



UNITED NATIONS

ENVIRONMENT MANAGEMENT GROUP



**23<sup>rd</sup> Senior Officials' Meeting of the Environment Management Group**

Senior Segment, 20 September 2017, (09.00 a.m-12.30 p.m. NY time)

EMG/SOM23/5

04 September 2017

Distribution: EMG Members

**Strategic Directions for the EMG and its Future Work**

**Note by the Chair**

**Summary**

Under Agenda item 4, Senior Officials are expected to discuss environmental issues that warrant system-wide cooperation and coherence in particular in follow up of the 2030 Agenda for Sustainable Development. This note is provided by the EMG Chair to stimulate a strategic discussion among Senior Officials in order to define potential issues for system-wide cooperation and directions for future work of the EMG.

**Delivering on the 2030 Agenda**

The international community took on a tremendous challenge in 2015 to implement a comprehensive, universal and integrated sustainable development goal (SDG) framework for eradicating poverty, reducing inequality and ensuring environmentally sustainable growth. Already, in the third year of the 2030 Agenda, many countries are getting up to speed to institutionalize the SDGs and monitor their progress. A diverse range of measures has been initiated in advancing implementation, such as the reform of institutional structures and the alignment of national plans and policies with the SDGs, allowing us to assess and relate national data in measuring the implementation of the SDGs. The level of implementation varies amongst countries, reflecting the diversity of their challenges and their social, economic, environmental and political contexts. In short, moving from a sectoral approach to working across sectors, to measuring and monitoring progress on a set of complex goals - as well as facilitating their communication to the public - all remain key challenges for countries in operationalizing the goals.

The processes and challenges of the UN system in delivering the 2030 Agenda to some extent mirrors the situation of Member States. With its integrated approach and indivisible nature, the 2030 Agenda challenges UN agencies to ensure that their specialized policy decision-making and response systems are well suited to uptake and effectively support the integrated SDGs, including their environmental dimension.

Environment Management Group Secretariat (EMG)

11-13 Chemin des Anémones, International Environment House, CH-1219 Châtelaine, Geneva, Switzerland

Tel: +41-22-917-8693 ♦ Fax: +41-22-917-8024 ♦ Email: [emg@unep.ch](mailto:emg@unep.ch)

While agencies have made progress in reflecting the SDGs (including their environmental dimension), in their high-level organizational goals and plans, policies and programs, the key challenge is how to grow a culture of integration in decision-making and policy/project implementation while preserving the advantages of specialized and sectoral expertise. How to employ agency sectoral expertise in delivering cross-sectoral Goals and how to share the tasks on common Goals and avoid duplication in their implementation, reporting and monitoring?

Cognizant of the need for collaboration and coherence, UN agencies have come to an agreement, under a System-Wide Framework of Strategies on the Environment (SWFS), on a set of principles and actions, and regular information exchange in addressing the environmental dimension of the SDGs. In the first synthesis progress report under the Framework, a large number of UN agencies have reported being engaged in one or more aspects of environmental issues in the SDGs and their various measures in aligning their corporate policies and strategies with the SDGs.

Agencies have shown an interest and reported on collaboration successes in several of the nexus issues present in the SDGs, including their environmental dimension. Some examples include the environment-health nexus (UN Environment-WHO), the climate-migration nexus (IOM-UNFCCC-OHCHR-UNHCR-UNICEF), poverty-environment nexus (UNDP-UN Environment), and the cities-environment nexus (UN-Habitat-UN Environment-UNDP-ILO-UNESCO).

Agencies have also called for information exchange and progress reporting of interagency and collaborative efforts and best practices, and to present findings at different interagency fora; for example, through knowledge management tools useful for mapping and the dissemination of system-wide efforts on the environment.

The importance of properly tracking progress towards the implementation of the SDGs is highlighted as a challenge by many agencies. Monitoring and reviewing agencies' impacts seems to be of concern as indicators are not standardized and agencies tend to align their strategic-plans to relevant SDGs and respective targets in an ad-hoc and uncoordinated manner.

They have also underlined the challenge of mainstreaming the normative and programmatic work of each Member Agency into the Member States' national plans and strategies. The Secretary-General's reform to reposition the UN development system to deliver on the 2030 Agenda is considered to be a timely opportunity to engage UN agencies more actively with UN Country Teams and UN Development Assistance Frameworks to support countries in delivering the SDGs. It is a very important opportunity to recalibrate the different platforms to ensure added value, coherence and delivery on the ground.

In light of the points raised above, Senior Officials are invited to engage in a discussion and share their views on the following issues:

- a) What are the experiences or challenges that your agency has faced in integrating the SDGs into corporate strategies and plans, in partnering with others and in responding to country needs with relevance to the environment? What are the potential areas where collaboration and coherence is missing but can be beneficial?
- b) In light of the Secretary General's report "[Repositioning the UN development system to deliver on the 2030 Agenda – Ensuring a Better Future for All](#)", how can a reformed UN development system deliver on the environmental dimension of the 2030 Agenda? How can the various UN coordination platforms on the environment contribute more coherently to a revitalized UN development system?

## Contributing to the Biodiversity Agenda

In 2010 in Nagoya, the international community gave a new momentum to the Biodiversity Agenda by adopting [The Strategic Plan for Biodiversity 2011-2020](#) and its twenty Aichi Biodiversity Targets, providing a framework for priority actions on conservation, sustainable use of biodiversity, and the fair and equitable sharing of the benefits arising out of the use of genetic resources. This framework was a major step in the history of multilateral discussions on biodiversity, placing biodiversity in the centre of sustainable development and highlighting its value and essentiality for human well-being. The Nagoya outcome has made it ever more pertinent for Member States to relate and integrate the Aichi Targets to some of the key SDGs such as food security, health, access to clean water and sustainable energy for all. This has made the biodiversity agenda a part of the larger framework for sustainable development and a responsibility of wider socio-economic and environmental sectors.

While progress has been made by countries in implementing some aspects of the Aichi Targets, the [Global Biodiversity Outlook 4](#) shows that in most cases this progress will not be sufficient to achieve the targets set for 2020, and additional action is required to keep the Strategic Plan for Biodiversity on course. Based on current trends, pressures on biodiversity will continue to increase and the status of biodiversity will continue to decline<sup>1</sup>. Most countries lack the whole-of-government approach necessary to address the drivers of biodiversity loss. Attention is needed at the highest levels of government to address this problem. In addition, public engagement and awareness of the issues and their importance needs to elevate to a level associated with climate change and the momentum that led to the Paris Agreement. Actions need to be taken urgently to integrate the value of biodiversity into policy. Actions also need to be taken to implement policy and regulations, to reach out to greater numbers of stakeholders, and to change societies' production and consumption habits.

The [EMG Biodiversity Report](#) and the Map of UN Agencies vis a vis the Aichi Targets prepared in 2010-2013, shows the relevance of a large number of UN agencies to the biodiversity goals, both in the way they impact and contribute to biodiversity. Enhancing human well-being was recognized as the common denominator for most of the UN agencies in relating their policies and programs of work to the Aichi Targets. A number of UN agencies and conventions already conduct activities or cooperate on biodiversity as part of their own strategies. Most EMG Members could, however, further enhance their contributions to the implementation of the Aichi Targets.

A number of mechanisms for cooperation are already in place – notably among the Convention on Biological Diversity and the other Rio Conventions, and among the United Nations agencies. Some mechanisms focus on specific thematic areas, and these cooperative efforts are starting to create important interactions with key sectors such as land management, agriculture and forestry. A number of UN system-wide actions address the indirect drivers of biodiversity loss through the provision of policy advice, communication, education and public awareness. These actions include the implementation of the ecosystem approach, the revision of economic incentives and the mainstreaming of biodiversity across sectors in government and society. Contributing to national biodiversity mechanisms, biodiversity monitoring and evaluation, and data analysis and integrating biodiversity into wider UN country level development plans such as UNDAFs, are identified for UN-wide support amongst other areas.

---

<sup>1</sup> Secretariat of the Convention on Biological Diversity (2014) Global Biodiversity Outlook 4 — Summary and Conclusions. Montréal. Available online : <https://www.cbd.int/gbo/gbo4/gbo4-summary-en.pdf>

In light of these developments, and looking forward to the post-2020 global framework for biodiversity under the wider 2030 Agenda, EMG Senior Officials are invited to share their views and perspectives on:

- a) How can UN Agencies leverage and give a new momentum to biodiversity and the Aichi Targets in the specific areas of their work during the next three years, in line with their respective roles and agendas for implementing the SDGs?
- b) How can UN agencies effectively contribute to the consultations for the preparation of the post-2020 biodiversity framework and actively engage their constituents in these consultations?
- c) How can the biodiversity agenda be elevated, learning from the climate and other successful experiences in forging a UN and global commitment?

### **Contributing to the 3<sup>rd</sup> UN Environment Assembly in addressing the issue of Pollution**

As the main UN global environmental authority and voice, the United Nations Environment Assembly will address the issue of Pollution in its forthcoming third meeting from 4-6 December 2017. The meeting is expected to deliver a number of commitments to end the pollution of our air, land, waterways, and oceans, and to safely manage chemicals and waste. These will include:

- A political declaration,
- A set of resolutions and decisions by Member States to address specific dimensions of pollution,
- Voluntary commitments by Governments, private sector entities and civil society organizations to clean up the planet and a clean-up pledge,
- A collection of individual commitments to take action to end pollution in all its forms.

Based on the report “Towards a Pollution Free Planet”, Member States will address scientific impacts and economic costs of pollution in the pollution areas as air, land and soil, fresh water, marine and oceans as other cross-cutting sources of pollution. The report also suggests a framework for transition to a Pollution Free Planet. The report has been shared with EMG members and received some comments by certain UN agencies.

The UN system has traditionally contributed to the agenda and deliberations of the Environment Assembly, including through a report of its work in the EMG. In view of the diverse environmental expertise of UN agencies in specific aspects of Pollution, it is suggested that the Senior Officials share their views and perspectives on how the work of their respective agencies and those of their intergovernmental processes can contribute and inform the deliberation of the Environment Assembly. They are also invited to share their views on how they wish to participate or communicate a common message to the assembly. As the Environment Assembly brings all stakeholders together in addressing global environmental issues, it provides a unique occasion for the UN system to share views and knowledge with other actors present in the meeting and to identify potential areas for future collaboration and partnership.

## **Reviewing achievements made in enhancing sustainability of internal UN operations - needs and expectations from the UN agencies**

The adoption of the SDGs challenges the UN system to improve its own internal sustainability efforts. The EMG work streams on enhancing Environmental and Social Sustainability in the UN (ESS), UN Climate Neutrality (including the recent CEB Roadmap for a Climate-Neutral UN by 2020) and the Peer Review Process, are examples of such system-wide efforts.

10 years after the approval of the UN Climate Neutral Strategy by the Secretary General and the Chief Executives Board and in moving towards the implementation of the 2030 Agenda in which the UN should lead by example, UN entities may wish to consider whether the current approach, mechanisms and modalities of the internal UN sustainability efforts, including those under the EMG, are adequate in enhancing internal sustainability at policy, program and facilities levels.

The Senior Officials are therefore invited to discuss opportunities as well as implications for improving internal sustainability work and operations of the UN system in light of the existing UN internal sustainability processes of the EMG.

## **Emerging threats to global environmental security and potentials for UN system-wide response**

The EMG traditionally looks at emerging environmental issues that may warrant UN system-wide response. In order to facilitate consideration of such issues and to keep them in perspective. A non-exclusive summary of selected alarming global environmental concerns derived from global environmental assessment reports has been provided in the annex 1 to this note.

While some or specific aspects of these issues might have already been addressed by UN agencies or through collective collaborative mechanisms, Senior Officials might find it useful to look at these issues and other environmental challenges that may require enhanced and collective response by the UN system and a focus for future work of the EMG.

## *Annex I*

### **Emerging Threats to Global Environmental Security**

The world is grappling with widespread environmental issues. Climate change and human encroachment into the environment are critical stressors that affect many contemporary environmental problems such as resource depletion, pollution, biodiversity loss, and high mortality rates associated with various natural hazards. Continued global economic growth has been made possible by sacrificing environmental resources that are exploited beyond their carrying capacity. Despite various mitigation efforts, dynamic environmental changes associated with overshooting of natural resources to support human activities not only intensify decades-old environmental problems but also create a host of emerging challenges. Addressing these challenges will require robust scientific and political consensus to forge international coalitions and mechanisms to realign the world's socio-economic growth path to a sustainable trajectory. What follows is a synopsis of major emerging global environmental challenges facing the world in the 21<sup>st</sup> century.

#### **Water resource depletion**

Water is a renewable but depletable resource. Human activities have altered the natural hydrologic cycle by changing availability and quality of water, as well as changing the time scale of the processes that replenish water resources. Consequently, water resources are under growing pressure in different parts of the world as is evidenced by over-allocation of surface water and declining groundwater table. Nearly twice the amount of fresh water in the global river network is withdrawn each year to meet various demands (Oki and Kanae, 2006). Tragic problems like shrinkage and disappearance of inland water bodies are becoming a trending threat in areas where the natural water balance is disrupted, primarily for agricultural production. Furthermore, groundwater depletion is manifested in declining groundwater tables and increasing salinity levels due to excessive freshwater withdrawal and intrusion of brackish groundwater into in-land and coastal freshwater wells. Groundwater resources provide about 20% of the annual water withdrawal (Shah et al., 2000; Wada et al., 2010). Extensive mining of deep fossil groundwater is a concealed problem that should be a major source of concern since it can take thousands of years for these resources to replenish (Burdon, 1977). Groundwater is the backbone of water management in areas where surface water alone cannot meet the demand, which is common in many population centers in arid and semi-arid regions.

#### **Desertification**

Desertification is a form of land degradation caused by poor land and water management for various agricultural and development activities, especially in drylands and desert frontlines around the world. Estimates of global land degradation vary between 15% and 65% of global land (Safriel, 2007). Drylands comprise about 41% of global land surface, of which 10-20% is severely degraded (MEA, 2005). A number of factors triggered by climate change result in desertification due to declining soil water content and destruction of protective land cover, including reduced precipitation and increased vegetation water requirement (i.e., evapotranspiration), excessive loss of vegetation in overgrazed lands, and poor forest management and land conservation. The

phenomenon has important implications for food and water security in poor, rural areas because of adverse impacts on land productivity and water holding capacity of the landscape.

### **Sand and dust storms**

Sand and dust storms are an emerging environmental problem. On average, about 2,000 million tons of dust is emitted into the atmosphere annually (Shao et al., 2011). This pressing problem adversely affects the livelihood of people by disrupting daily activities and causing health issues such as increased respiratory and infectious diseases leading to premature death, especially among vulnerable populations including children and the elderly and those with cardiovascular and respiratory diseases (Shepherd et al., 2016). While natural biogeochemical cycles of the Earth are the chief cause of dust emissions, poor water and management have significantly worsened the situation in recent years. Dust plumes rising from the Sahara in Africa are a major contributor to the problem, traveling thousands of kilometers around the world. Unsustainable water resources management coupled with hotter and drier climate exacerbate the problem by creating new sources of dust (e.g., drying lake beds) in arid and semi-arid regions.

### **Waste disposal**

Waste management and disposal is a growing global challenge. Wastes of different forms pose varying levels of hazard to public health and environment. New forms of waste associated with digital age and global consumerism are creating serious problems in terrestrial and marine ecosystems. Electronic waste (i.e., e-waste) comprised of discarded pieces of electronic appliances (e.g., computers and mobile phones) is estimated to be 20–25 million tons per year (Robinson, 2009). While developed countries in North America, Europe and Oceania are currently setting the pace for global e-waste production, developing countries are following suit and will become major e-waste producers in the near future (Robinson, 2009). The consequences of poorly managed e-waste include chemical environmental contamination of land and water resources. Plastic debris is another widespread ecologically harmful problem caused by improper waste disposal. Land-based plastic waste entering oceans has destructive effects of on marine wildlife. Plastics ingestion by seabirds has been predicted to reach 99% of all species by 2050, demonstrating the need for proper waste management to combat this threat (Wilcox et al., 2015). Other marine organisms as small as zooplanktons to larger species of fish and whales are also vulnerable to plastics through ingestion of water containing microplastics or eating larger plastic debris in the food web.

### **Ocean acidification**

Ocean acidification is caused by reduction of pH of the ocean over extended periods of time. There is strong evidence that a pH decrease of 0.1 has increased the acidity of oceans by more than 25% due to uptake of CO<sub>2</sub> since the industrial era. The amount of anthropogenic CO<sub>2</sub> uptake by oceans since 19750 is estimated at 30%. This rate has increased significantly during the last 4 decades with detrimental impacts on marine ecosystems such as coral reefs. Polar marine habitats are particularly vulnerable to warming temperatures and acidity of oceans.

### **Melting ice sheets and sea level rise**

Scientific syntheses indicate with high confidence that global glaciers have been shrinking and Antarctic and Greenland ice sheets have been losing mass continuously during the last two decades (IPCC, 2014). Consistent with these trends, temperatures in permafrost regions have

been increasing while extent of snow cover in northern Hemisphere has been declining. Between 1979 and 2012, the average decadal rate of areal decline of Arctic ice sheets was between 3.5% and 4.1%. Areal trends of ice sheets have varied between different regions of Antarctica with an average overall decadal increase of 1.2% to 1.8% between 1979 and 2012. Global mean sea level rose significantly throughout the 19<sup>th</sup> century and it has continued to rise at an increasing rate (IPCC, 2014). It is highly likely that about 95% of the ocean areas will have rising mean sea level by the end of the century, despite regional differences in the actual amount of sea level rise. This phenomenon will increase the vulnerability of coastal areas to salt water intrusion into coastal aquifers tidal inundation, and flooding, particularly when storm surge is compounded with high tides on low-lying coastal and estuarine lands.

### **Extreme weather and climate events**

Natural and built environments are vulnerable to increasing climate variability. Global warming is triggering an increase in the frequency and severity of extreme weather and climate events, including floods, droughts, and heat spells. Increasing heat waves already threaten to give rise to mortality events, especially in developing countries (Mazdiyasni et al., 2017). There is also evidence of greater widespread flooding risk to many communities due to more intense rainfall and rising sea levels (IPCC, 2014). More frequent extreme precipitation may also increase landslides that pose a risk to rural settlements. Likewise, dry spells are becoming more frequent with critical implications for regional water security, food security, and wildfires (IPCC, 2014).

### **References**

Bernstein, L., Bosch, P., Canziani, O., Chen, Z., Christ, R. and Davidson, O. (2007). Climate change 2007: synthesis report. Summary for policymakers. In *Climate change 2007: synthesis report. Summary for policymakers*. IPCC.

IPCC, Intergovernmental Panel on Climate Change (2014). Climate Change 2014: Synthesis Report. Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change [Core Writing Team, R.K. Pachauri and L.A. Meyer (eds.)]. IPCC, Geneva, Switzerland, 151 pp.

Mazdiyasni, O., AghaKouchak, A., Davis, S.J., Madadgar, S., Mehran, A., Ragno, E., Sadegh, M., Sengupta, A., Ghosh, S., Dhanya, C.T. and Niknejad, M. (2017). Increasing probability of mortality during Indian heat waves. *Science Advances*, 3(6), e1700066.

MEA, Millennium Ecosystem Assessment—Ecosystems and Human Well-Being: Desertification Synthesis (World Resources Institute, Washington, DC, 2005).

Robinson, B.H. (2009). E-waste: an assessment of global production and environmental impacts. *Science of the total environment*, 408(2), 183-191.

Safriel, U. (2007). The assessment of global trends in land degradation. *Climate and land degradation*, 1-38.

Shao, Y., Wyrwoll, K.H., Chappell, A., Huang, J., Lin, Z., McTainsh, G.H., Mikami, M., Tanaka, T.Y., Wang, X. and Yoon, S. (2011). Dust cycle: An emerging core theme in Earth system science. *Aeolian Research*, 2(4), 181-204.

Shepherd, G., Terradellas, E., Baklanov, A., Kang, U., Sprigg, W., Nickovic, S., Boloorani, A.D., Al-Dousari, A., Basart, S., Benedetti, A. and Sealy, A. (2016). Global assessment of sand and dust storms.



Wilcox, C., Van Sebille, E. and Hardesty, B.D. (2015). Threat of plastic pollution to seabirds is global, pervasive, and increasing. *Proceedings of the National Academy of Sciences*, 112(38), 11899-11904.