Workshop on the Egyptian Meteorological Authority's Contributions to the National Climate Change Adaptation Plan (NAP)

On 17 May 2026, the Egyptian Meteorological Authority (EMA), a Member of the World Meteorological Organization (WMO), organized a workshop to present the outputs of the Egyptian Meteorological Authority regarding the National Adaptation Plan (NAP) project for climate change and the role of the state sectors targeted by the project, under the supervision of the Egyptian Environmental Affairs Agency (EEAA) and the United Nations Development Programme (UNDP)

The National Adaptation Plan for climate change is considered an essential component of the State's strategy to address the impacts of climate change. It aims to reduce climate-related risks to natural resources, economic sectors, and populations, while strengthening the country's adaptive capacity to climate change until 2100.

Through its research center, EMA conducts studies and develops future climate forecasts up to 2100 as follow:

1. Developing climate change scenarios using climate projections derived from the outputs of the sixth phase of the Coupled Model Intercomparison Project (CMIP6), applying dynamic downscaling techniques using the regional climate model RegCM5, and implementing Shared Socioeconomic Pathways (SSP1-2.6,

SSP2-4.5, and SSP5-8.5), based on a reference period from 1995 to 2015 and a projection period from 2025 to 2100, in line with the technical guidance of both the World Meteorological Organization (WMO) and the Intergovernmental Panel on Climate Change (IPCC).

2. Developing interactive climate maps for Egypt until 2100 to provide accurate data for decision-makers on the area's most vulnerable and affected by climate change

3. Supporting climate change early warning systems

4. Providing a climate database through a network of surface and upper-air observation stations and forecasting centers

***The Egyptian National Adaptation Plan focuses on the following sectors**:*

Agricultural Sector as the sector most affected by climate change, adaptation measures include:

- Developing crop varieties resistant to drought, heat, and salinity
- Adjusting planting schedules in accordance with climate changes
- Expanding climate-smart agriculture
- Enhancing agricultural forecasting and early warning systems

Water Sector: Measures include

• Improving water-use efficiency.

•Expanding the reuse of agricultural drainage water.

•Developing modern irrigation systems.

• Establishing early warning systems for floods and droughts.

•Supporting water management in light of projected declines in water resources and rising temperatures.

Coastal Protection: Measures include

Egypt places special attention on the Nile Delta coasts due to the risks associated with sea level rise through 2100.

•constructing sea barriers.

•Beach nourishment through sand replenishment.

•Protecting coastal infrastructure.

•Monitoring erosion and coastal degradation rates.

Disaster Risk Reduction:

State sectors, led by the Cabinet's Information and Decision Support Center (IDSC), have focused on:

- Developing early warning systems.
- Improving governorates' preparedness for floods and storms.
- Building climate databases
- Using climate models for long-term forecasting.