TAJIKISTAN COUNTRY CLIMATE AND DEVELOPMENT REPORT

Over the past 20 years, Tajikistan has achieved strong economic growth and poverty reduction, but economic gains are unsustainable in the face of climate change.

Economic Challenges

- Annual GDP growth of **7%** could slow without structural reforms.
- Poverty rate dropped from **30%** to about **11%**, but further progress is at risk.

Environmental and Social Strains

- Over **50%** of land is degraded, and water productivity is among the lowest globally.
- Air pollution and lack of access to clean water supply impact public health.
- Record low water levels in 2024 at Nurek Hydropower Plant led to **power rationing**.

The Government has outlined an ambitious plan to green the economy; this transformation will require reforms to open markets and attract private investment.

By 2050, climate change could reduce real GDP by 5-6%, threatening the plan's success.

Poverty Risk

Over **100,000** people could be pushed into poverty, with women, children, and people with disabilities, disproportionately affected.

Water & Energy Security at Risk

Rapid glacier melting is disrupting water availability, affecting hydropower, irrigation, and regional water agreements.

Increased Natural Disasters

More intense and frequent natural disasters could affect settlements and key transport corridors, particularly on degraded lands.

Degraded Landscapes

Cost of land degradation in watersheds could double by **2050**.

Air Pollution and Climate-Related Urban and Rural Challenges

Poor air quality and rising temperatures are impacting public health and productivity, leading to increased migration and social tensions.

Agricultural and Food Security at Risk

Reduced agricultural production by **20%**, while increasing irrigation needs by **5-8%**.

Adaptation and resilience measures can cut economic impacts of climate change by half and a low-carbon growth model can boost GDP by 6% by 2050, with diversification, increased exports, and better jobs.

- Improve water, energy, and food security
- Resilient connectivity
- Reduce risk of extreme weather
- Restore **500,000** hectares of degraded land through efficient nature-based solutions
- Near-zero emissions in power and buildings by **2040**
- Near-zero emissions in transport and waste by **2050**
- Finalize subsidy removal and tariff reforms
- Increase livestock productivity while cutting methane emissions by **30%**

In **2025-2050**, adaptation and low-carbon development will require an additional **$17** billion to the government's ambitious reform plan needs of **$79** billion, including private financing.

Urgent priority policies and actions to enhance resilience to climate change, accelerate low-carbon development, and ensure an inclusive green transition

Policy Package A: Stronger institutions for better adaptation, resilience, and mitigation

- Normalize climate considerations in strategic planning by building institutional capacity and developing climate change laws and standards to reduce GHG emissions and promote adaptation.
- Eliminate subsidies for electricity and heating by 2027, introduce carbon pricing, and strengthen compliance with pollution standards.
- Establish a post-disaster emergency fund, set up a monitoring and reporting system for carbon accounting, and integrate climate risk assessment into budgeting procedures.

Policy Package B: Just and inclusive climate strategies

- Implement a benefit-sharing mechanism for equitable use of hydro and renewable resources, focusing on the Rogun HPP project.
- Enhance livelihood and employment programs for disaster-affected and climate migrants, with a focus on women and youth, to increase resilience in vulnerable regions.
- Strengthen social assistance programs, reskilling the workforce for green jobs, and expand local government roles to engage communities in climate action and pollution reduction.

Policy Package C: Mobilizing climate finance

- Enhance the capacity of government agencies and private firms, especially financial institutions, to collect and analyze climate-related data.
- Strengthen the assessment of climate-related risks in the banking sector and enforce reporting requirements aligned with a uniform green taxonomy.
- Promote the issuance of green bonds, develop risk-sharing mechanisms, and create natural disaster insurance products.

Policy Package D: Adaptation at the water-energy-food nexus, resilient landscapes, connectivity, and lower vulnerability

- Implement the National Water Strategy, upgrade water infrastructure, improve reservoir management with better data, and modernize irrigation systems to conserve water and boost agricultural productivity.
- Restore degraded lands using nature-based solutions, enhance land use regulation and scale up climate-smart agriculture, particularly in livestock, with institutional and financial reforms to attract private investments.
- Build capacity and enhance digital solutions for disaster risk management through improved climate data and financial preparedness.
- Ensure resilient connectivity in selected corridors, and comprehensive early warning system while strengthening road asset management, increase maintenance budgets, and manage landslide risks.
- Implement stricter air quality standards and reduce pollution in urban areas.
- Mobilize local governments and communities to support these measures and complement sectoral ministry initiatives.

Policy Package E: Accelerating resilient and low-carbon development

- Accelerate investments in hydropower and solar generation, aiming to develop 5 GW of hydropower and 1 GW of solar facilities by 2030.
- Enhance energy efficiency and sustainable heating by renovating 5% of the building stock annually starting in 2025, enforcing new building codes for better insulation, and promoting efficient heating technologies.
- Improve sustainable transport, enhance public transport, introduce stricter emission standards for vehicles, prioritize electrification of high-use vehicles, and implement tax incentives for electric vehicles.
- Enhance energy security and reduce industrial pollution by transitioning from coal to gas and utilizing city waste in industrial processes.

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