

TÜRKİYE'S NATIONAL ADAPTATION STRATEGY AND ACTION PLAN ON WATER MANAGEMENT



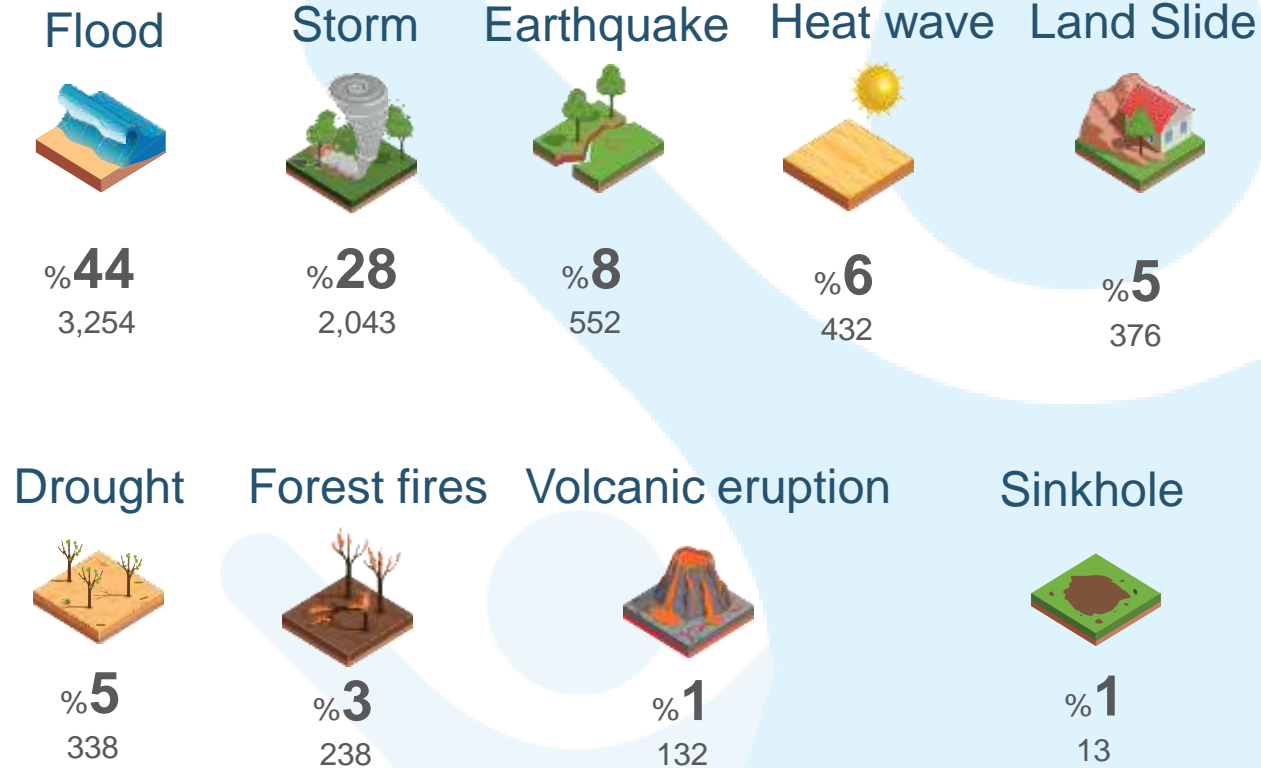
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**Strategic Roundtable on Increasing Resilience to Climate Change in
the Water and Sanitation Sector**

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Introduction

Impacts of Climate Change



It is emphasized by the UN that devastating disasters have increased significantly *in the last 20 years*, and that this increase has occurred especially in climate-related disasters, and that climate-related disasters constitute approximately **91%** of all disasters.

Climate change between 1970-2021;
It caused the death of **2 million people** and an economic loss of **4.3 trillion US dollars**.

Source: public.wmo.int



Introduction

Impacts of Climate Change on Türkiye



Our country is geographically located in the Mediterranean macro-climate zone, which is one of the regions that will be most affected by the negative consequences of climate change.



The warming in the Mediterranean region is 1.4 degrees, above the world average of 1.15.



There have been 1928 natural disasters in 2022.

Natural disasters that are expected to increase due to climate change in Türkiye are listed as:

- Forest fires,
- Storms,
- Floods,
- Hail,
- Heat waves,
- Landslides,
- Avalanches

Introduction

Climate Change Adaptation

According to the Intergovernmental Panel on Climate Change (IPCC) Definition of Adaptation

«*The process of adjustment to actual or expected climate and its effects. In human systems, adaptation seeks to moderate or avoid harm or exploit beneficial opportunities. In some natural systems, human intervention may facilitate adjustment to expected climate and its effects.*»



Main Content

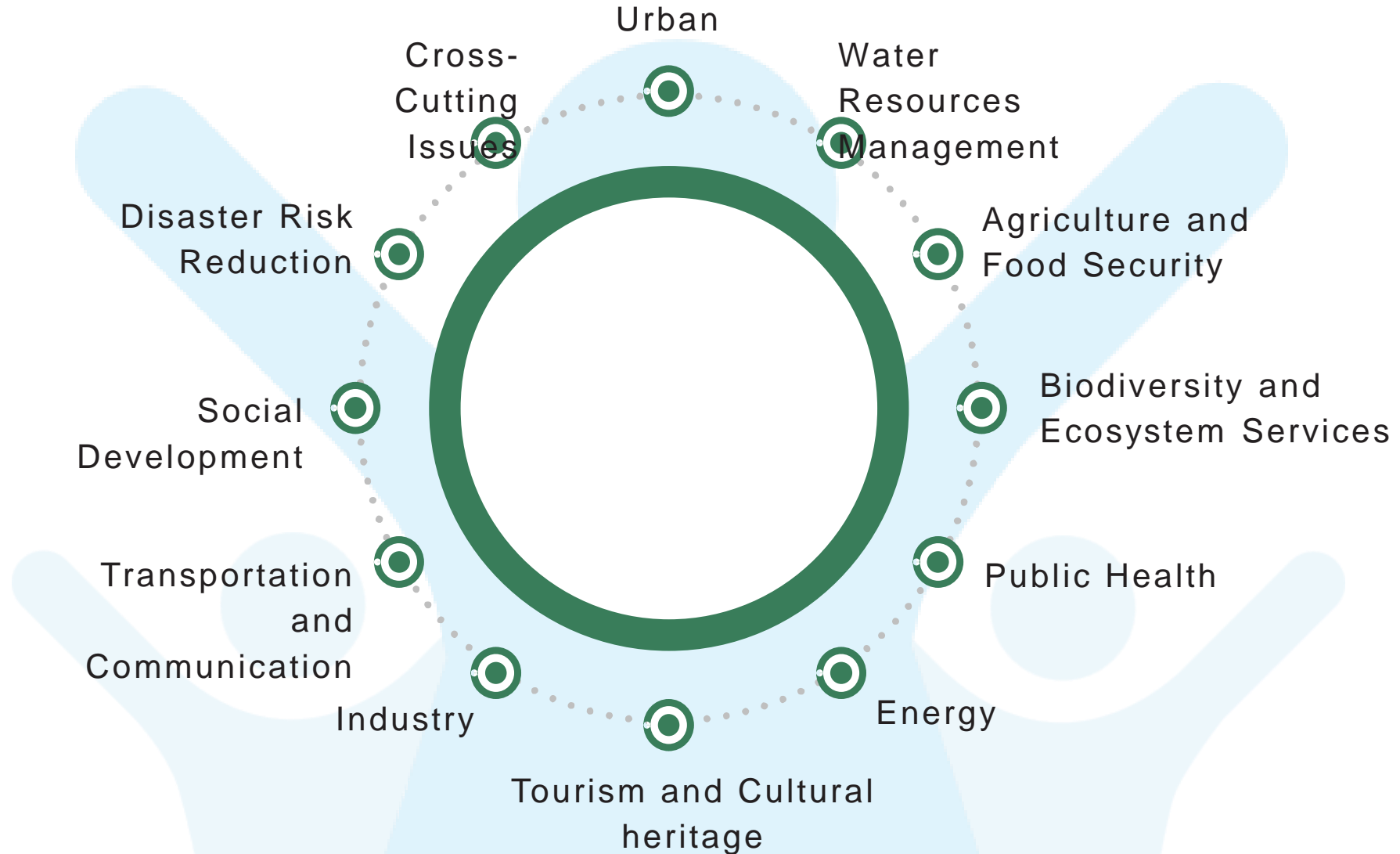
Türkiye's National Adaptation Strategy And Action Plan (2023-2030)



- Prepared within the scope of the **Enhancing Climate Adaptation Action** in Türkiye project which is implemented under the IPA-2 period.
- This Project is co-financed by the European Union and our Ministry and implemented by United Nations Development Program (UNDP) Türkiye.
- Türkiye's National Adaptation Strategy And Action Plan (2023-2030) investigated 12 sectors and develop adaptation strategies and actions.

Main Content

Türkiye's National Adaptation Strategy And Action Plan (2023-2030)



Main Content

Water Resources Management Sector

«Climate change reduces the availability and accessibility of water resources, increasing vulnerability and causing negative impacts on water-dependent sectors.»

- Decrease in drinking water resources, inability to meet household water needs,
- Failure to meet ecosystem water needs,
- Pollution of water resources,
- Failure to meet agricultural irrigation water needs, decrease in crop yield,
- Economic losses as a result of not meeting energy production and industrial water needs,
- Economic losses resulting from failure to meet sectoral needs such as commercial, tourism, recreation, mining, livestock, transportation, etc.

Issues on
Water
Management
in Türkiye

Main Content

Water Resources Management Sector



Vulnerability and Risk Assessment on Water Resources Management

Variables and data on:

- Climate Hazards
- Exposure
- Adaptive Capacity
- Sensitivity



Effects of drought on Water Resources Management

Main Content

Water Resources Management Sector



Vulnerability and Risk Assessment on Water Resources Management

Variables and data on:

- Climate Hazards
- Exposure
- Adaptive Capacity
- Sensitivity



Effects of extreme precipitation on Water Resources Management

Main Content

Adaptation strategies and Actions on Water Resources Management

The strategic targets and actions determined through consultation with many public institutions

- **General Directorate of Water Management,**
- **General Directorate of State Hydraulic Works,**
- **academia, private sector and non-governmental organizations**

2 strategic targets
15 actions

Main Content

Adaptation strategies and Actions on Water Resources Management

1. **Strategic Target:** Improving the political and legal framework in the field of Water Resources management, increasing data and information production and sharing, strengthening institutional capacity, cooperation and awareness

Actions

- Developing monitoring and information systems to ensure effective water and wastewater management,
- Creating an inventory regarding the quantity and quality of surface and groundwater resources and sectoral water consumption
- Determining the effects of climate change on water resources, lakes, wetlands and coasts
- Establishment of "Water and Sewage Administration" in all provinces in order to effectively maintain urban water supply and wastewater management

Main Content

Adaptation strategies and Actions on Water Resources Management

2. Strategic Target: Protecting, improving and ensuring efficient use of water resources

Actions:

- Continuing basin protection studies on surface and groundwater resources that provide potable water.
- Increasing the amount of treated wastewater, and increasing the reuse rate of treated wastewater to 15% by 2030.
- Reducing the water loss rate in municipalities, expanding the use of alternative water resources such as rainwater harvesting and use of gray water in cities, and increasing access to safe drinking water networks.

Main Content

Adaptation strategies and Actions on *Water Resources Management / Cross-Cutting Issues*

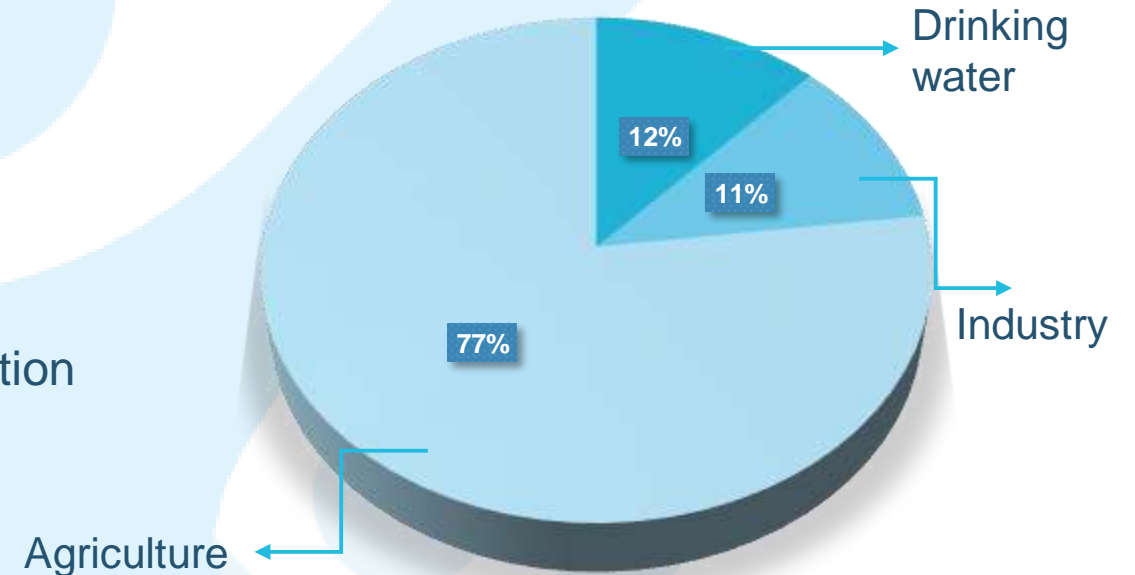
Industry

- Monitoring and recording surface and groundwater usage in industrial usage,
- Ensuring efficient use and recycling of water used in industry, energy and mining sectors.

Agriculture

- Preparation of annual groundwater withdrawal monitoring and control reports in groundwater operation areas,
- Installation of counter in groundwater wells,
- Increasing underground dams and groundwater artificial recharge structures

Water Use in Türkiye



Conclusion

Challenges and Opportunities on NASAP

Challenges

- Communication and cooperation between ministries
- Lack of Data
- Share of Data

Opportunities

- Communication and cooperation between ministries
- Awareness on climate change adaptation

Thank you!

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