

The Winds of Change: The Social and Political Cost of Climate Inaction in Central Asia

Climate change may be an “accelerant” for global cooperation, but it also poses significant social, political, and geopolitical challenges in Central Asia.

By **Murod Ismailov**

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The Chu River as it runs out of Boom Gorge in Kyrgyzstan.

Credit: Catherine Putz

Climate change is a global issue that affects many regions of the world, including Central Asia. The region is experiencing unprecedented climate crisis, causing significant changes to the region's environment and affecting local populations, economies, and ecosystems. In recent years, [climate change](#) in the region was associated with rising annual temperatures, prolonged drought, melting glaciers, intense heatwaves, reduced snow cover, as well as increased frequency of natural disasters.

Central Asia has experienced a significant increase in temperature in recent years, with average temperatures rising by 1-2 degrees Celsius over the past century. This has led to an increase in drought, affecting agricultural production and putting food security at risk. [Scientists have found](#) that since the late 1980s, desert areas in the region have expanded eastward, and have spread north by as much as 100 kilometers in northern Uzbekistan and Kyrgyzstan, in southern Kazakhstan, and around the Junggar Basin in northwestern China. The World Bank's latest [assessment](#) suggests that climate change could force 216 million people globally to migrate within their own countries by 2050.

Due to various factors, in Central Asia the climate crisis is not receiving as much attention as in other regions. Central Asia is not always in the headlines

and does not receive as much media coverage, which makes it more difficult for people to learn about the impacts of climate change. In addition, countries in the region face a range of challenges, such as poverty, political instability, and economic development, which may take priority over addressing the challenges posed by climate change. In addition, Central Asian states have limited financial and institutional resources to invest in climate change mitigation and adaptation. This can make it more difficult for them to receive international attention and support.

Despite the growing threat posed by climate change, there is limited awareness among the public, research community, and decision-makers in the region about the impacts of climate change and the need for action to mitigate and adapt to these impacts. A [recent study showed](#) that out of 13,488 journal articles in eight major journals focusing on Central Asia, only 33 articles (0.24 percent) were on climate change or a related topic.

Although some refer to climate change as an [“accelerant” for global cooperation](#), at the same time it poses significant social, political, and geopolitical challenges in Central Asia, as the region is highly vulnerable to its effects, including water scarcity, food insecurity, and increased frequency of natural disasters. The climate crisis will further [exacerbate existing political tensions](#), particularly over water resources, as countries compete for access to limited supplies. It is also affecting the stability of fragile states and increasing the risk of conflict and [cross-border migration](#).

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Central Asia is facing a serious water scarcity crisis due to the impacts of climate change. The region is largely dependent on snow and [glacier melt](#) from the Himalayas and the Pamirs for its water supplies, but rising temperatures are causing [these ice formations to melt faster](#), ultimately leading to declining water levels in rivers and lakes. At the same time, increasing evaporation due to higher

temperatures is reducing the availability of surface water. These changes are putting significant pressure on the region's agricultural sector and increasing the risk of conflict over access to water.

Food insecurity is another major concern in Central Asia as a result of climate change. The region is facing [declining crop yields](#) due to water scarcity, increased frequency of natural disasters such as droughts and floods, and soil degradation due to increased salinity and desertification. These factors are making it more difficult for farmers to produce enough food to meet the region's needs, leading to [food shortages and price spikes](#).

One recent example of food insecurity in Central Asia is the situation in Uzbekistan and Kazakhstan, where a combination of abnormal winter temperatures, poor preparation, and soil degradation led local governments [to ban food exports](#). The countries are heavily dependent on agriculture, and the impacts of food insecurity are affecting the livelihoods of millions of people and increasing the risk of social and political instability. Based on modest global climate projections, it can be concluded that the harsh winter of 2023 in Central Asia may serve as an example of what a typical winter will be like in 2043.

Central Asia is also facing an [increased frequency of natural disasters](#) as a result of climate change, which is causing significant damage to infrastructure, disrupting economic activities, and affecting the livelihoods of millions of people. The region is witnessing an unprecedented number of annual floods, droughts, and landslides. One recent example of increased frequency of natural disasters in Central Asia is the [situation in Kyrgyzstan](#), which has been hit by a series of floods and landslides in recent years. In 2019, the country was affected by severe flooding that caused significant damage to infrastructure and disrupted economic activities. The same year, a series of landslides caused by heavy rains affected communities and infrastructure, leading to loss of life and displacement of people.

Despite prevalent climate skepticism in Central Asia, it is clear that the issue cannot be ignored. In the short run, the governments of Central Asia should take action to mitigate the effects of climate change. First, governments should develop and implement [comprehensive adaptation plans](#) to help communities and key economic sectors, such as agriculture, energy, and water management, prepare for and respond to the impacts of climate change.

Second, governments should invest in upgrading existing infrastructure, such as dams, levees, and irrigation systems, to reduce the risk of damage from extreme weather events and ensure that [critical infrastructure](#) is resilient to the impacts of climate change.

Third, governments can support farmers in adopting sustainable agricultural practices that are better suited to the changing climate and can help to increase crop yields and improve food security.

Fourth, the local governments should prioritize the development of [integrated water management](#) plans that promote sustainable water use and reduce the risk of water scarcity and conflict over shared water resources. Other actions should focus on disaster risk reduction, investing in renewable energy, and capacity building.

There are a number of steps that the governments of Central Asia must take to mitigate the effects of climate change in the long term. The first step is a transition to low-carbon energy. Central Asian governments need to [support the transition to low-carbon energy](#) sources, such as wind, solar, and hydropower, and phase out the use of fossil fuels. This will help to reduce greenhouse gas emissions and slow the pace of climate change on a global level.

Second, governments can also implement measures to [improve energy efficiency](#) in buildings, transportation, and industry. This will help to reduce energy demand and lower greenhouse gas emissions.

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Third, the governments will need to work to [protect and restore ecosystems](#), such as forests, wetlands, and grasslands, which play a critical role in regulating the climate and preserving biodiversity. By implementing these types of initiatives, the governments of Central Asia could reduce the risks posed by climate change and promote long-term sustainability and resilience in the region.

Regional cooperation can play a critical role in tackling climate change in Central Asia. By working together, countries in the region can leverage their collective resources, knowledge, and experience to address the challenges posed by a changing climate. However, one should also stay realistic about the obstacles to regional cooperation, especially when addressing the challenges posed by climate change in Central Asia.

Regional cooperation may be complicated by political and economic interests (such as disputes over water and energy resources), new conflicts (such as the Russian aggression against Ukraine), and competition for regional influence. These interests can make it difficult for countries to work together effectively to address the challenges posed by climate change. Also, trust between countries in the region can be limited, which can make it difficult for them to work together on regional cooperation initiatives. Building trust between countries is essential for regional cooperation to be effective in addressing the challenges posed by climate change.

Countries in the region face a range of challenges, including limited financial resources, which can make it difficult to invest in the measures needed to mitigate and adapt to the impacts of climate change. To effectively address the challenges posed by climate change, countries will need to find ways to secure sufficient funding and resources.

AUTHORS

GUEST AUTHOR

Murod Ismailov

Murod Ismailov, Ph.D. is a tenured associate professor of communication at the University of Tsukuba (effective March 1, 2023) and adjunct professor of political science at the Tokyo University of Foreign Studies. He previously served as dean of the School of International Relations at the University of World Economy and Diplomacy in Tashkent.

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