

WMO: Environmental Mandate & Activities

World Meteorological Organization

Environmental mandate

The World Meteorological Organization (WMO) is a Specialized Agency of the United Nations. It is the UN system's authoritative voice on the state and behaviour of the Earth's atmosphere, its interaction with the oceans, the climate it produces and the resulting distribution of water resources.

Since its establishment, WMO has played a unique role in contributing to the safety and welfare of humanity. Under WMO leadership and within the framework of WMO programmes, National Meteorological and Hydrological Services (NMHSs) contribute substantially to the protection of life and property against natural disasters, to safeguarding the environment and to enhancing the economic and social well-being of all sectors of society in areas such as food security, water resources and transport. WMO supports the implementation of relevant conventions such as the UNFCCC, UNCCD and the Vienna Convention on the Protection of Ozone Layer and its Protocols and Amendments. WMO is instrumental in providing advice and assessments to governments on matters relating to the above Conventions. These activities contribute towards ensuring the sustainable development and well-being of nations.

In the specific case of weather-, climate and water-related hazards which account for nearly 90% of all natural disasters, WMO's programmes provide advance warnings that save lives and reduce damage to property and the environment.

Environmental activities

Among the WMO's many environment-related activities are:

- Weather and climate observations both surface and space observations
- Data collection, dissemination and processing
- Weather forecasting and warning to decision-making and public
- Application of meteorological services and information to areas such as agriculture, transport, marine activities etc.
- Climate prediction including urban climatology and heat wave prediction
- Application of climate information and services to socio-economic benefit and for human health and other sectors such as energy, urban issues and tourism
- Atmospheric research, in particular through the Global Atmosphere Watch to detect, monitor and assess and project changes in the composition of the atmosphere
- Emergency response in cases chemical and nuclear accidents, forest fire and volcanic ash
- Assessment of the quantity and quality of water resources
- Natural disaster prevention and mitigation