



ISLAMIC REPUBLIC OF IRAN

PERMANENT MISSION TO THE UNITED NATIONS
AND OTHER INTERNATIONAL ORGANIZATIONS
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Statement

By

The delegation of the Islamic Republic of Iran

Before

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“In the name of God, the Compassionate and the Merciful”

Mr. Chairman and Distinguished Delegates

The demand for water is growing implacably and sustainable water resource management is a central challenge for governments the world over. Access to water is indispensable not only for drinking, but also for agriculture, sanitation and energy. In certain regions of the world, water scarcity is caused by population growth, climate conditions and increasing climate variability and economic development. Data from Earth observation (EO) satellite plays a key role in water resources monitoring, including inland waterbodies, Seas and Ocean. After decades of maturation, satellite-based sensors orbiting Earth can now measure precipitation, evaporation, surface water levels, soil moisture, snow depth, groundwater, and more.

Due to Its geographic location, Iran faces many challenges regarding its water resources such as water scarcity, pollution and frequent drought and flooding. So the wide coverage independent system like space based observation for monitoring water resources is vital for the country in extent of Iran. Hence, the Iranian Space Agency (ISA) has successfully demonstrated the usage of Earth observation data for water resource monitoring through best practices and capacity buildings. Various projects are taken up in various fields such as reservoir monitoring, wetland mapping, irrigation water use efficiency, snow; subsidence mapping and flood monitoring based on inputs from EO satellites.

Today, thanks to publicly available satellite data for different observation scenarios in hourly, daily and weekly basis, it's a great opportunity to develop systematic continuous observation system for water related information in regional and national levels. In this regard, the ISA has kicked-off an operational project to develop a countrywide waterbody monitoring system based on EO data in which the details had already presented in STSC 59th session. So, our waterbody monitoring system uses state of the art algorithm to process multi-satellite data for water quality and quantitative indicators. Various parameters related to waterbody extent and its changes as well as water quality parameters such as chlorophyll

content, particulate matter, salinity, cyanobacteria and photosynthetic active radiation are derived from satellite observation all over the country. The system is also empowered by user-friendly front-end application so called Management Dashboard to provide users with basic Geographic Information system analysis as well as presenting the most decision derive information needed in water management at regional level.

Thank you, Mr. Chairman and distinguished delegates.