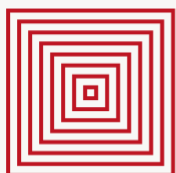




Central Asia

Climate-related security risk assessment

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A Report
from the Expert
Working Group
on Climate-related
Security Risks

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Executive Summary

Objective: to provide a climate-related security risk assessment and options for climate risk management strategies in Central Asia.

Central Asia is a brittle but largely stable region. The region's post-Soviet, authoritarian regimes are blighted by corruption, human rights violations and ethnic disputes. However, recent political developments following the leadership shift in Uzbekistan in 2016, demonstrate a move towards more constructive regional cooperation. The region is of strategic interest to major powers including China, Russia and the US, given its proximity to Afghanistan and location as a bridge between Europe and Asia.

In the medium-term, climate change is forecast to put increased pressure on the already constrained relations between countries in Central Asia: Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan. Water and energy have been defining factors of interstate and intercommunal relations in Central Asia since the states became independent in the early 1990s. Today, Central Asian states depend heavily on extractive industries, most notably coal, oil and gas. Here, climate impacts and climate change mitigation and adaptation, is projected to heighten tensions between countries in the region.

This report identifies four priority climate-related security risks in Central Asia:

- 1. Tensions increase between downstream and upstream countries due to rising water stress:** Management of water resources between the upstream hydro-rich and downstream carbon-rich states remains contingent on the changeable political will of regional leaders. This poses multiple risks as the climate changes and water stress grows. As water variability from glaciers increases, there will be more frequent disruption to generation in upstream hydropower plants. And if more water is held back in upstream countries, resources for irrigation in the downstream countries will diminish. In the absence of a functional, enforceable energy or water exchange systems, water may become weaponised and a cycle of retaliation could be triggered.
- 2. Border conflicts intensify as climate changes reduces access to natural resources:** In the Fergana Valley where borders between Kyrgyzstan, Uzbekistan and Tajikistan are not fully delimited, the ethnic patchwork of enclaves does not follow the state frontiers. People compete for land and water, claiming access based on natural rights, historical precedents and perceived principles of fairness. Squatting and abuse of administrative power are common practice. Climate change will increase uncertainty of water supply, which could leave lands unproductive and destabilise livestock breeding, making both nomadic and sedentary livelihoods untenable. In the absence of mutual trust and functional resource sharing arrangements, desperation could aggravate historical disputes, inflate prejudice and misplace the blame.
- 3. Climate-insensitive development erodes regional capability for cooperation:** Technical capacity to develop modern economies is lacking across the region, limiting foreign direct investment. However, fossil fuel extraction remains an anomaly which does attract investment. Carbon rich Kazakhstan, Turkmenistan and Uzbekistan extract and use oil, gas and coal for their energy production. Meanwhile, the Central Asian countries with lower GDP/capita - Tajikistan and Kyrgyzstan - use clean hydro energy. This inequality

breeds a sense of injustice which is further compounded by disparities in exposure and adaptive capacity in Central Asia - the most vulnerable have the least capacity to adapt. As climate change and low carbon resilient transition intensify, these inequalities can limit the cooperation required to embrace and address transboundary opportunities and challenges.

- 4. Social instability escalates as a result of unmanaged climate and energy transition impacts:** Extreme weather could cause energy and food access restrictions and threaten to destabilise vulnerable communities. Unmanaged transition from carbon and water-intensive economies may lead to dramatic shifts in revenue projections and rapid job losses. This risk is heightened by weak and corrupt institutions which limit the potential to assist vulnerable populations. Further, in a region where the primary strategy to manage social tensions and opposition has been through violence and repression, social shocks could result in rapid surges of violence.

In responding to Central Asia's climate change and security context an integrated and cooperative approach is required. This report provides four recommendations that recognise the importance of dialogue, advocacy, technical assistance and convening as tools for conflict prevention.

- **Develop open-access independent data to support monitoring and evidence-based management of climate-related security risks:** Reliable and open-access data can help inform effective policy and avoid weaponization of 'hidden' data. In Central Asia, limited access to independent data is currently preventing effective early warning and response. An upgrade in capacity for independent scientific analysis, and integration into the global climate change monitoring networks could help prevent misinformation and political campaigns which heighten domestic and inter-state tensions. Central Asian leaders and the security services typically consider this type of information sensitive. Currently, data on climate and natural conditions is classified, citing concerns about national security. However, an independent and open-access data set could help broker cooperative engagement and management of shared risks.
- **Conduct a cost-benefit analysis of cooperative frameworks for early warning and disaster relief:** The geography of Central Asia means citizens of one state may be in closer proximity to the relief services of a neighbouring state. However, transboundary early warning and disaster relief has not yet been established. The political geography of the region favours isolation over cooperation and countries are particularly sceptical about any adjustments to national security protocols. Conducting a cost-benefit analysis of potential models for regional frameworks could help build a case which helps unlock political will.
- **Provide technical assistance to develop feasibility assessments for low carbon resilient infrastructure and accompanying social transition policy:** At present foreign direct investment in the region is low and does not prioritise low carbon resilient investments. Technical support to undertake feasibility assessments could help unlock opportunities for low carbon resilient investments in the region, including those as part of the Belt and Road Initiative. For example, in addition to renewables investments, there are considerable opportunities to modernise agriculture and industrial practices which could yield significant efficiency savings. In tandem, social policies including re-training, support for entrepreneurship and improved mobility could help facilitate a just transition from high-carbon industries to low carbon resilient alternatives. Public participation in the decision-making process should also be supported to manage social tensions associated with transition and infrastructure construction.

- **Facilitate a regional climate change dialogue:** Climate change is currently considered a neutral topic for regional engagement. However, as climate change impacts worsen state relations could become more toxic without cooperative early action strategies. As a trusted broker, UNRCCA could open a regional climate change dialogue and involve governments, local government, investors, international organizations and civil society. The dialogue could help build support for the recommendations above and help identify common needs and opportunities for climate mitigation, adaptation and climate-related security management strategies.

Climate-related security risk assessment

Into an already challenging environmental and political context, climate change will bring greater uncertainty and more extreme weather. For an insecure population dependent on high carbon and water intensive industries, climate change poses a significant threat. Given existing tensions between Central Asian regimes, climate shocks could rapidly destabilise the region.

Climate change in Central Asia

The five countries of Central Asia - Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan - are landlocked. The absence of buffering coast stimulates the extreme variations in temperature between seasons, slowing air circulation and compounding contrasting temperatures. During the summer, air temperatures can reach as high as 50 degrees Celsius in the desert areas, whilst minimum winter temperatures drop as low as -45 degrees Celsius in glacial mountain areas. The region falls within arid and semi-arid climate zones and plays host to a wide range of natural conditions including deserts, steppes, fertile valleys, mountains and glaciers (USAID, 2018).

Over the past three decades, average annual temperatures have risen by 0.5 degrees Celsius in the region. As a result, entire ecosystem zones have been disturbed in the drought-prone region. In the future, the region is projected to experience increased incidences of extreme weather such as dust storms, melting permafrost, wildfires, floods, mudflows, landslides and droughts (USAID, 2018).

Central Asia is characterized by - and dependent on the fresh water from - its glaciers, and current warming is already making its mark. For example, mountain glacier meltwater is causing mudflows and floods which stresses agriculture production, livestock and human settlements. And later, the water finds its way to the oceans, contributing to sea level rise (UNEP, 2017). In turn, higher temperature forces more water to evaporate and the sensitive circle is closed when the atmosphere that holds dense vapor causes more extreme weather. Whilst it is uncertain whether the Central Asian countries will experience increased precipitation, scientists foresee a higher frequency of heavy rain events. Seasonal rain patterns are projected to shift, and increased concentration of rainfall is forecast during the winter season (USAID, 2018).

The average annual temperature in Central Asia is forecasted to increase by 2.0 to 5.7 degrees Celsius by 2085. The whole region is highly drought-prone. Whilst climate change will not be uniform across this diversity of ecosystems, it is set to intensify environmental degradation.

Climate-related security risks

This section sets out four climate-related security risks derived from currently available evidence. Further research will be required to gain a deeper understanding that can better inform decision making, programming and policymaking. Security risks related to climate change in Central Asia may diminish or increase depending on effectiveness and conflict sensitivity of future adaptation and mitigation strategies.

1. Tensions increase between downstream and upstream countries due to rising water stress

Water disputes are amongst the most cited instability risks in Central Asia. Disputes between upstream (Tajikistan and Kyrgyzstan) and downstream (Kazakhstan, Uzbekistan and Turkmenistan) countries are not uncommon. Disputes typically relate to breakdowns in the energy-for-water agreement – aimed at ensuring the supply of water from the upstream states for irrigation during the summer in exchange for gas and coal from the downstream states in the winter (Bernauer, 2012). Given the forecast reduction and increased variability of water flows from the region's glaciers, energy generation by the hydropower plants could decrease. As a result, energy access could shrink for countries and sub-regions such as Pamir (Wang et al. 2018). This would have a direct negative impact on public service provision and the economy at large, creating fertile ground for water disputes.

There is a risk that isolated sovereign water-related projects might take precedence over regional water responsibility and balancing risks, leading to severe water deprivation for other states and communities. Threats in such cases are not unheard of. During the past few years, the late Uzbek leader – fearing water disruption for Uzbek farmers – responded to the construction of Tajikistan's Rogun hydropower plan by reducing the flow of goods to Tajikistan (Kuchins, 2016). Tensions disrupted economic, trade and infrastructure relations between the two countries (Parshin, 2010).

2. Border conflicts intensify as climate change reduces access to natural resources

Fergana Valley is a patchwork of Uzbek, Tajik and Kyrgyz enclaves that had no experience of any borders before their kin states gained independence. Incomplete processes of border demarcation between the countries have led to clashes between people and with security personnel. Agricultural land and access to cemeteries and water sources in particular, have ignited the resentment. In response, there has been a tendency for land grabs and expansion in the hope that the eventual delimitation will accept the *de facto* rather than *de jure* interstate borders (Muzalevsky, 2014). Given that the Fergana Valley is the most densely populated region in Central Asia, competition for land and water is likely to intensify in the future.

An additional risk factor is that asymmetries in population growth and land use patterns are mapped on to ethnic identities. The Tajik and Uzbek populations in the Fergana Valley are growing much faster than Kyrgyz population and the Tajik section of the Fergana Valley (Zokirov, 2014). The former perceive that they live in difficult conditions under constant stress of land, food and water shortage. The latter feel insecure, fearing Tajiks will grab land. Although some private deals between individuals have occurred to allow Tajiks to 'rent' pastures in the Kyrgyz enclaves, these are not publicized because of the fear of recriminations from fellow Kyrgyz.

Climate change will affect the variability of the water supply (Radchenko, 2017) and so endanger the irrigation-based agricultural activities of the predominantly Uzbek and Tajik populations of the Fergana Valley. In parallel, floods and mudslides could affect the accessibility of pasture for the Kyrgyz livestock breeders. These developments are likely to aggravate historical disputes and inflate prejudice, leading to misplaced blame and magnified fears.

Figure 1: Map of Central Asia



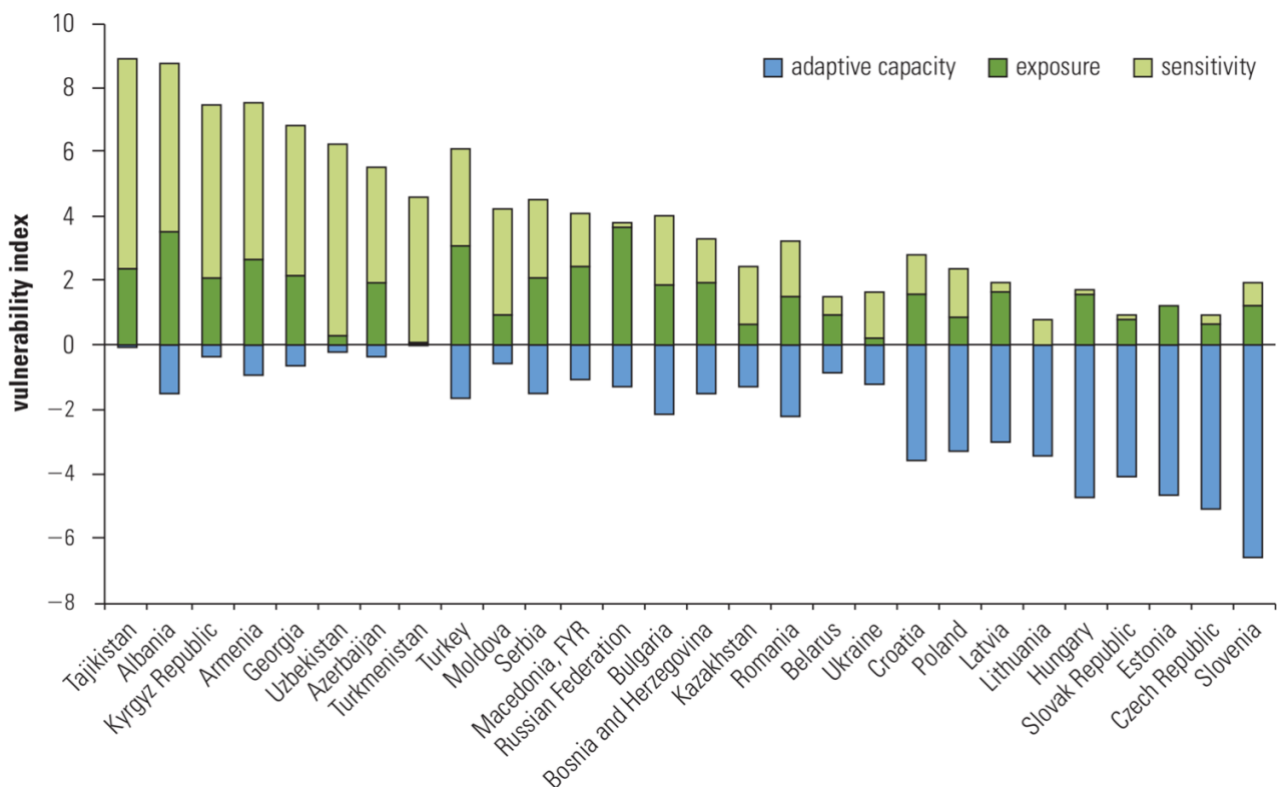
*Central Asia is defined as a region that consists of five states: Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan.
Source: freeworldmaps.net with insertion of "Fergana Valley" by the Expert Working Group Secretariat, 2018.*

3. Climate-insensitive development erodes regional capability for cooperation

Strong power asymmetries exist between Central Asian states. There are the large, prosperous, emitting states that have contributed to global warming. Then, there are the smaller, less-emitting states that suffer the consequences of climate change most directly. This breeds a sense of injustice and aggravate the insecurity of the vulnerable. Kazakhstan, Turkmenistan and Uzbekistan produce significant volumes of oil, gas and coal, and as a result, greenhouse gas emissions. These countries are thus, in relative terms, the major contributors to climate change in the region. Whereas Tajikistan and Kyrgyzstan, with low GDP per capita, produce clean hydro energy and are not significant contributors to CO₂ emissions.

The issue of asymmetry becomes more prominent when countries begin to adopt climate change mitigation and adaptation policies. Mitigation and adaptation come at a cost that the most vulnerable countries struggle to afford. Disparities in exposure, sensitivity and adaptive capacity in Central Asia are clear: the most vulnerable have the least capacity to adapt - see figure 2 (Marianne Fay, 2008). Kyrgyzstan and Tajikistan are both the most exposed and sensitive to a more ferocious climate and weather conditions, yet their adaptive capacity is extremely low, shown below in figure 2 (Fay, 2010).

Figure 2: Adaptive capacity vs climate-related exposure and sensitivity



Source: The World Bank by Fay, Block, Ebinger (2010). All credit to original authors in Fay, M., and H. Patel. 2008. "A Simple Index of Vulnerability to Climate Change." Background paper prepared for report, World Bank, Washington, DC.

In the regional context, a lack of solidarity and effective resource sharing could compel poorer upstream countries to seek greater energy independence. Either by monopolizing water distribution or by investing in the exploration of their own hydrocarbon resources, which in turn would increase greenhouse gas emissions and aggravate climate change (Tänzler, 2013).

China's Belt and Road Initiative (BRI) presents new challenges and opportunities for infrastructure investment in Central Asia. On the one hand, increased connectivity could incentivize fossil fuel export. On the other hand, these investments could support low carbon resilient transition. For example, China is already investing in the modernization of electricity transmission systems, hydropower generation technologies and infrastructure in the mountainous areas of Tajikistan and Kyrgyzstan (Duarte, 2018). However, China is also investing in fossil fuels, with \$331 million in loans to the Tajikistan Dushanbe coal plant alone. (Anderson, 2018). Given that the BRI operates through bilateral agreements with individual states, perceptions of 'favouritism' should also be considered as regional rivalries evolve.

4. Social instability escalates as a result of unmanaged climate and transition impacts

Extreme weather can directly and indirectly undermine physical safety, health and food security. There is a risk that climate change will ignite protest as unmanaged transition and impacts destabilise livelihoods and social security. As seen during the Arab Spring, a critical mass with unmet basic human needs – living in a culture of oppression – can provoke powerful social discontent with far-reaching security consequences.

Despite recent effort to seek investment in climate change mitigation and adaptation in the region,¹ efforts to attract investment have historically failed to translate from theory to practice. In part, this results from the lack of financial instruments, frameworks and strategies to support investment (Satkea, 2015). Unless timely adaptive interventions are made in practice – and not just on paper – Central Asia could struggle to keep pace and facilitate an orderly low carbon resilient transition.

Further, the economic impacts of climate change and transition could result in employment shocks and social dissent if not carefully managed (Asian Development Bank, 2017). The region does not have a strong track record for engaging workers and the broader public in managed transitions, and as such it is more vulnerable to shocks of this kind (European Bank of Reconstruction and Development, 2018). Response to striking workers, protesting pay and working conditions, are typically met with state suppression. For example, in the Kazak region of Zhanaozen ten protesters lost their lives in 2011 and a further seven 5 years later in 2016 during strikes (Satpayev, 2015).

¹ All five countries submitted their Intended Nationally Determined Contributions to the *United Nations Framework Convention on Climate Change* and made climate change an important part of their policies and rhetoric.

Regional overview

This section provides a contextual analysis of Central Asia, outlining key economic, political, conflict and security dynamics. The aim is to put the risks identified above into context and provide a framework for considering the interconnectivity of climate-related security risks.

Governance and resilience

The Central Asian states are considered consolidated authoritarian regimes. They score low on democratic performance (Freedom House, 2018). Kyrgyzstan is the only exception, displaying some egalitarian tendencies. International observers have long described the nations as homes to repression, crumbling infrastructure, corruption and insecure economies, forecasting a collapse. Paradoxically, the Central Asian states and their regimes are today considered relatively stable (Kendzior, 2013).

Table 1: Capacity: Government and institutions in Central Asia

<i>World Bank Governance Indicators:</i>	Political stability Out of 100	Government effectiveness Out of 100	Rule of Law Out of 100	Voice and Accountability Out of 100	<i>Transparency International's</i> Corruptions Perception Index
Kyrgyzstan	30	23	17	33	135/180
Kazakhstan	45	54	38	14	122/180
Tajikistan	22	13	8	5	161/180
Turkmenistan	40	10	6	1	167/180
Uzbekistan	35	33	11	3	157/180

Nevertheless, corruption, a lack of transparency and public participation each help diminish the region's capacity to prevent social shocks (Schmitz, 2012). As shown in table 1, stability, governance and corruption indicators rank low across all Central Asian Countries (World Bank 2017, Transparency International, 2017).

The Central Asian states have all been ranked as *fragile* in recent indexes. Fragility is determined based on a state's ability to provide public service, institutional legitimacy and capacity to control its territory. Notably, they have also demonstrated increased fragility over the past decade (Fund for Peace, 2018).

Regional cooperation and governance are stained by a modern history of antagonism between the states. After independence from the Soviet Union, the new-born states asserted their sovereignty and promoted national loyalty. However, this was done at the expense of rights for certain ethnic minorities. Some states managed to balance nationalism with inclusion of minorities more effectively. But for most ethnic minorities, relations with kin states have soured.

Rigid hierarchies and nepotisms are pervasive in the central government structures of Central Asia. In most Central Asian countries, leaders stay in power until they pass away or nominate a successor. Kyrgyzstan is the exception, where revolutions and elections, albeit contested, have facilitated the transfer of power (Tokmakov, 2015). Political change management is a primary task. State systems are inflexible, centralized and oppressive. This presents a particular challenge for managing climate change given the need for creative, flexible, informed and participatory strategies. The highly centralized approach risks leaving local authorities and relevant professional bodies, such as water and energy services, security providers, rescue services and health care entities, with little resources to effectively manage climate-related risks.

Environmental governance

Central Asia has experienced environmental degradation since the implementation of industrial and agricultural modernization under the Soviet Union. Megaprojects have been favoured, with little regard for the environment. For example:

- **Irrigation of arid lands** - in Kazakhstan to ensure the “rice independence” of the Soviet Union and in Uzbekistan to grow cotton, that ensured steady flow of hard currency into the country – have resulted in severe depletion of the Syr Darya and Amu Darya rivers.
- **Attempts to reverse the flow of rivers**, coupled with the depletion of the Central Asian water resources led to the drying up of the Aral Sea, considered one of the major environmental catastrophes of the 20th century.
- **Nuclear test sites in Kazakhstan** and uranium mines in Kyrgyzstan, Uzbekistan and Tajikistan have affected the Central Asian population’s health for generations. Lack of adequate storage for toxic waste, including along the shores of the Syr Darya river and the Caspian Sea coast, poses ongoing serious threats of contamination to major water sources for agriculture and livelihoods.

Socio-economic context

The five culturally and ethnically diverse nations have each taken their own path since their independence from the Soviet Union. Turkmenistan did not choose to transition to market economy whilst Uzbekistan gradually is shifting to a market-oriented economy (World Bank, u.d.). Kazakhstan and Kyrgyzstan are attempting market reforms but continue to have limited access to export markets. Tajikistan has made slow progress toward a diversified economy and remains one of the poorest countries in Asia (Batsaikhan, 2017). At present, foreign direct investment in the region, especially from Europe, is very low (Brookings, 2018).

A lack of trust in the state and public sphere is consistent throughout the five states (Roser, 2018). In some cases, this has given rise to social dissent which in turn has triggered authoritarian suppression, further compounding public sentiment. Central Asian governments tend to respond with securitized means to social and political dissent (Satpayev, 2015). This has previously resulted in mass violence, such as in Andijan, Uzbekistan, in 2005, in Zhanaozen in Kazakhstan in 2011 (Human Rights Watch, 2005) and in the Gorno-Badakshan Autonomous Region of Tajikistan in 2012 (Stronsky, 2016). Government’s typically label protests as anti-social behaviour, extremism or attacks against the state.

Security context

Situated at the centre of Eurasia, the five countries are of strategic interest for major powers including Russia, the US, China, Turkey and, in part, Iran. Foreign powers have paid attention to the region for a range of security-related reasons. For some, due to its proximity to Afghanistan, for others as a strategic location for military and trade routes or as a source of natural resources (Aydin, 2018). Internally, the region has faced significant security challenges with border-related conflicts, violent labour unrest, political revolutions, terrorism, and inter-ethnic violence (Kassenova, 2014).

The most immediate regional security risks relate to the developments in neighbouring Afghanistan as well as those relating to drug routes, human trafficking and jihadism (Heathershow, 2014). The so called “Northern route” is particularly significant for the transit of opiates from Afghanistan to reach Iran and Pakistan. Drug trafficking is closely linked to corruption in the security sector and other governmental structures. This condition weakens the overall security in the region (Peyrouse, 2012).

Human trafficking is a growing safety concern. In recent years, the numbers of effected people has swollen as individuals have fallen foul to trafficking and slavery as well as ISIS recruitment and related prostitution (Mamyrayymov, 2017). Meanwhile, impoverished rural youth forced into the cities, as well as a disillusioned population have swelled the ranks of the Islamic State (IS) in the past decade. Some travelling to fight elsewhere, others staying at home to carry out terrorist attacks, as was the case in Aktobe in Kazakhstan in 2016 (The Diplomat, June 10, 2016).

Additional regional security risks have arisen over infrastructure projects. For example, where the construction of Tajikistan’s massive Rogun hydropower plant, led the late Uzbek leader, Islam Abduganiyevich Karimov, to threaten intervention over concerns relating to disruption to downstream water supply (Trilling, 2016). Direct flights between the two capitals were suspended and railway connections and mining at the border were disrupted, until new the Uzbek leadership took office in 2016 and begun to repair the relationship between the neighbouring countries.

International interventions and support

This section provides an overview of the regional and international processes that are currently addressing peace and security in Central Asia and the larger region.

Projects to foster regional cooperation

Regionalism has never been a readily acceptable model for Central Asia. Bringing states together to foster cooperation has been an inherently political task, and one that has benefitted from an external convener in the form of the UN Regional Centre for Preventative Diplomacy for Central Asia (UNRCCA).

UNRCCA was established for an open-ended period in 2007 with the support of all five Central Asian states. Its mandate lists environmental degradation as one of the most pressing threats along with international terrorism and extremism, organized crime and drug trafficking (S/2007/279, 2007). At the time of its establishment, UNRCCA was one of the UN’s first conflict prevention institutions.

Water diplomacy has been at the top of the agenda of the UNRCCA since its inception. Central Asia has been highlighted as a notable example of hydro-diplomacy. In an open debate on Water, Peace and Security (S/PV.7818) held in the Security Council on the 22 November 2016, Central Asia was mentioned as a best practice on transboundary water cooperation. However, since water resources and the environmental and social consequences of their use transcend national borders, water disputes in Central Asia are inherently political and above all require a political mechanism. Despite hailed efforts in the Security council, there is no single, common and enforceable legal framework for water governance that all five countries adhere to. Disputes can thus not be resolved in legal terms, which is why alternative dispute resolution and prevention tools such as dialogue and mediation are needed (De Stefano, 2017).

Nevertheless, other environmental projects offer some promise for the future. For example, The Aga Khan Foundation and Mountainous Societies Research Institute each explore climate change as a security factor in the Pamir and other mountainous areas of Central Asia. The Aga Khan Foundation enjoys the highest degree of legitimacy not only in the Gorno-Badakhshan region of Tajikistan, but also across the country and in Kyrgyzstan. Its systemic approach and generous support for infrastructure, education and health care projects in the remote mountainous areas have saved lives and fostered resilient communities that are better prepared to withstand the consequences of climate change, including for communal and human security.

Regional, cross-border projects tend to be sporadic and ad-hoc in nature. Consistently the biggest of the countries – Kazakhstan – has been the leader for regional approaches. More recently, Uzbekistan has also been more open to promoting such projects. Some commentators spoke of the ‘spring’ of regionalism in Central Asia after the leadership change in Uzbekistan in 2016 (Cornell, 2018) which may incentivize more long-term cooperation.

International cooperation priorities

International actors in Central Asia have tended to focus their efforts to supporting development and democracy in the region. Including, through community-level initiatives on agricultural development, establishing Small and Medium sized Enterprises (SME’s) and skills development targeted at young people. Such projects have been carried out by governments but also UNDP, OSCE and various international NGOs (UNDP, 2016).

In recent years programming aimed at the prevention of violent extremism and countering violent extremism has become a priority among international donors, most notably UN and OSCE (OSCE, 2017). There is a broad range of UN agencies working across the five countries: 9 in Turkmenistan, 20 in Tajikistan, 12 in Uzbekistan, 22 in Kazakhstan and 17 in Kyrgyzstan (UNRCCA n.d).

Status of discussions in the United Nations Security Council

Despite interest in environmental issues in Central Asia, the Security Council has not yet made reference to relevance of climate-related security risks for the region. In January 2018, the Security Council issued a Presidential Statement (S/PRST/2018/2, Jan 2018) calling for the strengthening of regional, interregional and international cooperation to achieve stability and sustainable development in Central Asia and Afghanistan. In June 2018, the UN General Assembly adopted a resolution that reaffirmed the value of regional cooperation in Central Asia as a peace and security mechanism (S/PRST/2018/2, June 2018).

Recommendations

Climate-related security risk management strategies require an integrated response. The following recommendations recognise the importance of dialogue, advocacy, technical assistance and convening as tools for conflict prevention.

1. Develop open-access independent data to support monitoring and evidence-based management of climate-related security risks

Reliable and open-access data can help inform effective policy and avoid any weaponization of 'hidden' data. In Central Asia, limited access to independent data is currently preventing effective early warning and response. An upgrade in capacity for independent scientific analysis, and integration into the global climate change monitoring networks could help prevent misinformation and political campaigns which heighten domestic and inter-state tensions. Central Asian leaders and the security services typically consider this type of information sensitive. Currently, data on climate and natural conditions is classified, citing concerns about national security. However, an independent and open-access data set could help broker engagement on shared risks and opportunities for their management.

Further an open-access data approach would help support public participation and buy-in. Timely early warning and implementation of preventative measures can also help build public trust and support to implement climate mitigation, adaptation and climate-related security risk management strategies. The international community can play an important brokering role between Central Asian nations. Providing open access data which develops the regions investment potential and engages the public can help build a stronger evidence-base about the benefits of cooperation on climate, and more broadly.

2. Conduct a cost-benefit analysis of cooperative frameworks for early warning and disaster relief

The geography of Central Asia means citizens of one state may be in closer proximity to the relief services of a neighbouring state. However, transboundary early warning and disaster relief frameworks have not yet been established. The political geography of the region favours isolation over cooperation and countries are particularly sceptical about any adjustments that might be required to national security protocols. Conducting a cost-benefit analysis of potential models for regional cooperation frameworks could help build a case which helps unlock political will.

Regional frameworks typically result in resource and efficiency savings and serve to strengthen inter-state relations. Conducting a cost-benefit analysis for a cooperative vs. single state approach could be a useful tool to garner political and public support. For maximum effect the cost-benefit analysis should include economic, political and social considerations. Involving a wide range of state and non-state stakeholders in the process can also help in gaining support for such measures.

3. Provide technical assistance to develop feasibility assessments for low carbon resilient infrastructure and accompanying social transition policy

At present foreign direct investment in the region is low and predominantly focuses on fossil fuel exploitation. However, some countries, particularly Uzbekistan, are attempting to create a more open investment climate. Central Asia is rich in natural resources and inexpensive labour. But endemic corruption, cumbersome bureaucracy and lack of confidence in rule of law, limit foreign investments. Technical assistance to undertake feasibility assessments could help unlock opportunities for low carbon resilient investments in the region, including those that are part of the Belt and Road Initiative.

In addition to renewables investments, there are considerable opportunities to modernise agriculture and industrial practices which could yield significant efficiency savings. As such, these investments can support development in the region more generally and help provide sustained employment that is more resilient to climatic and transition risks. In tandem, social policies including re-training, support for entrepreneurship and improved mobility could help facilitate a just transition from high-carbon industries. Public participation in the decision-making process should also be supported to manage social tensions associated with transition and infrastructure construction.

4. Facilitate a regional climate change dialogue

Climate change is currently considered a more neutral topic for regional engagement. However, as impacts worsen relations could become more toxic without early action. As a trusted broker, UNRCCA could open a regional climate change dialogue and involve governments, local government, investors, international organizations and civil society. The dialogue could benefit the building of support for the recommendations above and help identify common needs and opportunities for climate mitigation, adaptation and climate-related security management strategies.

This dialogue can help to improve climate-related security risk management but also serve to strengthen relationships between nations and non-state actors more broadly. This initiative is consistent with UNRCCA's existing projects and could also help to strengthen the regions international reputation.

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About this report

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The Expert Working Group

The Expert Working Group on Climate-related Security Risks aims to produce high-quality and policy-relevant assessments of climate-related security risks that can strengthen decision-making and programming on those risks within the United Nations. In 2018, the Expert Working Group together with external researchers and the working group secretariat produced research on four locations: Iraq, Lake Chad, Somalia and Central Asia. The reports build on research and insights from the field to provide integrated risk assessments of climate-related change and security, as well as other social, political and economic aspects.



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