

# International Conference on Combating Sand and Dust Storms: Challenges and Practical Solutions

Tehran, the Islamic Republic of Iran, 3-5 July 2017

## Technical Recommendations<sup>1</sup>

### Introduction:

Sand and dust storms, SDS, have a wide geographical extent, as they occur in all world regions and are trans-boundary in nature. Their impacts on achieving sustainable development are therefore significant at the local, regional and global levels. The main drivers for the increase of sand and dust storms, specifically in arid and semi-arid areas, are the drastic changes in annual rainfall, temperature and droughts as the results of climate change as well as unsustainable land management and water use.

The following technical recommendations are classified based on the topics of four technical sessions:

### Social, economic and environmental impacts and costs to:

- *Promote sustainable management of land and water use, including in arid and semi-arid areas to mitigate drivers of sand and dust storms.*
- *Identify a new set of standards to prevent and reduce the impact of SDS on human health in the affected areas.*
- *Establish Dust-Health Early Warning System which would protect human health and save lives.*
- *Develop standard methods and models for quantification of socio-economic and environmental impacts and risk assessments.*
- *Improve research to fulfil the gaps between scientific findings and operational work.*

### Source Recognition, Monitoring, Observation, Forecasting and Early Warning Systems to:

- *Strengthen the national, sub-regional and regional capacity of weather monitoring, climate and forecasting models of sand and dust storms in cooperation with relevant UN bodies and organizations, including WMO, through technology transfer and allocation technical and financial assistance.*
- *Harmonize the collection, quality assurance and control, analyzing, processing, reporting and communicating the required data and information to improve the quality of early warning and forecasting systems.*
- *Integrate the SDS warning system with warning systems of other sectors in national and regional and global plans and strategies as appropriate.*

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<sup>1</sup> Note: Although the Turkish delegation was represented and participated in the discussions of the committee established to prepare these recommendations, in the end, they expressed reservations on the text indicating that they were not in a position to accept it as negotiated.

- *Identify and map the SDS hotspots and their impacts at local, national, regional and global levels.*
- *Establish Dust-Health Early Warning System which would protect human health and save lives.*

**Policy options, technology innovation and resource mobilization, considering cross-sector integrated approaches to:**

- *Promote using and protecting endemic and appropriate plant species that are able to withstand extreme weather and soil conditions (drought, salinity, etc.) to reduce the negative impacts of SDS.*
- *Undertake research and evidence-based studies at national and regional levels on the factors that cause and accelerate the negative impacts of SDS (e.g. loss of land cover, overgrazing, soil cultivation methods, etc.) and take appropriate preventive measures.*
- *Raise public awareness of the local communities and promote their participation for mitigating the negative impacts of SDS.*
- *Provide socio-economic incentives needed to encourage local people to implement the necessary measures on their land.*
- *Ensure that actions to tackle the drivers of SDS are consistent with actions recommended under the three respective Rio conventions (the United Nations Framework Convention on Climate Change (UNFCCC), the UN Convention to Combat Desertification (UNCCD) and the UN Convention on Biological Diversity (UNCBD)).*
- *Consider existing initiatives under UNCCD regional action plan to establish green walls on desert margins and other initiatives such as regional air pollution agreements and policies that have the potential to address SDS.*
- *Encourage affected developing countries to develop action plans on SDS at national and regional levels and seek support from the UN and other regional and international organizations for that purpose.*
- *Develop integrated strategies to promote sustainable use of natural resources.*
- *Enhance access of states, in particular developing countries, to finance, transfer of environmentally sound technologies, science and inclusive innovation as well as knowhow sharing, especially through bilateral and multi-lateral collaborative arrangements.*

**Global, regional and cross-sectoral cooperation and responses to:**

- *Take appropriate actions required to address the main factors at all levels causing SDS in the context of the Sustainable Development Goals (SDGs) also taking into consideration the synergies among the three Rio conventions.*
- *Invite the UN system to consider initiating an inter-agency process on SDS globally.*
- *Stress the need for further cooperation and capacity building through sharing know-how, experiences, technical expertise, boosting of technical cooperation, best practices, lessons learned.*