. *HAPSc Policy Briefs Series*, 2(2), 206-215. DOI: 10.12681/hapscpbs.29507

<sup>2</sup> Department of International and European Studies, University of Piraeus, Greece.

terrorist actions in a fragile and unstable environment. Subsequently, it is worth mentioning the definition of the NSAGs (Non-State Armed Groups) and the examination of their main categories, including the examination of the terrorist group Boko Haram in the Lake Chad region. The third chapter indicates that NSAGs attempt to establish their regime by managing natural resources and even using them as strategic weapons. The last chapter analyzes the measurements taken by governments and suggests policies in different sectors that can lead to improvement.

### **1. The lack of natural resources causes fragility.**

Climate change is considered as a low start threat. The most common threats against natural security are reported as direct attacks and events, which oppose the slow action of climate change. An example of an immediate threat to national security is the terrorist attacks of 11<sup>th</sup> of September in 2001, which stamped the pages of modern history. However, slow-start threats, such as climate change, are having more and more impact on national security (Asaka, 2021).

According to Telford (2020), climate change acts as a multiplier of threats to instability. It can worsen the already existing social vulnerability, if there are no measures taken on time. Social vulnerability has been linked with the spread of terrorism, as the terrorist groups are known for recruiting members from poverty-stricken youth. For example, Pakistan is a great area for NSAGs (Non-State Armed Groups) to be constituted and established. The fact that it is located in an area of great political importance, creates constant tensions and political conflicts. In addition, climate change often causes high flood risks and severe water scarcity. The continuous political and climate changes pose a great danger to the national and environmental security of the area. In many areas, it is a common tactic for the NSAGs to use the scarcity of natural resources and pollute even the small quantities of drinking water that has been left, in order to push the locals to join them (Rüttinger, et al, 2015). To sum up, climate insecurity is defined as the conditions under which the effect of climate change threatens a group of various actors. There is a feedback loop relationship between climate change and terrorism, in which climate change enables and multiplies terrorist actions, which in turn drives to climate change.

Within the past, Non-State Armed Groups were defined as organized groups that were part of an international or beyond the state armed conflict. As Nett and Rüttinger analyze (2016), they were perceived as actors who are trying to get political power and initiate political change. They all share a fundamental organizational structure that continues over a certain period of time, the status to utilize force to attain political, financial or ideological targets, out of the state control (UNSSC, 2015).

NSAGs usually don't have formal obligations and they don't participate in state structures. Consequently, NSAGs are not committed to international humanitarian law (DCAF, 2015).

It is extremely important to be prepared for extreme weather phenomena. As the climate is continuously changing, more hurricanes, cyclones, fires, earthquakes tend to happen. These events put national security at great risk, as they cause the loss of human lives, material disasters and more. This highlights the importance of being prepared for all those extreme events. Homeland security has evolved around protection from a terrorist threat, but it is evolving to include responses to natural disasters (Goodman, 2021).

Finally, natural security issues are one of the most critical issues of our time and must be integrated into national security planning (European Commission, 2008; UN Security Council, 2011). Although the different effects of climate change are still being examined, there are two pillars to approach this phenomenon: the mitigation, which is the attempt to reduce all human activities that may lead and contribute to climate change and adaptation, in order to adapt in the new environmental data. Mitigation and adaptation should be considered as part of national security planning in order to efficiently address multiple risks (Nett & Rüttinger, 2016).

## **2. NSAGs and the support of the local population.**

According to Nett and Rüttinger (2016), the instability that has been caused by climate change in the international arena, has been used by many non-state actors in order for them to be established, using new patterns of violence. Climate change acts as a risk multiplier regarding NSAGs. There are two main ways that climate change helps the rise and growth of the NSAGs. Firstly, due to high levels of fragility that have been located in many areas, NSAGs often try to fill the gaps by providing basic services in places. In this way, they gain legitimacy and the support of the locals. Secondly, in many nations climate change is having an increasingly negative influence on livelihoods, such as food poverty and water scarcity. As a result, the affected population groups are more prone to both negative climatic impacts and NSAGs recruitment. It is intensively worrying how NSAGs take advantage of the fragile conditions created by compound climate-fragility risks.

Nowadays NSAGs tend to operate in an environment without conflict, using the unconventional armed violence, which means that they do not use violence in a way of armed conflict. Usually, they cause conflicts with financial motivations which are funded by illegal profitable activities. NSAGs involve a wide range of participants in short range, such as youth and street gangs, organized crime and in a wider range, such as professional terrorist groups (Schneckener 2010).

In order to comprehend the influence of climate change to the NSAGs' activities, one of the most known NSAGs that is located on Lake Chad and it is known as Boko Haram, is illustrated. Lake Chad's region, which includes Niger, Nigeria, Chad and Cameroon, has been suffering from financial difficulties, decreasing resources and conflicts (Freedom House, 2015). Climate change adds up even more pressure, since severe droughts have caused a huge shrinking of the Lake, which is the main sector of employment in the area. Lack of water and fertile land causes competition which might lead to social tensions. Also, the huge growth of population, which is calculated to 38 million people, in combination with the severe lack of economic opportunities (Department of State, 2015), leaves a perfect spot for NSAGs to establish.

Boko Haram is an islamist extremist group that was founded in 2002 by Myhammed Yusuf and it launched a conflict against the Nigerian government in 2009. From 2015 it is also called Islamic State in West Africa or Islamic State's West African Province. Its initial purpose was to fight the injustice and the corruption against the lower classes, caused by the Western presence. (The Editors of Encyclopaedia Britannica, 2021). It gained control of 18 local government areas in Nigeria (Abubakar, 2015). It started as a non-violent Islamic movement, but it turned into an extremist group, whose cause is the establishment of an Islamic state under Sharia law (Campbell, 2014). As the resources in Chad Basin, such as quality fresh water, fishes, the capability of vegetable cultivation and livestock are decreasing, violent conflicts and social tensions have appeared. This situation provides a fertile ground for NSAGs. Boko Haram recruits young men by offering payments in order to carry out violent attacks (Olojo, 2013), or by using other brutal methods such as kidnapping, forced marriages etc. (Amnesty International, 2015). In addition, Boko Haram uses natural resources as a weapon, in order to exert even more pressure. Nonetheless, Boko Haram seems to understand the importance of this strategy and keeps using it, since, as Nett and Rüttinger (2016: 27) indicate, '*the scarcer resources become, the more power it gives to those who control them*'.

### **3. NSAGs use natural resources as weapons.**

As the reservoirs continue to dry up, severe droughts caused by climate change have spread the vulnerability of the water system. As the world's fresh water supply becomes increasingly scarce, NSAGs are multiplying their attacks and manipulating the supply as a coercion strategy. Extremist groups, including Al Qaeda, have expressed interest in contaminating drinking water in the United States. A report by the New Jersey Office of Homeland Security and Preparedness identified 26 specific threats of water contamination in the United States between 1968 and 2008 to recent reports from the Nigerian military, Boko Haram has implemented new weapons which are based on natural

resources. (Somers, 2019). In places dislodged by the army, they poisoned water sources, making water usage unsafe for both humans and wildlife. Although it remains an open question if this activity is against the local population, it is evident that natural resources are a crucial strategic tool. As a result, the potential damage is extremely high and this strategy becomes increasingly menacing in the face of a changing climate. Furthermore, when governments are incapable of managing natural resources, competition for scarce resources is intense and likely to cause violence and instability (Nett & Rüttinger, 2016).

Water can be strategically used to apply political and military pressure (Shamout, 2018). Terrorist groups control the water barriers and hence, in order to cause damage in water-scarce areas and increase their territorial control. In 2015, ISIS attacked regime forces further downstream by blocking the gates of the Ramadi (Shamout, 2018). In addition, water can be used as a weapon by taxing it and as a result, be an important source of funding (Nett & Rüttinger, 2016).

#### **4. Recommendations**

Foreign policy makers should play an active role in order to prevent climate change, violence, conflict and fragility, but first they must understand the complex nature of NSAGs. Their goal is to create resilient states that can face the risks of NSAGs. Three sectors can help the policy makers face the problem of NSAGs: climate change adaptation, development and humanitarian aid, peacebuilding and conflict prevention (Nett & Rüttinger, 2016).

Strategies that are against violent extremism do not take climate change into consideration and as a result the interventions can lead to failure (UNDP, 2016). In areas with a lot of conflicts, peacebuilding strategies that are linked to climate change can bring about external support and development (Crawford et al., 2015).

The quality of public services and goods affects the ability of local communities to cope with climate risks that are related to NSAGs. Weak infrastructure could increase the conflicts for local resources (Detges, 2016). The solution of the livelihood insecurity problem and the recommendation of alternative sources is more likely to cause resistance to the integration in extremist groups and to climate risks. As Nett and Rüttinger (2016) illustrate, changes to sectors such as agriculture, livestock, forestry and fisheries can reduce the possibilities of joining NSAGs. More specifically, in order to adapt to changing climatic conditions, agricultural practices can be shifted towards less water-intensive and more drought-resilient crops. Governments need to reassure that food adequacy will remain sustainable and crops will be easily estimated. Prudent management of irrigation systems will reduce climate risks and the impacts of drought (Nett & Rüttinger, 2016).

In addition, climate changes such as cyclones, floods, sea-level rise, droughts, temperature and rainfall fluctuations have a negative impact on the economic returns from fishing. Those who are more likely to be affected by these climate risks are mostly the small-scale fishers or day laborers (Vivekananda et al., 2014). A decrease in fishing revenue will increase illegal fishing and piracy (Hyde, 2016). Policy makers must take initiatives in order to face the risks that are linked to livelihoods.

Forests are used for commercial and cultural reasons and as a result they can cause a lot of conflicts. A lot of NSAGs (especially from East, Central and West Africa) sell and tax forest resources such as tropical timber and charcoal because of the lack of supervision of forest land and resources. Local mafia, Islamist extremists and rebel movements, including al-Shabaab (a terrorist group linked to Somalia's Al-Qaeda) are funded from the annual trade in illegal logging (Nellemann et al., 2014). At a global level, governments should make efforts in order to face the problem of illegal timber trade and protect forests by creating programs such as REDD+ and the EU's Forest Law Enforcement, Governance and Trade (FLEGT).

In some areas, young people have low employment opportunities and as a result they are attracted by armed groups or other illegal activities such as drug trafficking, piracy or poaching. Government policies have to take into consideration demographics and gender when considering climate resilient livelihood strategies (Nett & Rüttinger, 2016).

Furthermore, policies must improve the host-migrant relations by helping them have equitable access to resources, lines of communication and information. In this way, hosts and migrant communities will build trust and consequently, conflicts and risks of illegal activities and criminality will be reduced (Nett & Rüttinger, 2016).

Governments should reassure that the resources are distributed immediately and fairly and prevent NSAGs from providing services such as access to clean water, food aid and medical care in order to replace state services (Ruttinger et al., 2015).

According to Shreve and Kelman (2014), foreign policy should also spend enough money to reinforce early warning systems so as to predict the risks. Countries that are prone to disasters need to take emergency decisions in order to avoid the domination of criminal groups. Governments and civil society should collaborate and warn specific groups about the threats of exploitation and human trafficking in times of disasters. The more efficient the collaboration becomes, the more difficult is the appearance of smuggling and human trafficking.

Weak governance, poverty, inequality and marginalization are often the reasons why rapid urbanization happens. The increase of NSAGs depends on the way cities face these threats. Humanitarian aid, peacebuilding and conflict prevention should focus on cities that are affected by fragility and conflicts. A collaboration between the poor urban and the periphery population with governance systems and services will solve the problem of livelihood insecurity and contribute to economic development (Mosel et al., 2016; Nett & Rüttinger, 2016).

It is worth mentioning that the National Homeland Security Strategy should include sustainable principles and practices in order to prevent NSAGs from the exploitation of the environment. The implementation of a strategy regarding national infrastructure protection will lead to sustainability. For instance, the U.S. military has realized that sustainability is an important strategic security element. Moreover, large and complex distribution systems are more likely to fail and that's the reason why governments must fund investments on a smaller scale, especially in distributed infrastructure systems. Ultimately, it is important to improve sustainable water technologies in order to enhance the EPA Water Security Initiative (Somers, 2019).

Despite these attempts, the government was unable to manage climate change and as a result, citizens created a movement of civil activism. The actions of this movement are known as eco-terrorism which are associated with organizations as the Earth Liberation Front (ELF) and the Animal Liberation Front (ALF). The actions of such organizations could be considered similar to those of Al-Qaeda and ISIS, by using violent tactics against western societies (Spadaro, 2020).

ICRC (International Committee of the Red Cross) cooperates with armed groups in order to provide humanitarian assistance to persons who are affected by armed conflict and other situations of violence. The goal of ICRC is to collaborate with all parties (including NSAGs) in order to gain access to civilian populations and persons located in territories, in which armed groups operate. To sum up, this humanitarian organization can offer its services to the parties to a non-international armed conflict, including non-state ones (Pejic, Herbet & Rodenhäuser, 2021).

As Vosniak (2021) highlights, for a successful collaboration, NSAGs must respect existing humanitarian norms under international humanitarian law (IHL). However, there must be a better engagement with NSAGs, because they are usually breaking the law. The United Nations could play a crucial role and stimulate NSAGs to implement IHL. The UN Security Council has already found ways in order to encourage NSAGs to comply with the law.



## Conclusion

Climate change is a major threat to international peace and security. The effects of climate change heighten competition for resources such as land, food and water, fueling socioeconomic tensions and, increasingly often, leading to mass displacement. Consequently, climate change and violent attacks are inextricably connected. The escalating scarcity of basic resources such as water, the increased desertification of agricultural regions and the overall rise in temperatures have caused a severe fragility and sociopolitical vulnerability. Thus, climate change can undoubtedly become a contributor to terrorist attacks to an extended dimension, as the use of environmental stress is a strategic tool for NSAGs in order to recruit citizens and proceed to more violent actions. If governments, businesses, civil society, youth and academia collaborate, it is possible to create a green future where suffering is diminished, justice is upheld and harmony is restored between people and planet. “Terrosism and deception are weapons not of the strong, but of the weak” - Mahatma Gandhi.

## References

- Abubakar, A. (2015). The Case of Boko Haram in Nigeria. In: Javan, J. & Wieland-Karimi, A. (eds). Understanding a new generation of non-state armed groups (pp. 45-46). United Nations System Staff College. Available at: [https://www.unssc.org/sites/unssc.org/files/Non-state%20Armed%20Groups\\_Dialogue%20Series-2015.pdf](https://www.unssc.org/sites/unssc.org/files/Non-state%20Armed%20Groups_Dialogue%20Series-2015.pdf) (Accessed: 11/10/2021).
- Amnesty International (2015). ‘Our Job is to Shoot, Slaughter and Kill’: Boko Haram’s Reign of Terror in North-East Nigeria. Available at: <https://www.amnesty.org/en/documents/afr44/1360/2015/en/> (Accessed: 12.10.2021).
- Asaka, J. (2021). Climate Change and Terrorism. New Security Beat, Available at: <https://www.newsecuritybeat.org/2021/04/climate-change-terrorism/> (Accessed: 11/10/2021).
- Campbell, J. (2014). Boko Haram: origins, challenges and responses. The Norwegian Peacebuilding Resource Centre. Available at: <https://www.files.ethz.ch/isn/184795/5cf0ebc94fb36d66309681cda24664f9.pdf> (Accessed: 12/10/2021).
- Crawford, A., Dazé, A., Hammill, A., Parry, J., & Zamudio, A. (2015). PROMOTING CLIMATE-RESILIENT PEACEBUILDING IN FRAGILE STATES. International Institute for Sustainable Development. Available at: <https://www.iisd.org/system/files/publications/promoting-climate-resilient-peacebuilding-fragile-states.pdf> (Accessed: 11/10/2021).
- DCAF and Geneva Call (2015): Armed non-state actors: current trends and future challenges. DCAF Horizon 2015 Working Paper No. 5. Available at: [https://www.files.ethz.ch/isn/144858/ANSA\\_Final.pdf](https://www.files.ethz.ch/isn/144858/ANSA_Final.pdf) (Accessed: 12/10/2021).
- Department of State (2015): Investment Climate Statements 2015. Available at: <https://2009-2017.state.gov/e/eb/rls/othr/ics/2015/index.htm> (Accessed: 12.10.2021).
- Detges, A. (2016). Local conditions of drought-related violence in sub-Saharan Africa: The role of road and water infrastructures, (53)5. Available at: <https://journals.sagepub.com/doi/abs/10.1177/0022343316651922> (Accessed: 12/10/2021).
- European Commission (2008): Climate Change and International Security. Paper from the High Representative and the European Commission to the European Council. Available at: [https://www.consilium.europa.eu/uedocs/cms\\_data/docs/pressdata/en/reports/99387.pdf](https://www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/en/reports/99387.pdf) (Accessed: 12/10/2021).

- Freedom House (2015): Freedom in the World 2015. Available at: <https://freedomhouse.org/report/freedomworld/freedom-world-2015#.WJL3U31kycE> (Accessed: 12.10.2021).
- Goodman, S. (2021). What is environmental security?. Yale Insights. Available at: <https://insights.som.yale.edu/insights/what-is-environmental-security> (Accessed: 12/10/2021).
- Hyde, T. (2016). Is climate change turning Indonesian fishermen to crime?. American Economic Association. Available at: <https://www.aeaweb.org/research/climate-change-indonesian-fishermen-crime> (Accessed: 12/10/2021).
- Lytle, N. (2021). Climate Change as a Contributor to Terrorism: A Case Study in Nigeria and Pakistan. University of South Carolina, Senior Theses 207. Available at: [https://scholarcommons.sc.edu/cgi/viewcontent.cgi?article=1182&context=senior\\_theses](https://scholarcommons.sc.edu/cgi/viewcontent.cgi?article=1182&context=senior_theses) (Accessed: 11/10/2021).
- Mosel, I., Lucci, P., Doczi, J., Cummings, C., Bahadur, A., & Walker, D. (2016). Urbanisation: Consequences and opportunities for the Netherlands' DirectorateGeneral for International Cooperation. Government of Netherlands - Ministry of Foreign Affairs. Available at: <https://cdn.odi.org/media/documents/10219.pdf> (Accessed: 10/10/2021).
- Nellemann, C., Henriksen, R., Raxter, P., Ash, N., & Mrema, E. (2014). The environmental crime crisis: threats to sustainable development from illegal exploitation and trade in wildlife and forest resources. United Nations Environment Programme and GRID-Arendal, Nairobi and Arendal. Available at: <https://www.cbd.int/financial/monterreytradetech/unep-illegaltrade.pdf> (Accessed: 12/10/2021).
- Nett, K., & Rüttinger, L. (2016). Insurgency, Terrorism and Organised Crime in a Warming Climate [Ebook]. Berlin. Available at: [https://climate-diplomacy.org/sites/default/files/2020-10/CD%20Report\\_Insurgency\\_170724\\_web.pdf](https://climate-diplomacy.org/sites/default/files/2020-10/CD%20Report_Insurgency_170724_web.pdf) (Accessed: 12/10/2021).
- Olojo, A. (2013). Nigeria's Troubled North: Interrogating the Drivers of Public Support for Boko Haram. International Centre for Counter-Terrorism. Available at: <https://www.icct.nl/app/uploads/download/file/ICCT-Olojo-Nigerias-Troubled-North-October-2013.pdf> (Accessed: 11.10.2021).
- Pejic, J., Herbet, I., & Rodenhäuser, T. (2021). ICRC engagement with non-State armed groups: why and how - Humanitarian Law & Policy Blog. Available at: <https://blogs.icrc.org/law-and-policy/2021/03/04/icrc-engagement-non-state-armed-groups/> (Accessed: 11/10/2021).
- Rüttinger, L., Stang, G., Smith, D., Tänzler, D., & Janani, V. (2015). A New Climate for Peace – Taking Action on Climate and Fragility Risks. Available at: <https://www.adelphi.de/en/publication/new-climate-peace-%E2%80%93-taking-action-climate-and-fragility-risks> (Accessed: 13/10/2021).
- Schneckener, U. (2010). Dealing with Armed Non-State Actors in Peace- and State-Building, Types and Strategies. Available at: <https://www.clingendael.org/sites/default/files/pdfs/Non-conventional%20armed%20violence%20and%20non-state%20actors,%20challenges%20for%20mediation%20and%20humanitarian%20action.pdf> (Accessed: 12/10/2021).
- Shamout, N. (2018). Syria Faces an Imminent Food and Water Crisis | Parliamentarians Network for Conflict Prevention. Parliamentarians Network for Conflict Prevention. Available at: <http://pncp.info/news/syria-faces-imminent-food-and-water-crisis> (Accessed: 12/10/2021).
- Shreve, C., & Kelman, I. (2014). Does mitigation save? Reviewing cost-benefit analyses of disaster risk reduction. University of Northumbria. Available at: [https://nrl.northumbria.ac.uk/id/eprint/17954/1/does\\_mitigation\\_save.pdf](https://nrl.northumbria.ac.uk/id/eprint/17954/1/does_mitigation_save.pdf) (Accessed: 11/10/2021).
- Somers, S. (2019). How Terrorists Leverage Climate Change. New Security Beat, University of Buenos Aires. Available at: <https://www.newsecuritybeat.org/2019/09/terrorists-leverage-climate-change/> (Accessed 11/10/2021).
- Spadaro, P. A. (2020). Climate Change, Environmental Terrorism, EcoTerrorism and Emerging Threats. *Journal of Strategic Security*, 13(4), 58-80.