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International Workshop on Water Scarcity Taking action in transboundary basins and reducing health impacts

To be held in Geneva, 11-12 December 2017
Palais des Nations, Geneva, Switzerland,
starting at 10.00 a.m. on Monday, 11 December 2017

INFORMATION NOTICE

I. Background

Water scarcity is of growing concern in many parts of the world. Population growth, urbanization, increased demands in irrigated agriculture and inadequate water management are important determinants of water scarcity, accelerated by the effects of climate change which result in an increase in the frequency and intensity of droughts. Today, already about 2 billion people are living in water stressed areas. By 2025, half of the world's population is expected to do so. Globally, each 1°C of temperature increase caused by global warming is projected to result in a 20% reduction in renewable water resources.

Scarcity has serious consequences for society and threatens sustainable development. For example, water scarcity can negatively affect water supply and sanitation services and may impact health. A lack of sufficient amounts of safe drinking-water can compromise hygiene behaviours and increase the risk of diarrhoeal disease. It may also limit economic growth due to a decline in agricultural production, affect the environment and biodiversity by reducing environmental flow needed for vital ecosystems, lead to conflict within and across countries and exacerbate migration. Persistent drought conditions can result in food insecurity, loss of livestock, famine, malnutrition and stunting with children and women being the most vulnerable. With the existing climate change scenarios, water scarcity in some arid and semi-arid places may displace between 24 million and 700 million people by 2030.

In recent years, the topic of water scarcity has attracted more and more international attention. Target 6.4 of the Sustainable Development Goals requests countries to “*substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity*”. Target 6.5 requires implementing “*integrated water resources management at all levels, including through transboundary water cooperation, as appropriate*”. Member States of the WHO European Region committed to strengthen and advance actions toward improving environment and health at international, national and subnational

levels through the Declaration of the Sixth Ministerial Conference on Environment and Health (Ostrava, 13–15 June 2017).¹

Implementing these ambitious objectives will require increased attention and efforts at national level on amending policies and/or institutional arrangements, as well as technological aspects. While concrete measures at national level are crucial to deal with water scarcity consequences and mitigate health impacts, transboundary cooperation offers opportunities for synergies through cooperative, basin-wide approaches. More than 60% of all freshwater resources worldwide cross national boundaries. Many of the 286 transboundary rivers and over 500 transboundary aquifers are particularly vulnerable to the effects of climate change and increasing water scarcity. There are already examples when melting and disappearing glaciers, over-exploitation of groundwater and drying rivers resulted in water shortages and water stress downstream. In many regions of the world, increasing water scarcity may lead to tensions and even conflicts between riparian countries and sectors over how to share scarce water and how to address droughts. Transboundary legal and institutional arrangements for cooperation are often not flexible enough and do not include provisions for low water flows.

Transboundary cooperation in addressing water scarcity and climate change impacts can enable more efficient and effective solutions. More and more transboundary basin organizations worldwide therefore recognize and address the challenge of water scarcity and droughts.

Against this background, a global workshop on water scarcity and climate change adaptation with focus on transboundary cooperation and health impacts will be organized jointly under the UNECE Convention on the Protection and Use of Transboundary Watercourses and International Lakes (Water Convention) and the UNECE-WHO/Europe Protocol on Water and Health to the Convention. The workshop will be held on 11-12 December 2017 under the leadership of the Netherlands and Switzerland (as lead Parties for climate change activities under the Convention) and Spain and Italy (as lead Parties under the Protocol).

II. Objectives and topics of the workshop

The workshop aims to accelerate actions to address water scarcity and thereby reduce the related health, social, economic and environmental risks, by sharing practical solutions, in particular from the perspective of transboundary water cooperation and health impacts. It will review measures to prevent scarcity and mitigate its consequences taken in transboundary basins and at national level, identify good practices and lessons learned and formulate some conclusions for further activities.

More specifically, the workshop has the following objectives and will cover the following issues:

- Clarify the difference and linkages between water scarcity and droughts; review the challenges related to scarcity and climate change: health, social, economic and environmental impacts of scarcity, current situation and future scenarios, relevant international commitments
- Discuss how to address water scarcity in legal, institutional and policy frameworks for cooperation in transboundary basins:

¹ The Ostrava Declaration stipulates ensuring “*universal, equitable and sustainable access to safe drinking-water, sanitation and hygiene for all and in all settings*” through “*providing sufficient amounts of safely managed drinking-water, ensuring safely managed sanitation from collection to disposal or reuse of wastewater, and sustaining the availability and quality of freshwater resources, especially in regions that experience water stress, high-usage patterns and competing demands accelerated by the consequences of climate change*”. Annex 1 to the Declaration proposes, among others, “*building climate-resilient WASH services that are responsive to the effects of climate change impacting variability, availability and quality of freshwater resources, as well as to extreme weather events (i.e. droughts, torrential rains and floods)*”.

- How do the Water Convention, the United Nations Convention on the Law of Non-Navigational Uses of International Watercourses (Watercourses Convention) and international water law more broadly help address water scarcity?
- How can water scarcity be addressed in transboundary agreements, if appropriate and needed? How to ensure flexibility?
- How can countries deal jointly with water scarcity, if needed, in river basin organizations and basins in which agreements do not address water quantity issues?
- Review possible measures to address water scarcity from the health perspective, such as:
 - How to safely reuse wastewater while protecting health?
 - How to increase resilience of water and sanitation services to extreme drought events and longer-term scarcity?
- Identify the potential of transboundary water cooperation for reducing impacts of water scarcity on health and other related sectors:
 - Which measures are beneficial and effective from a transboundary perspective (such as upstream ecosystem restoration, groundwater recharge, revised coordinated reservoir operation, water efficiency increase, ensuring minimum flow, information exchange, common information campaigns, drought monitoring systems)?
 - How to increase cooperation at basin level among institutions responsible for transboundary water management, health protection and water and sanitation services? How to integrate health aspects in transboundary cooperation?
- Discuss how to build synergies and avoid contradictions between strategies, policies and measures to address water scarcity at the transboundary, basin, national and sectoral level:
 - River basin management plans
 - National drought management plans and strategies
 - Water safety plans and sanitation safety plans
 - Sectoral national policies in particular on health, energy and agriculture/food safety
 - Other relevant national policy and planning documents on development, climate change and disaster risk reduction
- Share experience on financing measures to address water scarcity and droughts and experience the societal costs of impacts of scarcity and droughts
- Identify priorities for possible future work on the topic of water scarcity under the Water Convention and its Protocol on Water and Health

The workshop will contribute to the thinking under the Water Convention on emerging challenges of transboundary water cooperation. It will build on the results of the global workshop on water allocation in transboundary basins, to be held on 16 and 17 October 2017 in Geneva, as well as on other previous work on climate change adaptation and in other related areas, in particular the water-energy-food-ecosystems nexus.

The workshop will also build on the relevant provisions of the Protocol on Water and Health and work under the Protocol, for example with regards to how to ensure equitable access to water and sanitation in situations of water scarcity and droughts or how to ensure the resilience and safety of water and sanitation services under extreme conditions, including in small resource-limited systems.

III. Participants

The workshop will bring together water practitioners, health professionals, representatives of water-using sectors and authorities responsible for addressing climate change impacts, at the national and transboundary levels, representatives of bilateral and multilateral donors, financing institutions and the private sector. The target audience includes representatives of governments, non-Governmental and intergovernmental organizations, international financial institutions, academia, the private sector and other experts.

IV. Organization of work

The workshop will be organized on 11 to 12 December 2017, back-to-back with the ninth meeting of the Task Force on Water and Climate (13 December 2017) which will review all climate change activities under the Convention and discuss possible future activities on climate change adaptation and water scarcity beyond 2018.

The workshop will consist of a combination of plenary presentations and discussions, smaller group discussions and exercises. Working languages will be English, French, Russian and Spanish.

A detailed programme will be issued in November 2017.

V. Partners involved

The workshop will be organized under the leadership of the Governments of Italy, the Netherlands, Spain and Switzerland, with the support of the Water Convention secretariat and its Protocol on Water and Health, serviced by UNECE and WHO-Europe.

Activities on climate change adaptation in transboundary basins under the Water Convention started in 2006 in cooperation with partners such as AGWA, INBO, OSCE, UNDP, WHO, WMO and included development of a Guidance on Water and Adaptation to Climate Change in 2009, a collection of good practices and lessons learned in 2015, a programme of pilot projects and a platform for exchanging experience. The latter was transformed in 2013 into a global network of basins, facilitated in cooperation with INBO, which aims to enable comparing methodologies and approaches, fostering exchange of experience and promoting a shared vision between the participating basins. In 2016, work on financing climate change adaptation in transboundary basins was initiated.

Under the Protocol on Water and Health, activities in this area aim at strengthening resilience of communities to water-related disasters and other effects induced by climate change, particularly in urban areas, focusing on building awareness, evidence and capacities in addressing the issues of water scarcity and wastewater reuse in agriculture in the broader water resource management context. The activities will build on and further expand the work previously undertaken under the Protocol in relation to water supply and sanitation in extreme weather events and adaptation to climate change, namely *Guidance on Water Supply and Sanitation in Extreme Weather Events developed* by a Task Force on Extreme Weather Events under the leadership of Italy and adopted by the Meeting of the Parties during its second session in 2010.

The workshop is organized in cooperation with the International Network of Basin Organizations (INBO), the European Investment Bank (EIB), the World Meteorological Organization (WMO) and in particular the Integrated Drought Management Programme (IDMP) by GWP and WMO, the Global Environment Facility's International Learning and Exchange Network (iw:learn), the Food and Agricultural Organization (FAO) of the United Nations as well as UNECE and WHO-Europe:

- The GEF Project International Waters Learning Exchange and Resource Network (IW:LEARN) exists to strengthen Transboundary Waters Management (TWM) by facilitating portfolio learning and information management amongst GEF IW projects and partners: <http://iwlearn.net/>.

- International Network of Basin Organizations (INBO): is gathering at world level basin organisations in order to exchange good practices for better water resource management at basin scale, including the constraints related to the global changes, namely climate change: <http://www.inbo-news.org> .
- The World Meteorological Organization (WMO): is the UN specialized agency in the areas of meteorology, climatology and hydrology, furthering the application of meteorological, climatological and hydrological data and information for the overall benefit of the society. WMO has launched the Global Framework for Climate Services (GFCS) as a global partnership of governments and organizations that produce and use climate information and services. Water has been identified as one priority area for GFCS implementation: www.wmo.int.
- The Global Water Partnership (GWP) and the World Meteorological Organization (WMO) launched the Integrated Drought Management Programme (IDMP) at the High-Level Meeting on National Drought Policies in March 2013. IDMP works with over 30 expert organizations on drought management with the objective of supporting stakeholders at all levels. The IDMP's Integrated Drought Management Help Desk provides policy and management guidance through globally coordinated generation of scientific information and sharing best practices and knowledge for integrated drought management. It especially seeks to support regions and countries in developing more proactive drought policies and better predictive mechanisms. This workshop contributes to that objective.
- FAO is the UN agency specialized in Food and Agriculture. With specific reference to water scarcity, FAO launched at COP22, the Global Framework on Water Scarcity in Agriculture (WASAG) which brings together partners who are committed to collaborate in finding solutions to the increasing threat to agriculture and food security in the face of water scarcity, aggravated by climate change, while the population to be nourished continues to increase. WASAG is received increasing attention, with a growing number of Partners consisting of FAO Member States, regional bodies, research and academic institutions, international NGOs and private sector platforms.
- The European Investment Bank (EIB) is the European Union's bank and the world's biggest multilateral lender. The only bank owned by and representing the interests of the EU Member States, the EIB works closely with EU institutions to implement EU policy and mandate. EIB finance and expertise backs sustainable investment projects in small and medium-sized enterprises, innovation, infrastructure, and climate and environment. Though 90% of EIB business is in Europe, it is a major lender around the globe. In the water sector, the EIB is the largest IFI lender to the global water sector, having provided EUR 64 bn to 1400 water projects to date, contributing to investments amounting to EUR 200 bn.

VI. Practical information

The workshop will start at 10.00 a.m. on Monday, 11 December and end at 6.00 p.m. on Tuesday, 12 December 2017. It will be held in the Palais des Nations, Geneva, in room XII. The workshop will be followed by the ninth meeting of the Task Force on Water and Climate, which will be held on 13 December 2017 in Geneva. The working languages will be English, French, Russian and Spanish.

Eligible participants from countries with economies in transition and developing countries may apply for financial support to facilitate their participation in the meeting using the financial support request form available on the meeting website. Requests for financial support should be submitted to the UNECE secretariat (mayola.lidome@unece.org) as soon as possible, but not later **than Monday 30 October 2017**. No application will be accepted after this deadline.

Participants requiring entry visas should inform the UNECE secretariat as soon as possible. Since Switzerland is part of the Schengen Zone, obtaining a visa might take up to 5 weeks. Participants needing a visa are therefore requested to submit their application as soon as possible and initiate visa procedures at least four weeks before the meeting.

Delegates attending the meeting are requested to register by 1 December 2017 using the following link: <https://www2.unece.org/uncdb/app/ext/meeting-registration?id=RZNDRI>. In case of difficulties, please contact the secretariat by e-mail (mayola.lidome@unece.org). On their way to the meeting, participants

should obtain an identification badge at the Pass and Identification Unit of the United Nations Office at Geneva Security and Safety Section located at the Pregny Gate, 14 Avenue de la Paix (see map on the UNECE website). Please allow enough time for this.

Practical information on the Palais des Nations, as well as on transport and accommodation in Geneva, is available online at: <http://www.unece.org/meetings/practical.htm>

Further information and relevant material will be made available on the following website in due course:
<http://www.unece.org/index.php?id=43633>

For the Task Force: <http://www.unece.org/index.php?id=43636>