



WORKSHOP

“The impact of climate change on national security” *(Phase II)*

- 26th October, 2023 -

Climate change is a set of impacts caused both by natural causes and, directly or indirectly, by human activity. These effects are felt in the form of long-term changes in weather patterns, in short, climate changes that can threaten people’s security, the environment and development conditions in all sectors and areas. In other terms, climate change is a deeply chronic phenomenon, in the sense that it occurs over a long period of time, with effects that are not yet felt very often, acutely. The real issue is that, as with any chronic dysfunction, the closer we get to what is called ‘the point of no return’ and the longer it takes to prevent it, the more the diversity, complexity, and scale of measures to deal with the effects of climate change increase, and the more serious the impact.

The unavoidable effects of climate change are increasingly visible, at national, regional, and even global level. We are witnessing periods of extreme temperatures (intense heat waves or cold waves), periods of drought, which destroy agricultural production, threaten to affect biodiversity caused by floods, vegetation fires, landslides or other such phenomena that affect people, deepen, or multiply vulnerabilities, thus causing risks to national security.

Climate change is not a new phenomenon, it is already a constitutive part of life on our planet and acts, if not directly, often as an conflict amplifier in society with potentially destructive effects on human systems. We are witnessing an increase in the frequency and scale of extreme weather and climate phenomena. The current rapid and widespread pace at which they are occurring, the transition to a development model that protects the environment, in which economic and social considerations are balanced with concern for combating climate change and the sustainable use of natural resources, represent the main challenges of the 21st century



for the international community. People and societies will need to identify, mitigate (through increased use of renewable energy, promotion of behavioural change, etc.), prevent and continuously adapt to the disruptive and unavoidable consequences of these phenomena (through conservation of water resources, crop rotation, public planning and awareness raising, increasing the height of dams, etc.).

As a result of climate change and global warming, along with the disruption of natural ecosystems come the political, social, and economic systems that underpin every society and guarantee the security of citizens, communities, and states. The overall consequence is that climate disruption can lead to political, economic, and social instability on all levels of national and international security.

Climate change has prompted states and international organisations to develop policies, strategies and plans to combat the disruptive and destructive effects of climate, global warming, the greenhouse effect, and environmental degradation.

The European Union has been at the forefront of global efforts to combat climate change and has been actively involved in making climate change a central element of its external policy. In this respect, discussions on climate change on the agenda of EU leaders have led to the setting of a rather bold target in the current security context of moving to green energy and reducing greenhouse emissions by at least 55% by 2030 (European Commission 2023).

Within NATO, there has been a growing recognition of the links between climate change, security, and geopolitical stability, increasingly integrating climate considerations into its security planning and operations. NATO's Strategic Concept 2022 defines climate change as a "crisis and threat multiplier".

NATO and the EU are demonstrating a shared commitment to addressing climate change challenges by actively promoting the adoption of green energy solutions and advancing the transition to a more sustainable future by actively promoting the adoption of green energy technologies at the civilian level.

The World Economic Forum held on January 11, 2023, in its *Global Risk Report 2023*, highlights the importance of climate change and ranks extreme weather as the top ten risk in terms of likelihood of occurrence and climate action failure as the top risk in terms of impact – before weapons of mass destruction, cyber-attacks and infectious diseases (World Economic Forum).

These are just a few introductory aspects that refer to the need to focus efforts on taking the most serious steps possible to analyse the situation, draw up realistic forecasts, identify solutions to address the issue of climate change, and develop a coherent and integrated strategy and its implementation at sectoral, national, regional, and global level through plans that include objectives and deadlines, measures, and actions, as well as allocated means and resources.

With more than 20 years of activity, Centre for Defence and Security Strategic Studies (CDSSS) organises and conducts a wide range of scientific events, each with the common objective of developing security culture while increasing visibility



in academia and scientific research. This year's *Workshop edition was held on October 26, 2023, in hybrid format, marking the second phase of the project entitled "The impact of climate change on Romania's national security"*, requested by the Armament General Directorate (AGD) and included in the Ministry of National Defence sectoral research and development plan for the period 2022-2025.

PROJECT PRESENTATION

• **PURPOSE** – to identify Romania's vulnerabilities, as well as threats and risks to national security, caused by ongoing climate change, and to forecast them over the next two decades, with the aim of providing a model for analysis and a coherent basis for the development of future strategies and policies in the field.

• **OUTPUTS** – the research outputs approach three workshops, one organized each year of the allocated period. Each workshop will generate the following deliverables:

- summary material on how it was carried out and the results obtained – sent to AGD;

- presentation of the scientific event in Strategic Impact journal, edited by CDSSS;

- portfolio with recordings, photos, presentations;

- media coverage of the scientific event through official media channels (social networks), in compliance with the rules in force.

• at the end of the project, a model for analysing the effects of climate change on national security will be developed to enable beneficiaries to develop/adapt future strategies and policies in this field.

•PROJECT TEAM

• the project team comprises project directors and CDSSS staff members (researchers and administrative staff).

• EXECUTION

The project period was divided into three phases as follows:

- Phase I: March-December 2022;

- Phase II: January-December 2023;

- Phase III: January-December 2024.

A workshop is held at the end of every phase to effectively accomplish both general and specific objectives.

The general objectives address the whole research approach and aim to: *identifying the main national threats posed by climate change; analysing the major consequences of climate change impacts on national and regional stability and*



security; identifying possible solutions to the climate change challenges we face - green economy opportunities and climate action; discussing measures to adapt to the inevitable impacts of climate change; identifying solutions for improving adaptive capacity and increasing the resilience of socio-economic and natural systems to the climate change effects; identifying responsible institutions and the role and place of national instruments of power in managing the climate change effects; presenting national policies and measures to reduce greenhouse gas (GHG) emissions; identifying economic sectors where specific measures to reduce GHG emissions are needed; identifying specific elements of a low-carbon economy.

The objectives for each workshop/phase follow the standard ADDIE (Analysis, Design, Development, Implementation, Evaluation) sequence. This is the process that will be undertaken to develop the Climate Change Impact Analysis Model for National Security, which will be the final deliverable.

WORKSHOP I (December 14, 2022)



The first workshop was held online on the ILIAS-DIDAD platform. More than 30 specialists, academia and researchers from the country and abroad participated in the activity.



The following specific objectives were achieved:

01. *initiation of scientific research approach – presentation of the general coordinates of the whole project: purpose, theme, framing in the research effort of MoND, NDU, CDSSS, allocated period, beneficiaries, participants, results expected by the beneficiary (deliverables, activities,), necessary steps, etc.*

02. *definition of study problem – presentation by invited experts of the climate change situation in cause-effect format. The project team understood the topic under study, which created the prerequisites for a more realistic design of the whole approach as well as of each phase of the project, determination by the project team of the necessary data (sources, format, documentation activities, etc.), of the needs and possibilities for cooperation, as well as of the methods and tools used for the analyses they will undertake in the approach, each member per chosen section/field.*

03. *definition of research objectives, outline of the organisational framework (participants tasks, contributions to activities and deliverables, possibilities for cooperation, etc.). The research objectives, phases and milestones for the whole approach have been defined, according to the purpose and expected results of the beneficiary. The organisational framework has also been set up to carry out the necessary activities for the development of the climate change impact analysis model on national security, based on the threats and risks generated by climate change, correlated with system vulnerabilities, as well as elements of forecasting on the subject, in line with the project scientific objectives. It was agreed that the entire project team's approach would focus on the security sectors as understood by the Copenhagen School (political, defence, societal, economic, environmental), to which the public communication component was added.*

The scientific event was publicised through official information channels and the conclusions were submitted in summary to the main beneficiary, namely the AGD.

WORKSHOP II (October 26, 2023)

The second workshop was held in a hybrid format, physical – at NDU, and online – on ILIAS platform. In response to numerous invitations, the workshop was attended by specialists with concerns in climate change, security and defence and related fields. The audience included representatives of structures such as the Department for Defence Policy, Planning and International Relations, Control and Inspection Corps, Directorate of Training and Doctrine, Air Component Command, Joint Forces Command, “Henri Coandă” Air Force Academy, General Inspectorate for Emergency Situations.

Valuable contributions were made by specialists from structures such as SNAOPSN, governmental, non-governmental and academic institutions respectively:



- Director General of the National Meteorological Administration, Elena MATEESCU, together with Roxana BOJARIU, Romania's Focal Point to the Intergovernmental Panel on Climate Change;
- Manager of "Marius Nasta" Institute of Pneumophysiology, Doctor Beatrice MAHLER;
- representative of Special Telecommunications Service, Colonel Iuliana GUIȚĂ-ALEXANDRU;
- representatives of Control and Inspection Corps within the Ministry of National Defence, Colonel Adrian ANTIP, and Major Valentin MĂRĂCINEANU;
- representative of Department for Defence Policy, Planning, and International Relations, Civil Servant Ștefan NIȚULESCU;
- representative of the Defence Staff, Colonel Iliuță VLAD, representative of Air Force Staff, Captain Cristian CIULEAN and representative of Joint Forces Command, Major Alexandru CRISTIAN;
- representative of Romanian Reserve Officers Association, Colonel (ret.) Stan ANTON, former director of CDSSS, and representative of Ministry of Internal Affairs, Second Lieutenant Adrian NISTORESCU;
- professor emeritus Sabina ȘTEFAN, Romanian Academy of Scientists and Bogdan ANTONESCU, PhD, Faculty of Physics, University of Bucharest;
- professor Adrian PITICAR, PhD, Vice-Rector for Scientific Research together with Captain Alexandru TUDOR from "Henri Coandă" Air Force Academy;
- PhD candidates from National University of Political Studies and Public Administration and "Carol I" National Defence University;
- researchers from CDSSS, members of the project team scientific component.

Specific objectives:

- identifying and analysing national vulnerabilities, as well as threats and risks that may be generated by the effects of climate change, to configure the set of threats-risks-vulnerabilities associated with the impact of climate change – inputs of high importance in the equation that will be solved by the previous analysis model;
- identify forecast inputs, oriented to the PMESII domains, to support those produced by the implementation of the analysis model; this objective will also be maintained in Workshop III.

Workshop conduct

The event was moderated by the head of Strategic Analysis and Evaluations Office, Colonel Dan-Lucian PETRESCU, PhD, together with Scientific Researcher Mihai ZODIAN, PhD, from CDSSS. The Workshop organising committee, under the



coordination of the Head of BAES, included research staff from the Centre as well as members of the Scientific Secretariat, Events and Collaborations Department.

The event was attended by more than 30 people. The set objectives were achieved through presentations and debates. The proposed themes provided the scientific framework for 22 presentations (including two with the same title), as follows:

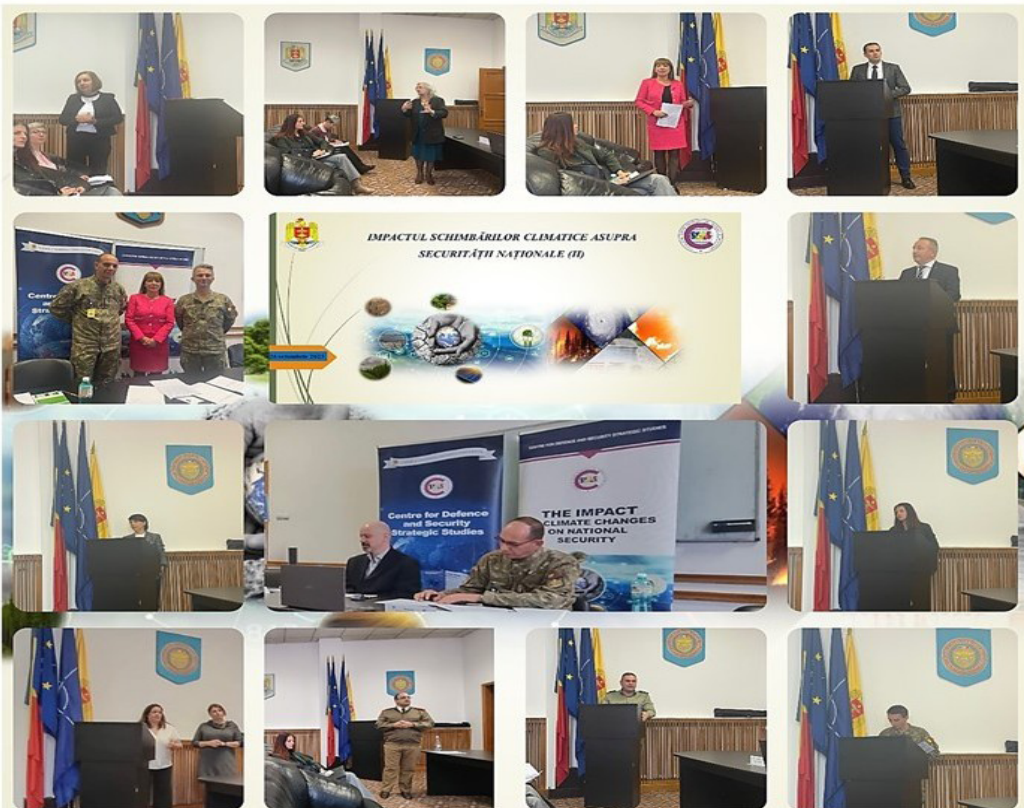
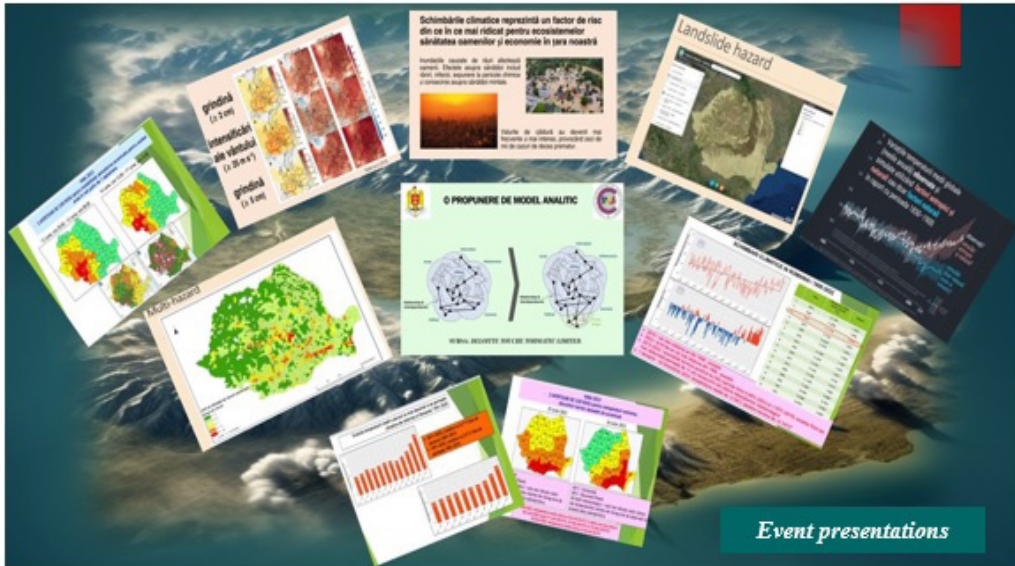
- *Global Warming and International Relations Theory: Issues, Concepts and Approaches;*
- *Climate Change in the Context of National Security;*
- *Climate Change in Romania - Trends and Challenges;*
- *Identifying the Effects of Climate Change and its Impact at National Level;*
- *Climate Change Initiatives;*
- *Strategy for Romanian Armed Forces Preparation to Address Climate Change and Energy Transition;*
- *The Interdependence between Critical Infrastructure and Climate Change;*
- *The Impact of Climate Change on National Security;*
- *Climate Change and its Direct Effect on Romania;*
- *Implications of Climate Change in the Military;*
- *Pollution as a Risk Factor in Chronic Lung Diseases;*
- *Changes in Heat Wave Indices in Romania;*
- *Ecological Dimension of Security - The Importance of Water;*
- *Ro-Risk Project;*
- *Vulnerabilities Translated by Climate Change Effects into Environmental Risks and Threats to National Security;*
- *Vulnerabilities of the Economic Sector in the Context of Climate Change;*
- *Climate Change Impacts on National Security. Vulnerabilities in the Societal Sector;*
- *How to Be Resilient. Emotions, from Survival Lessons to Lessons Learned;*
- *Reflecting Climate Change in Public Discourse and Romanian Media;*
- *The Effects of Climate Change on Military Security;*
- *NATO Action Plan on Climate Change and Security.*

A brief assessment of the activity was made at the end of the workshop, during which the conclusions on the results obtained from the scientific approach were presented.

The activity was publicized online, before and after its conclusions, during which the participants expressed their appreciation on how the activity was organised and their intention to participate in the next CDSSS scientific activities.



SCIENTIFIC EVENT



Event photo: Workshop with the theme
“THE IMPACT OF CLIMATE CHANGE ON NATIONAL SECURITY (II)”



The Workshop represented a success both for CDSSS and for “Carol I” National Defence University, in terms of the topics addressed, the scientific level of the presentations, the institutional affiliation of participants origin and the results obtained. The activity made a real contribution to the development of the knowledge-sharing in the security and defence field, providing a high-quality academic framework for debate and real support for the strategic and security culture development.

WORKSHOP III (fourth semester, 2024)

The third workshop is scheduled to take place at the conclusive phase III of the associated research approach of the project, towards the end of 2024.

Specific planned objectives:

- to present the model analysis on the impact of climate change on national security;
- to present the results of the model implementation in the form of conclusions on how climate change may affect national security in the next 20 years;
- to determine ways to optimise the model.

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