Organization for Security and Co-operation in Europe
PARLIAMENTARY ASSEMBLY

Parliamentary Web Dialogue

Framing the Environmental Security – Public Health Nexus

Science Informs Policymaking

Tuesday, 25 May 2021, 14:30 – 17:00 CET

HIGHLIGHTS[1]

EXECUTIVE SUMMARY

Under the auspices of the OSCE PA General Committee on Economic Affairs, Science, Technology and Environment and with the scientific support of the Italian Society of Environmental Medicine (SIMA), the Assembly held the Parliamentary Web Dialogue "Framing the Environmental Security – Public Health Nexus" on 25 May 2021. The aim was to explore the interlinks between environmental degradation and public health, including in the context of the COVID-19 pandemic. The event served as a forum for interdisciplinary knowledge-sharing and intended to promote policy convergence around the need to better protect the environment to safeguard citizens' health, reverse climate change, promote socio-economic development, and enhance global security. Ultimately, the web dialogue reinforced the OSCE PA's determination to increasingly engage in this important security domain, including promoting well-informed environmental protection strategies and more sustainable development policies.

Facilitated by **Mr. Marco Bonabello**, Director for Economic and Environmental Security at the OSCE PA International Secretariat, the policy dialogue was opened by **Ms. Doris Barnett**, Chair of the OSCE PA General Committee on Economic Affairs, Science Technology and Environment and by **Mr. Roberto Montella**, OSCE PA Secretary General. In their welcoming remarks, they stressed how properly understanding the nexus between environmental security and public health is instrumental to protecting the planet and the people living in it. Accordingly, these topics should be dealt with as a matter of priority by the International Community.

High-level guest speakers were **Dr. Maria Neira**, Director of the Public Health, Environment and Social Determinants of Health Department at the World Health Organization, **Ms. Veronica Manfredi**, Director for Quality of Life Directorate-General for Environment of the European Commission, **Prof. Dr. Jos Lelieveld**, Director at the Max Planck Institute for Chemistry and Professor in Atmospheric Physics at Mainz University, **Prof. John Ioannidis**, Professor of Medicine, of Epidemiology and Population Health at the Stanford Prevention Centre and **Prof. Prisco Piscitelli,** Vice-President of the Italian Society of Environmental Medicine. Collectively, they illustrated the latest international policy efforts and scientific findings in this context. In their focussed remarks, they

[1] DISCLAIMER: The Highlights from the OSCE PA Web Dialogue are not intended to be official conclusions, nor an exhaustive list of all issues raised during the discussion, but rather a collection of interesting points noted by the International Secretariat for possible future reference. As such, the OSCE Parliamentary Assembly makes no claims nor warranties of any kind, expressed or implied, about their completeness and reliability.

The event was organized with the scientific support of the Italian Society of Environmental Medicine (SIMA).

SIMA

also floated several proposals on how to better safeguard public health and international security, thereby triggering a lively parliamentary debate.

Closing the event, **Ms. Elona Gjebrea Hoxha**, Rapporteur of the OSCE PA General Committee on Economic Affairs, Science Technology and Environment, stressed that reversing environmental degradation in all its forms and mitigating its detrimental impact on public health is a shared security priority for all OSCE participating States. More specifically, she underlined the importance of (1) supporting the low-carbon energy transition, (2) promoting "green finance" and a more responsible economy, and (3) harnessing the opportunities offered by the digital revolution and technological innovations to support the green transition and promote global security.

KEY FINDINGS

- **The nexus between environmental security and public health** is profound and multifaceted; as such, it should be studied more carefully and feature more prominently in the international security agenda.
- **The world is facing several major environmental crises** including climate change, biodiversity loss, unsustainable use of natural resources, and pollution. These bring along many human and animal health risks in the form of infections and non-communicable diseases, water scarcity and food safety problems. **Accordingly, the COVID-19 pandemic** should be framed as a **symptom of a much more intricate emergency affecting planet Earth**.
- Environmental degradation, pollution, and climate change are directly **affecting our security by negatively impacting public health and socio-economic development,** including access to critical resources and migratory pressures. Intensifying climate change is estimated to increase future risks of conflict as well[2].
- **The relationship between altered environmental conditions and human health is particularly complex**: drivers of global environmental change (e.g. land-use change, resource scarcity, or climate change) can **directly pose health risks,** or impair ecosystem services[3] that subsequently influence public health.
- **Clean air is fundamental to healthy human life and ecosystems - of all environmental factors which lead to disease and shorten life expectancy, air pollution is predominant**. The health effects of air pollution are severe – high air pollution increases respiratory and cardiovascular hospital admissions and mortality and contributes to reduced life expectancy[4].
- Statistically, **loss of life expectancy in global terms is ten times larger due to air pollution than due to any kind of violence** (including armed conflicts or domestic violence). **Around 25 percent of the global causes of diseases and death are related to environmental degradation**.
- It is estimated that **air pollution kills approximately 7 million people every year**, out of which approximately 4.2 million perish from ambient (outdoor) air pollution alone. However, recent studies[5] estimate a higher mortality burden of **10.2 million premature deaths annually from the fossil-fuel component of fine particulate matter** (PM 2.5).

[2] "Climate as a risk factor for armed conflict", Mach et al., Nature 571, 193–197, 2019.
[3] Ecosystem services are the benefits provided by ecosystems that contribute to making human life both possible and worth living. Examples of ecosystem services include products such as food and water, regulation of floods, soil erosion and disease outbreaks, and non-material benefits such as recreational and spiritual benefits in natural areas.
[4] Health effects of air pollution include exacerbation of asthma in the short-term, while in the long-term, they can cause stroke, lung cancer, different respiratory conditions, cardiovascular diseases, and even mental health problems.
[5] For instance, see: "Global mortality from outdoor fine particle pollution generated by fossil fuel combustion: Results from GEOS-Chem", Vohra et al, Environmental Research, Volume 195, 2021.

- **In the context of the COVID-19 pandemic and the spread of coronavirus, air pollution has been signalled as an important cofactor,** increasing the severity of COVID-19 and increasing COVID-19 mortality by 15% worldwide[6].
- Considering how particulate matter serves as "carriers" for several chemical and biological pollutants - including viruses - **there is also growing evidence that the airborne route transmission of SARS-CoV-2 is exacerbated by air pollution**. An observational study[7] in Northern Italy during the first coronavirus wave proved revealing in this regard, as it discovered SARS-Cov-2 RNA traces on particulate matter in the city of Bergamo. Accordingly, particulate matter should be regarded as a contributing factor to COVID-19 infections, both in terms of health outcomes and disease diffusion.
- **Environmental protection contributes to economic growth.** Clean air and water, healthy food and preserved nature all benefit human health and, consequently, bring significant savings. Notably, there are clear economic benefits from improved air quality[8] like fewer respiratory illnesses, which results in less public money spent on medical treatments and reduced impact on work productivity. Likewise, merely adapting to, rather than mitigating and reversing climate change will imply enormous costs.
- Against this backdrop, **tackling environmental degradation and climate change is a top priority** of current and future generations. It is critical to address these interlinked security challenges urgently, synergistically, coherently, and without leaving anyone behind, as the security of one affects the security of all in this context.
- **It is necessary to halt pollution in all its forms**. Notably, what is really at stake is human survival, rather than the endurance of planet Earth!
- **Considering the greenhouse effect of many air pollutants, the "health argument" is also a predominant factor in our climate action.** By protecting citizens' lungs, States are also safeguarding the world climate and vice versa.
- The **2021 European Commission's action plan** *"Towards a Zero Pollution Ambition for air, water and soil – building a Healthier Planet for Healthier People"*[9] represents a decisive step **in** reducing health inequalities and promoting green solutions[10]. As such, it could shape **a global vision for 2050**, where pollution is reduced to levels that are no longer harmful to human health and natural ecosystems.
- Regularly **monitoring and evaluating the implementation of existing environmental standards is critical** to better understanding whether existing approaches are yielding expected results, tracking progress, identifying persisting gaps, and anticipating future trends.
- Finally, it is **key to ensure that all views are duly listened to and considered, including** those who argue in favour of more lenient environmental policies on economic grounds.

[6] The study "Regional and global contributions of air pollution to risk of death from COVID-19" estimates that the proportion of pollution-related COVID-19 deaths is around 19% in Europe, 17% in North America, and 27% in East Asia

[7] "Evaluation of the potential relationship between PM pollution and COVID-19 infection spread in Italy ", SIMA, 16 March 2020.

[8] According to the OECD the economic welfare benefits of cleaner air have been demonstrated to outweigh the costs by at least 30-to-1 in the case of the US, while they could be at least 14-to-1 in the case of Europe under tighter regulations.

[9] Towards zero pollution in air, water and soil – EU action plan, European Commission, 12 May 2021.

[10] There are nine flagships (integrated activities) in the EU Zero Pollution Action Plan, one leading to another: 1) reducing health inequalities through zero pollution, 2) supporting urban zero pollution action, 3) promoting zero pollution across regions, 4) facilitating zero pollution choices, 5) enforcing zero pollution together, 6) showcasing zero pollution solutions for buildings, 7) living labs for green digital solutions and smart zero pollution, 8) minimising the EU's external pollution footprint and 9) consolidating the EU's knowledge centres for zero pollution.

KEY RECOMMENDATIONS

- **Concerted global efforts are urgently required** to address the complex set of security threats stemming from environmental degradation. Policymakers should work together with health experts and scientists **to tackle both pollution and climate change and protect the health of their citizens**. Doing so is a matter of survival, while also bringing clear economic advantages.
- **"Combination therapy"[11] is fundamental** in designing and implementing policies, legislation, and programmes to tackle environmental degradation, protect public health and build a more sustainable world. **Stakeholders at international, regional, national, and local levels should come together and work in synergy to drive positive environmental change** through the various means at their disposal.
- In this context, it is pivotal to (1) **support the low-carbon energy transition**, (2) **promote** "green finance" and **a more responsible economy**, and (3**) harness the opportunities offered by the digital revolution and technological innovations** to support the green transition and promote global security. While future technological advancements will play a critical role in better protecting the environment and public health, it is critical to make the best possible use of already existing technologies.
- Accordingly**, policymakers should aim at adopting stringent national legislation and at mobilizing adequate resources** to implement relevant international obligations and commitments.
- **OSCE participating States should move decisively towards environmentally friendly sources of energy** to reverse environmental degradation and support public health and the economy. To this end, it is paramount to **cease all public subsidies to fossil fuels and invest in technological innovation.**
- **National Authorities should capitalize on the numerous co-benefits for public and climate health derived from the reduction of greenhouse gas and air pollution emissions,** especially by fossil fuel combustion**.**
- **Authorities should regularly analyse the status of the environment** and identify the main causes of environmental degradation. **Moreover, States should better understand how environmental degradation and climate change affect different public health components**[12] to preserve them more efficiently. An **accurate medical reading of environmental data is critica**l to protect citizens' security and health.
- It is also paramount to continue **studying the complex interlinks between environmental degradation, insecurity, and conflict,** including how environmental degradation can act as a "risk multiplier". In all these domains, **the contribution of science, independent research and technology are paramount.**
- **Parliamentarians should advocate for well-informed, coherent, and stringent environmental mitigation and adaptation policies** based on the latest scientific findings, and in line with recognized best practices and relevant international standards.
- **Parliamentarians should play a major role also in the oversight of** the implementation of **stringent environmental frameworks and in raising public awareness** about the environmental security – public health nexus.
- **Interparliamentary fora**, such as the OSCE PA, shall continue to **provide an open platform to share experiences and lessons learned** in this context. In doing so, they will **inform decision-making processes** and **foster policy convergence** on environmental security across the region.

[11] In medical terms, combination therapy refers to using multiple therapies and methods to threat a disease.
[12] For instance, medical and physical health, mental health, and the health of communities.