

# Uzbekistan's role in overcoming climate challenges





Today, a serious challenge to sustainable development and international security are the negative consequences of climate change. The severity of this problem is evidenced by the fact that this issue is being raised more and more often and with even greater urgency from the UN rostrum.

In particular, speaking recently at a briefing at the Organization's headquarters, UN Secretary-General A. Guterres said, "The era of global warming is over, the era of global boiling has arrived". At the same time, in his report "Our New Agenda", he singled out three planetary crises: climate change, loss of biodiversity, and pollution of the planet.

These problems are also affecting Central Asia, which is now increasingly feeling the effects of global warming. Thus, according to new estimates by the Intergovernmental Panel on Climate Change, since 1850, global temperatures have risen by an average of 1.1°C. At the same time, in Central Asia, the increase has exceeded the global average, amounting to 2.2°C.

The consequences are already evident today, and experts suggest the situation will only worsen in the coming period.

First, the main reason is the intensive melting of glaciers. Snow and glacier cover, which form up to 50% of the annual runoff of the main water arteries of Central Asia – the Amudarya and Syrdarya rivers, have decreased by more than 30% over the last 70 years.

In the next 20 years, their runoff is expected to decrease by 15%, water availability per capita will reduce by 25%, and crop yields by 40%.

Over the last 20 years, per capita water availability in Uzbekistan has decreased from 3 thousand cubic

meters<sup>3</sup> to 1.5 thousand cubic meters, i.e. 2 times;

Second, changes in the hydrological cycle significantly increase natural disasters. Statistics show that out of 126 cases of natural disasters recorded in 2011-2022, 46% are caused by earthquakes, 27% by floods, 13.5% by landslides, 8.7% by strong winds, 1.6% by natural fires, 0.8% by avalanches, etc.

Natural disasters affect up to 3 million Central Asians annually. In Uzbekistan, natural disasters affect an average of 1.4 million people annually and cause almost 3 billion dollars in damage.

Overall, worsening water scarcity and increasing aridity will devastate biodiversity, grazing lands, and animal production, increasing respiratory diseases and other risks.

These factors of climatic impact, along with the growth of population and economies of the countries, entail negative economic and social consequences for Uzbekistan and the whole region, jeopardizing water, food, and energy security and aggravating environmental problems. Already today, every minute, 9 square meters of the region's fertile area is turning into a desert.

It is predicted that by 2050, climate change-induced reduction of water resources in the Amudarya and Syrdarya basins may lead to a drop in regional GDP by 11%. By the same time, according to forecasts, up to 2.4 million "climate migrants" may appear in Central Asia, who will move to the regions favorable in this respect.

Under these conditions, with the election of Shavkat Mirziyoyev as President in 2016, Uzbekistan has fundamentally revised its environmental policy, agriculture, water management, and others. Drastic measures are being implemented to prevent the adverse effects of climate change in the country.

In 2017, Uzbekistan signed the Paris Agreement and assumed several commitments, including the main quantitative commitment to reduce greenhouse gas (GHG) emissions – the Nationally Determined Contribution (NDC).

In 2021, our country raised its ambitions and adopted an updated NDC, with a new commitment to reduce specific greenhouse gas emissions per unit of GDP by 35% by 2030 from 2010 levels.

Uzbekistan has also approved several conceptual documents to address environmental issues, preserve biodiversity, and achieve the UN Sustainable Development Goals. These include the Strategy for the transition of the Republic of Uzbekistan to a green economy until 2030, the Concept of environmental protection in the Republic of Uzbekistan until 2030, the Strategy for municipal solid waste management in the Republic of Uzbekistan until 2028, as well as the Strategy for biodiversity conservation in the Republic of Uzbekistan until 2028.

The country generally has a solid legal and regulatory framework, including more than 40 laws in nature and environmental protection.

To address environmental problems, the Ministry of Natural Resources of Uzbekistan was transformed into the Ministry of Ecology, Environmental Protection and Climate Change. Central Asian University of Environmental Studies and Climate Change was established to develop practical cooperation in training climate specialists and actively involve young people in environmental protection activities.

More than 400 million saplings of ornamental and fruit trees have been planted under the "Yashil Makon" (Green Space) project. In the course of implementation of the Uzbekistan – 2030 Strategy, it is planned to plant 200 million tree seedlings annually and bring the country's greening level up to 30%. The organization of an aerobiological monitoring system in 10 regions of the country and the creation of public parks for every 50-100 thousand people in urban and district centers are also envisaged.

To prevent the aggravation of climatic and socio-economic challenges caused by the drying up of the Aral Sea, seed forests have been created in the Aral Sea region on an area of 1.8 million hectares and seedlings

of desert plants. By 2030, it is planned to cover 2.3 million hectares with green cover.

The transition to low-carbon energy and the introduction of renewable energy sources (RES) are ensured. By 2030, the share of RES is planned to reach 25 thousand megawatts, and in the total generation structure, it is expected to go from 14% to 40%, etc. Uzbekistan intends to reduce energy consumption by 2030 through accelerated introduction of RES and resource-saving technologies. Uzbekistan intends to reduce the economy's energy intensity by half by 2030 through the accelerated introduction of RES and resource-saving technologies and achieve carbon neutrality in the energy sector by 2050.

Active measures are taken to conserve water resources. Uzbekistan ranks 7th worldwide in implementing water-saving technologies after Israel, the USA, Russia, Spain, Brazil, and Italy.

By 2018, water-saving technologies were introduced in the country in the area of 28 thousand hectares, and today, this indicator has reached 1 million hectares. By 2030, it is planned to increase water use efficiency by 25%. The total area of land covered by water-saving technologies for crop irrigation will be brought to 2 million hectares, and the annual capacity of domestic enterprises for the production of water-saving technologies will be up to 300 thousand hectares.

At the same time, realizing that climate challenges are transboundary, Uzbekistan has significantly intensified its efforts to consolidate the Central Asian region in combating climate change and adapting to its consequences.

President Shavkat Mirziyoyev, speaking at the Fifth Consultative Meeting of the Heads of Central Asian States in Dushanbe on September 14, proposed the adoption of the Regional Climate Change Adaptation Strategy to contribute to climate resilience and green development.

Within the framework of the 3rd Belt and Road Forum for International Cooperation, the Head of our state spoke in detail about climate issues. Designating green development as a strategically important task, he demonstrated a high level of responsibility to his own people and the entire region. This approach and politics will allow the President of Uzbekistan to consolidate the states of Central Asia, directing joint efforts towards the consistent transition of the region's countries to the path of green development.

At the same time, Uzbekistan has stepped up measures to promote the climate agenda within other international formats as well. In particular, within the framework of the SCO, the Head of our state stressed the need to strengthen coordination and practical cooperation on decarbonization and the introduction of clean technologies, the development of smart agriculture and water conservation.

In addition, at the sixteenth summit of the Economic Cooperation Organization, the Leader of Uzbekistan proposed to create a high-level platform on environmental issues and hold its first conference within the framework of the upcoming Samarkand Climate Forum in 2024. Also, at the meeting of the Council of Heads of State of the Organization of Turkic States, the creation of a permanent acting Turkic Environmental Forum at the ministerial level was noted.

In addition, at the 78th session of the UN General Assembly, the Head of our state specifically focused on the consequences of the Aral tragedy and the measures taken by the authorities to mitigate the situation, proposing the establishment of the post of UN Special Envoy for Water Resources and Central Asian Climate Dialogue.

In his message at the 21st Session of the Committee for the Review of the Implementation of the United Nations Convention to Combat Desertification, held for the first time in Samarkand on November 13-17, Shavkat Mirziyoyev emphasized once again that Uzbekistan and the entire Central Asian region as a whole are particularly exposed to the negative impact of climate change and fully feel the dire consequences of the social and environmental problems caused by it. He called on the international expert community to support Uzbekistan's initiatives to adopt the Samarkand Declaration on Sand and Dust Storms.

An essential platform for Uzbekistan is the annual Conference of the States Parties to the UN Framework Convention on Climate Change (UNFCCC), the 28th regular meeting in Dubai this year.

Our country joined the UNFCCC in 1993. As a party to the UN Framework Convention, Uzbekistan prepares and submits regular climate reports to the Convention Secretariat: National Communications, Biennial Reports, Adaptation Plans, and develops and updates the NDC. The Fourth National Communication of the Republic of Uzbekistan on Climate Change is being finalized, reflecting the country's activities to combat climate change over the past 5 years.

The importance of this platform for Central Asian countries is evidenced by the fact that at the 26th UN Climate Conference in Glasgow in 2021, Central Asian countries were represented by a single pavilion and issued a joint communiqué drawing the attention of the international community to climate problems in Central Asia.

In 2022, speaking at the 27th session of the Conference of the Parties to the UNFCCC in Sharm El-Sheikh, the head of the delegation of the Republic of Uzbekistan Tanzila Narbayeva noted the readiness of our country to actively interact with the world community. She proposed establishing a regional Climate Council, which will increase cooperation effectiveness in promoting climate adaptation, combating desertification and land degradation, and introducing water-saving technologies.

Undoubtedly, the upcoming 28th Forum, which will bring together representatives of almost all countries of the world, key international organizations, and civil society, is essential for consolidating international efforts in combating and mitigating climate change, financing climate strategies, and transitioning to green energy.

Uzbekistan's participation in the 28th Conference of the Parties to the UNFCCC symbolizes its commitment to the global fight against climate change. Undoubtedly, the platform of the event will allow making important climate initiatives, providing an opportunity to learn and adopt the best international practices, and establish cooperation with the global community to ensure a sustainable future.

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**Source**