INTER-AGENCY
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FERGHANA VALLEY FIVE YEAR HUMANITARIAN TRENDS ASSESSMENT

Aging Leadership, Economic Shocks, Decreased Funding and Reduced Resilience to Environmental Hazards

MIDDLE EAST
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ACTION AGAINST HUNGER
IN PARTNERSHIP WITH
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INSTITUT DE RELATIONS INTERNATIONALES ET STRATÉGIQUES

This analysis was commissioned to assess possible trends in the next five-year period that could lead to humanitarian intervention. Within the Central Asia region, the Ferghana Valley has been identified as particularly vulnerable, impacted as it is by environmental hazards, water stress, ethnic conflict, increased poverty and urbanization as well as national and regional power plays. Shifts in the Central Asian political sphere and reduced GDPs will weaken national DDR policies and coordination. Combined with a trend of decreasing humanitarian aid, this region could prove more vulnerable than in recent decades to shocks.

The Economist: "Kyrgyzstan: Stalin's Harvest," 17 June 2010.

INTRODUCTION

Surrounded by a ring of mountains, the Ferghana Valley is the fertile confluence of Kyrgyzstan, Tajikistan and Uzbekistan, each home to enclaves of ethnic groups within their territories[1]. The Uzbek districts of Andijan, Namangan, Ferghana; Kyrgyz districts of Osh, Jalalabad and Batkan; and Tajikistan's Leninabad make up the region. The poorly demarcated borders dividing these states were irrelevant during the Soviet Union, when collectivized agriculture brought enormous wealth to the region. Yet since the collapse of the USSR, the burgeoning population[2] has been forced to compete over decreasing water and grazing land in conflicts that have taken on an increasingly ethnic tone. Scarcity caused by population growth compounded by environmental degradation and poor water, transportation and electricity infrastructure is exacerbating tensions between communities, aggravated by government rhetoric seeking to distract attentions from poor governance. While the greatest impacts are felt by small-scale farmers without coping mechanisms, it is even impacting Uzbekistan's centralized cotton production, which appears ever more unsustainable in the face of decreasing water resources. High unemployment and poverty rates among the young population were previously combatted by mass migration to Russia, yet the depreciation of the ruble and increasing restrictions

[1] A large minority of ethnic Uzbeks can be found in Tajikistan (31%) and Kyrgyzstan (27%), and are sometimes the majority population in border areas (UNFVDP). Ethnic Tajiks also live in Uzbekistan. Kurbanova, M. "The role of traditional gender ideologies in the empowerment of women in post-Soviet Uzbekistan." Master of Arts Thesis, University of Ohio, June 2005.
[2] The population in the region is around 11 million. In all three countries almost half the population is under the age of 17, and will soon be joining the workforce, drastically increasing unemployment. Grid thing.

on foreign workers are progressively causing a return to home countries that cannot incorporate these populations into the labor market or provide access to adequate health and education services.

Remittance wealth was traditionally invested in rural hometowns, where foreign migrant workers would settle at retirement. In the meantime, their extended families would depend on this income and farm on family land that was owned or rented[3]. Yet growing obstacles to employment are increasingly causing reverse migration, whereby migrants are settling in the outskirts of larger cities, subtly altering the character of these regional centers of power. In the informal areas home to Ferghana Valley communities, the resurgence of observant and conservative Islam is developing hand in hand with the influence of Islamic charitable organizations providing services to these neglected areas. Organizations associated with various ideological Sunni strains, but dominated by conservative Pakistani Jamaat al-Tablighi and Saudi Wahhabi schools have stepped into the vacuum left by weak and non-existent state assistance. While it would be difficult to claim that any group is promoting radicalization, it could be argued that workers radicalized abroad—a phenomenon far more common—could find a more sympathetic audience among family networks exposed to conservative Salafist rhetoric and worsening quality of life. In contested border areas, the unequal distribution of resources between ethnic groups and general state neglect is manifesting itself in outbreaks of ethnic violence encouraged by the rising nationalism of post-Communist republics. This has particularly impacted the perceptions of a younger generation who have never witnessed peaceful coexistence in the region[4], who perpetrated most of the violence during the June 2010 clashes.

The largest challenge in the region, however, is the potentially severe impact of compound environmental risk including natural disasters, industrial pollution and climate change that amplify other drivers of instability like those mentioned above. The agricultural Ferghana Valley region is highly susceptible to earthquakes, which can cause landslides, avalanches and mudslides. Climate change has caused seasonal irregularities and temperature extremes impacting the timing and intensity of the seasons. More concentrated rainfall is causing regular and devastating flooding, the impact of which has been worsened by soil degradation caused by overgrazing and erosion. The regularized pace of environmental hazard and the lack of state support for those who earn their livelihood from agriculture has had a significant detrimental impact on coping mechanisms, and the lack of state assistance to rebuild agricultural capacity following these events exhaust household savings. Though the international community has invested significant resources in increasing government capacity towards disaster risk reduction (DRR) policies, longer-term economic development has been lacking in the region and has not significantly mitigated risks. Similarly, humanitarian funding has decreased in the last several years as the international community focuses on wars in the Middle East, the US draws down its presence in Afghanistan and Russia suffers from sanctions and military interventionism.

Bilateral economic aid continues, particularly with China's support of infrastructure development—certain to diminish Russia's unipolar domination of Central Asia, at least economically. Counterbalancing the pull between Russian and Chinese interests is the possibility of regional economic cooperation following the death of Uzbek President Karimov. As his successor Mirziyoyev attempts to consolidate power, for the first time since the collapse of the Soviet Union Uzbekistan is reaching out to its neighbors, addressing long-held grievances and pushing for a degree of market integration in the region. If better economic relations can lead to coordination over security issues impacting the highly inter-dependent region, this can put Central Asia in a stronger position to face the host of challenges likely to befall it in the next five-year period.

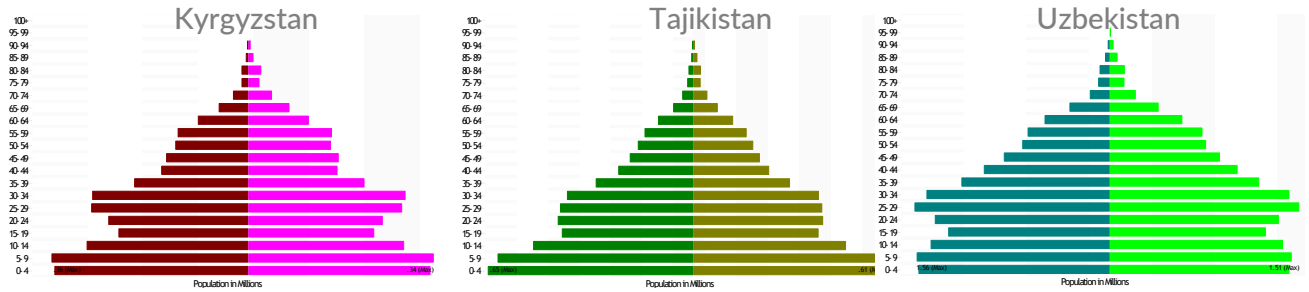
[3] In Kyrgyzstan rates of ownership are higher than in Tajikistan, where most farmers rent on long leases.

[4] *The Economist*: "The post-imperial chessboard," 1 April 2014. Madeleine Reeves

HEAVY TRENDS BY 2021

1. Poor integration of youth into the economy triggering migration

2020 Projection of Population Distribution for:



International Futures

The Ferghana Valley region has been severely economically impacted by the economic slowdown of Russia and falling commodity prices of goods produced in Central Asia including cotton, wheat, oil and gas. Internally these factors have been compounded by growing rates of poverty and unemployment affecting a predominantly young population with few options to migrate abroad for work.

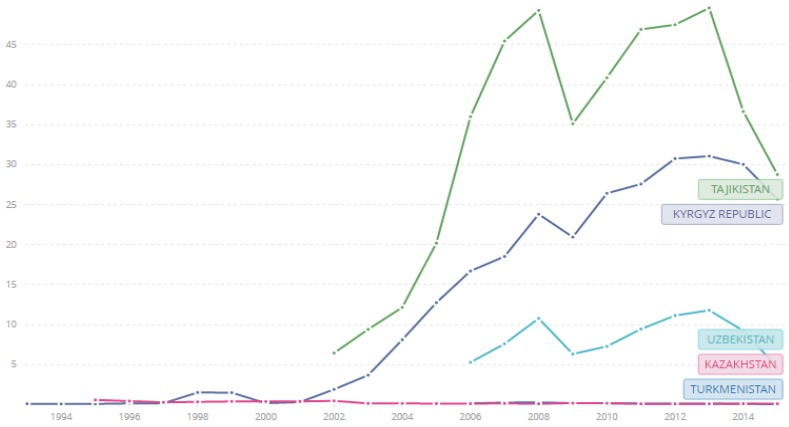
Uzbekistan, Kyrgyzstan and Tajikistan boast a large youth bulge, with Tajikistan's population distribution representing the most unstable distribution of the three countries. Though each country boasts around 30% of their populations to be under 30, in the populous Uzbekistan that accounts for approximately 10 million people, the majority of whom live in the valley region working in the agriculture sector. With high regional unemployment rates and levels of poverty, Russia[5] traditionally served as stop-gaps for the decreasing income of farmers in the region, as rural populations migrated in the millions to earn the far stronger ruble. Yet the slump in Russia's currency has had a massive impact on regional GDPs dependent on remittance wages and employment abroad. So too have similar recessions in Kazakhstan and Belarus. In addition to impacts on household resilience, these economic downturns amplify the impact of poor access to services by decreasing coping mechanisms, and also influence migratory trends.

The economic heartland of the Ferghana Valley is far from the political centers of Bishkek, Dushanbe and Tashkent. Since the collapse of the Soviet Union, the previously centralized provision of health, governmental and educational services have deteriorated to varying degrees across the region. A lack of government efforts to revitalize these areas and a perception of corruption when doing business has hampered natural economic and commercial growth. In the coming decade, public sector work will stand on the brink of a crisis across the Central Asia, as the Soviet education system that prepared young workers to take on jobs across the country was replaced by a hodgepodge of institutions prioritizing newfound national identities and languages, causing an educational rift between Soviet, and post-Soviet education and the export of highly skilled labor to more lucrative markets. Those who completed their education in a centralized Soviet economy at the collapse of the Union are currently in their 60s and are reaching retirement age.

[5] And to a far lesser degree, Kazakhstan.

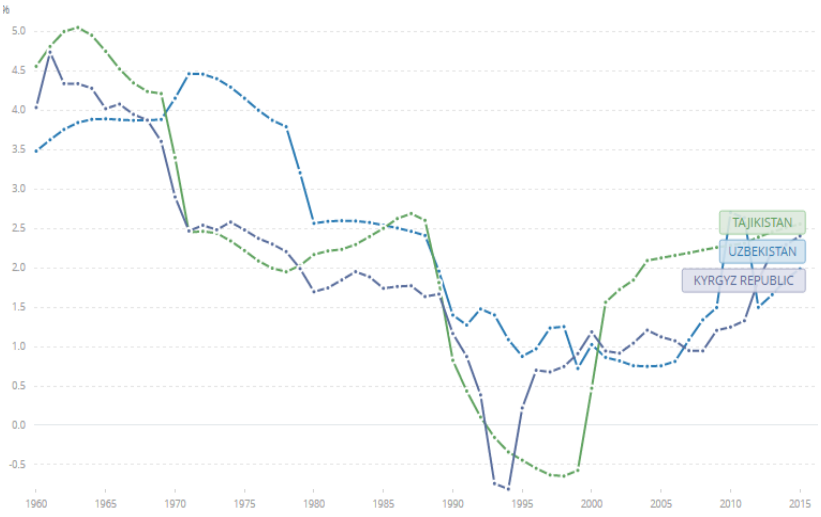
Declining Regional Remittances lead to reverse migration and greater internal migration

Economies in the region are intrinsically tied to Russian remittances. Russia hosts a remarkable eight million citizens from Central Asia coming from lower middle-income states Uzbekistan, Tajikistan and Kyrgyzstan[6]. Internationally, Tajikistan is the most dependent remittance economy globally[7], with nearly 50% of its GDP coming from remittances in 2013, which has decreased to a remarkable 30% in 2015 and is likely even lower today[8]. Half of its male population works abroad. Kyrgyzstan is the second-most dependent internationally[9].



World Bank: "Personal Remittance Received as a % of GDP."

In addition to the shock of the 2009 global financial crisis, remittances to the Ferghana Valley states fell precipitously in 2014 due to Russia's economic recession and the fall of the ruble. 2015 marked the slowest remittance growth rate since the financial crisis of 2008, with the Central Bank of Russia reporting a 15% drop in remittances to Central Asia between only 2015 and 2014[10]. This alongside stricter immigration policies has forced hundreds of thousands of Tajiks, Kyrgyz and Uzbeks, who were supporting families at home, to return without sources of income. Tougher regulations have particularly hit Tajik and Uzbek workers, as the two states are not part of the customs Eurasian Economic Union (EEU), which allows for the free travel of workers. An estimated 400,000 Tajiks are barred from returning to Russia for up to ten years due to visa overstays or legal infractions[11]. Household savings and subsistence agriculture have cushioned part of the impact of this shock, but with energy prices projected to remain low, Russia's economy will not recover in the next few years and few options are arising to displace these jobs lost.



World Bank: "Urban population growth (annual %)"

This is pressuring the country to join neighboring Kyrgyzstan in the union, tolerating greater Russian oversight in economic and political affairs for the hope of easier labor integration—a move it was hesitant to take in the face of the Russian economic slowdown and sanctions leveraged due to its offensive in eastern Ukraine. It is also unlikely that joining the union would dramatically improve the situation in the coming five-year period. Though the possible lifting of US sanctions

[6] Central Asia Security Policy Briefs: "Labour Migration from Central Asia to Russia: Economic and social impact on the societies of Kyrgyzstan, Tajikistan and Uzbekistan," February 2015.
[7] By share of GDP
[8] World Bank: "Personal remittances, received (% of GDP): Tajikistan."
[9] IOM: "Tajik migrants with re-entry bans to the Russian federation," 15 Jan 2014.
[10] UNICEF: "Impact of labour migration on "Children left behind" in Tajikistan," November 2011; Schottenfeld, Joe. *Foreign Affairs:* "Tajikistan's Russian Dream: Letter from Dushanbe," 11 May 2015.
[11] *Eurasia Net*: "Tajikistan, Turkmenistan Submit to Chinese Capture," 24 June 2016.

would allow the export of gas to recommence, the war in Syria is proving a costly drain on state finances that will require years to resurrect, even if a fragile peace comes to the country in the coming year.

The younger generation of skilled labor has been integrated in the Russian economy, with many educated, middle-class workers migrating permanently and starting families abroad. Yet even these opportunities are narrowing considerably as remittances continue to fall. For the working class, more dispensable in a worsening economic recession increasingly gripped by xenophobia towards foreign labor, migration trends are slowly reversing.

Rates of rural to urban migration in Central Asia were typically low in the region's recent history, as employment in major cities offered lower salaries than the stronger ruble. Though rates fluctuated significantly in the past, urbanization is slowly beginning to increase, however, as migrants have returned to their countries seeking a cheaper standard of living, market connectivity, work opportunities and services that cannot be provided in their home villages. A notable increase in the populations of Bishkek, Osh, Dushanbe and Tashkent has been observed informally by residents, particularly along the edges of cities. Efforts to eke out a living on the margins of the city have also led to innovative new economies, particularly of seasonal agriculture using rented land near city centers, and of the emergence of new markets reducing the cost of produce by eliminating costly middlemen. Yet their ability to access extant urban labor markets is hampered by the lack of jobs and poor business environment. As in Syria, decreasing opportunities to undertake agricultural work and a large, young migrant population with more conservative values will be a key destabilizing factor for the states, even if between states the death of Karimov could mean that the time has never been better for high-level cooperation.

The returning influx of migrants also has a gender impact, particularly in Tajikistan— the most conservative of Central Asian states. Alongside economic migration, women were able to carve out a role in the public labor market, contributing to household income[12], altering gender roles in the conservative country. The return of a predominantly male workforce and the likely decrease in their salaries could have a negative impact on family dynamics.

Economic Foresight

Shocks caused by the Russian recession, historically low energy prices; poor economic diversification and inflation have been exacerbated by uneven distributions of wealth caused by corruption and clientelism. In all three countries, the increase in food and energy prices and depression of currency rates has affected household purchasing power and resiliencies. States are not meeting the needs of their populaces, which is causing leaders to clamp down on civil society groups, and increasingly, on the Islamic charitable associations and foundations that are supporting needs.

This economic reality is pressuring petro states Kazakhstan and Turkmenistan to abandon burdensome subsidy regimes, which would prove drastic for household food security, access to healthcare and education and lead to far greater political risks and uncertainties. For Uzbek, Tajik and Kyrgyz states, their habitual dependencies on foreign aid put them in a more vulnerable position.

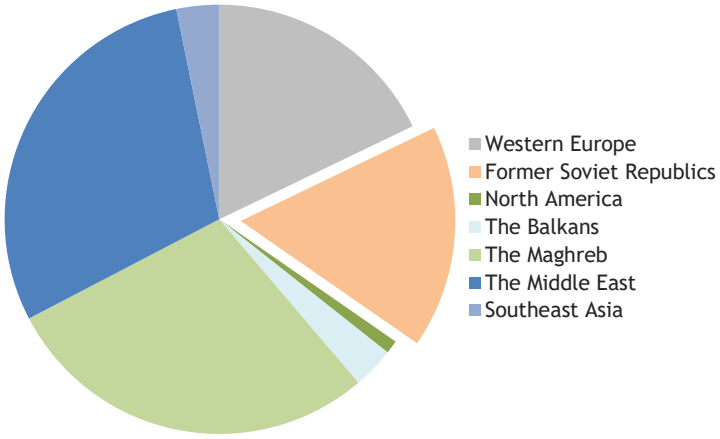
[12] IMF: "Caucasus and Central Asia: Oil Price Decline and Regional Spillovers Darken the Outlook," May 2015.

2. Islamisation, political marginalization and targeted recruitment leading to radicalization of some individuals

An uptick in Islamic observance in the region has been aided by several factors: the end of the Soviet Union and the space and ability offered for the expression of religious identity differing from the former regime, the influence of Turkish schools established by the Fathullah Gulen educational model, religious endowments and financing from Turkish, Pakistani Jamaat al-Tablighi and Gulf-based Wahhabi doctrines; and the growing importance of Islamic charitable associations to provide services lacking in the community. Increasing observed religiosity does not translate into radicalization, and in this case reflects the filling of a government, social and community-based vacuum through a familiar form of social organization.

The key destabilizing risk in the growing presence of Islamic societies and organizations will concern attempts towards political participation amidst declining state engagement, particularly in poor and rural areas. State response to these initiatives will determine[13]whether groups splinter towards political, anti-state agendas, or are incorporated into state structure. Due to the history of the militant group Islamic Movement of Uzbekistan in Uzbekistan and Kyrgyzstan, Islamic parties are prohibited from political representation and independent candidates do not field Islamist platforms. In Tajikistan their presence was enshrined in the country's post-civil war constitution[14], yet the second-largest party in the country, the moderate Islamic Renaissance Party of Tajikistan (IRPT) was disbanded in late 2015 and classified as a terrorist organization as part of the President Emomali Rahmon's efforts to neutralize any legitimate alternative to his rule[15].

Foreign Fighters by Region[12]



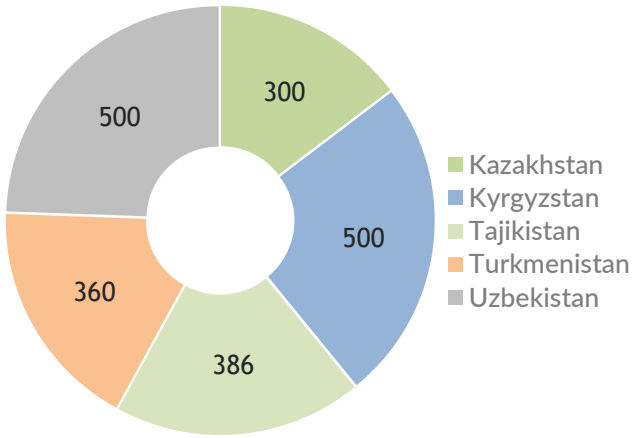
Today, three of the five Central Asian states are listed by the US State Department as violators of religious freedom, with Tajikistan added in 2016 and Turkmenistan in 2014, and Uzbekistan in 2006[16]. In efforts to maintain control over civil society president Almazbek Atambayev opportunistically escalated tensions against ethnic Uzbeks accused of ascribing to extreme forms of Islam, who were displaced in the hundreds of thousands from the restive southwest Kyrgyzstan region in 2010 before returning back within the following two years. This has proven a potent tool to exploit for the president's agenda of ethnic nationalism. Such actions only reinforce the belief that Central Asian leaders are leading a campaign to suppress dissenting forms of political Islam in the region, accompanied by heavy-handed security tactics encouraged or ignored by international stakeholders prioritizing security and economic ties with[17]the 'stans'[18]. States have particularly targeted public forms of expression, like the wearing of modest dress and the growing of beards[1920].

[13] Soufan Group: "Foreign fighters: An updated assessment of the flow of foreign fighters into Syria and Iraq," December 2015.
[14] The outcome of the Tajik civil was the peace agreement signed between IRPT and its allies, and the government in June 1997. The peace deal legalised the wartime opponents' political parties and granted them 30% of places in government at all levels. Pannier, Bruce. *Radio Free Europe Radio Liberty*: "The Demise of Tajikistan's Islamic Party," 4 September 2015.
[15] Rahmon's efforts have included oppositional media organisations. Thibault, Helene. *Registan*: "The Islamic Renaissance Party's downfall and its consequences for Tajikistan's stability," 7 August 2015.
[16] Goodenough, Patrick. *CNS News*: "State dept. gives Pakistan pass on religious freedom violations—for 14th straight year," 18 April 2016.
[17] Soufan Group: "Foreign fighters: An updated assessment of the flow of foreign fighters into Syria and Iraq," December 2015.
[18] *The Economist*: "In Central Asia, Islamic State adds a new twist to a diplomatic puzzle," 8 May 2016.
[19] This has included the growing of beards, 'alien' Arabic names or hijabs in school. Trilling, David. *The Guardian*: "Tajikistan debates ban on Arabic names as part of crackdown on Islam," 8 May 2015.

Conditions of suppressing expressions of religion, and the only legitimate opposition party in Tajikistan the IRPT, lead to conditions that encourage recruitment to IS. In the last decade in addition to the IMU, there have been significant numbers of Kyrgyz, Tajik and Uzbek nationals joining the Islamic State[21], nearly exclusively among the migrant labor community living in difficult conditions abroad and isolated from their social networks, accessed by Chechen recruiters in Russia, or by social media networks[22] drawn by the promise of a righteous battle against religious oppression and Western Imperialism, as well as money. The nature of this dislocation makes government response challenging[23].

Even the longer-established IMU and IJU organizations acknowledged that the battlefield for the global Salafi-jihadist movement and particularly among Central Asians has shifted from Afghanistan and Pakistan, Dagestan and Chechnya towards Syria and Iraq[24]. In the short-term this may have positive impact for regional security, but as the war winds down risks will increase. As the so-called Caliphate loses territory, the likelihood of battle-experienced jihadists returning to the region exists, though the risk for significant destabilizing acts remains low. With upcoming elections in Kyrgyzstan[25] and the settling in of a newly-elected President of Uzbekistan, a crackdown on religious association perceived to threaten the status quo could trigger a much larger wave of dissent and protest.

Estimated number of fighters in IS[16]



The ongoing instability in Afghanistan also poses a threat for border Tajikistan, Uzbekistan and Turkmenistan, particularly as the lucrative smuggling of drugs and weapons sustains parts of the mountainous border regions. The end of the NATO International Security Assistance Force (ISAF) mandate in 2014 caused deaths from terrorism in Afghanistan and Pakistan to rise to its highest number—9000 deaths in each country[26]. January 2015 witnessed the Islamic State establishment of its Central Asia franchise Wilayat Khorosan, and by January 2016, as many as 8,500 jihadists loyal to IS were active in Afghanistan, with between 2000-4000 Central Asian citizens joining IS.

China is recognizing this significant threat to its internal security[27]. Therefore, China has increased its bilateral military and security aid and coordination to Central Asian states and is attempting to use the Shanghai Cooperation Organization (SCO) to share intelligence on the threat of Uighur separatism, and the increase of extremism in Pakistan and Tajikistan.

3. New multipolar realities: Declining Russia and new Uzbek president increase economic multipolarity and greater regional cooperation

Russia's decreasing economic investment and diminishing source of remittances is allowing for the unprecedented opening of states to other markets including China and Turkey. While Russia's influence in the

[20] Swerdlow, Steve. *Foreign Affairs*: "Tajikistan's fight against political Islam," 14 March 2016.
[21] *The Economist*: "In Central Asia, Islamic State adds a new twist to a diplomatic puzzle," 8 May 2016.
[22] Tucker, Noah. *USAID*: "Central Asian involvement in the conflict in Syria and Iraq: Drivers and responses," 4 May 2015.
[23] Botobekov, Uren. *The Diplomat*: "Kyrgyzstan's self-defeating conflict with moderate Islam," 22 June 2016.
[24] Tucker, Noah. *USAID*: "Central Asian involvement in the conflict in Syria and Iraq: Drivers and responses," 4 May 2015.
[25] Scheduled for September but early elections could take place in May.
[26] Breitmaier, Martin. European Institute for Strategic Studies: "China's rise and Central Asia's security," June 2016.
[27] Swanstrom, Dr. Niklas. United States Congressional Committee: "The security dimension of the China-Central Asia relationship: China's military engagement with Central Asian countries," 18 March 2015.

region remains pre-eminent politically and militarily, states are balancing their economic objectives against what Russia can offer, which is less appealing.

When President Xi Jinping announced China's "Belt and Road" vision in 2013, it signaled the country's desire to be a key stakeholder in the region. Considering that China overtook Russia as the biggest trading partner with Central Asia in 2008[28], the purpose of such a speech was likely to signal to leaders the reality that a retrenching Russia would unequivocally place China in its stead, and that China would invest in all of Central Asia with an economic policy that deals uniformly with states regardless of their human rights record. Russia's efforts to create a common customs union through the Eurasian Economic Union were hampered by recession and sanctions. As a result, Kyrgyzstan was enticed with nearly USD 1 bn in financial incentives to join after displaying certain reticence, whereas the energy-rich Uzbek and Turkmen governments have not joined, failing to see a financial benefit. Even Tajikistan—highly dependent on Russian market access for remittances— has yet failed to join the EEU. China's own efforts to bridge security and trade coordination through regional forums like Shanghai Cooperation Organisation have failed to do much better, as the country's own pattern of bilateral economic aid bridging states via infrastructure is in some ways more effective.

In addition to building an oil pipeline from Kazakhstan, a gas pipeline from Turkmenistan, and a pipeline bringing Russian oil to China, Chinese companies are building roads, tunnels and bridges to connect the region via much-needed infrastructure. While its interventions have been solely economic until this point, in the coming years China could shift to exerting broader policy goals onto increasingly dependent Central Asian states. Nevertheless, China and Russia have appeared satisfied with a mutually-beneficial multipolar system of influence that prioritizes stability and counter-extremism strategies, and plays to both countries' strengths. Whereas Russia continues to exert political and military influence, China exerts economic influence.

Russia currently hosts 5,900 troops in Tajikistan and is hoping to increase its present to 9,000 by 2020. Its presence in Tajikistan currently represents the largest troop presence outside of Russia, even taking into account of its presence in the Syria theatre. In Kyrgyzstan, Moscow is renewing fighter jets at its air base[29]. Such moves are claimed to be directed towards fighting extremism, but the country is also consolidating influence and filling the military vacuum left behind by the US withdrawal from Afghanistan.

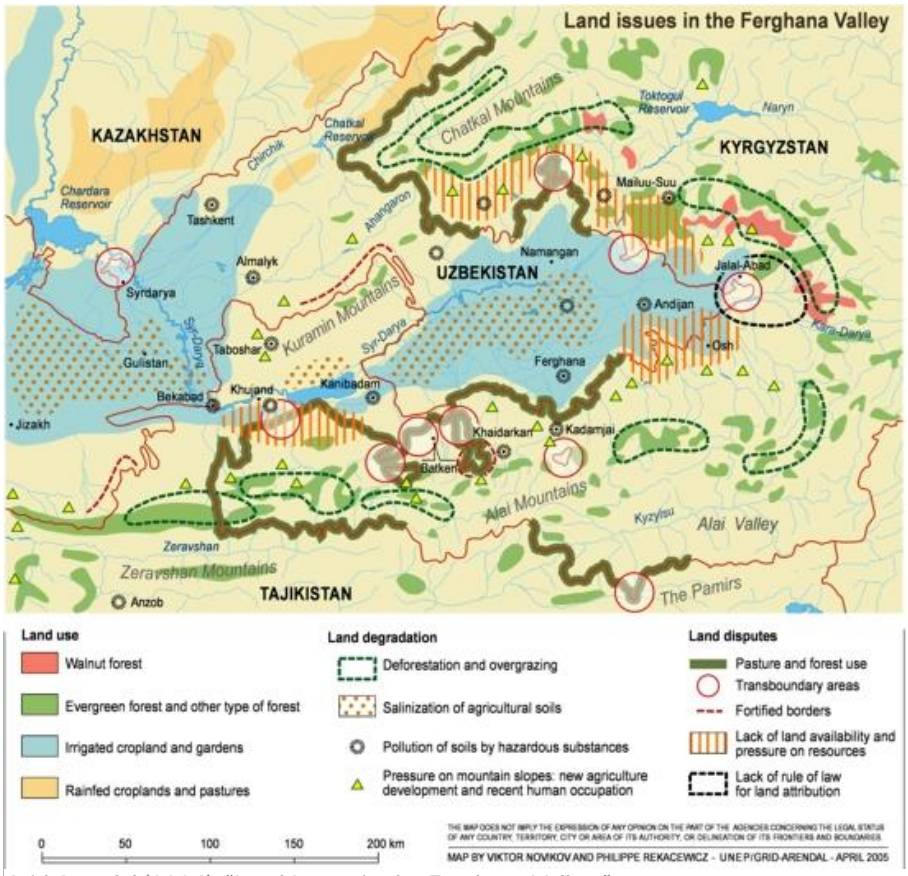
Russia has maintained its strategic influence in the historically Soviet Central Asian region by the high degree of dependence Uzbek, Tajik and Kyrgyz economies have on Moscow through the market and provision of remittances, by establishing several regional bodies to coordinate trade and security policies, and increasing its military presence and troop numbers in Tajikistan and possibly Turkmenistan on the Afghan border[30]. The death of Uzbek president Karimov and waning US influence could provide a unique opportunity for Putin to cement his relationship with a new generation of leaders distrustful of Western loyalties. Indeed, Uzbek PM and likely leader Shavkat Mirzoyiyev has been feted by Moscow and seems to be leaning towards closer cooperation[31]. Russian influence could encourage the further suffocation of media, free speech and civil society as states struggle to provide services and subsidies, increasing risks of popular unrest leading to interethnic and state violence in addition to terrorist attacks conducted by separatist and Islamic groups.

India and Pakistan

India has proven a traditional influence on Afghanistan as a counterbalance to Pakistan interference militarily and in terms of religious discourse—one that has increased with the establishing of a military base in Farkhor Tajikistan. There is a widely held belief in the region that jihadist groups pose a threat from the Indian subcontinent and Pakistan, rather than Afghanistan, even if Afghanistan is home to safe havens and training camps. The country also maintains military relations with Kazakhstan and Uzbekistan.

[28] Stratfor: "China strives to secure Central Asia," 29 September 2016.
[29] Lemon, Edward and Joe Schottenfeld. *Foreign Affairs*: Putin's Ploys in Central Asia," 14 January 2016.
[30] Vladimir Putin's representative for Afghanistan stated that Islamic State fighters are training near the Tajik and Turkmen borders. Stratfor: "Why Russia will send more troops to Central Asia," 11 April 2015.
[31] *Reuters*: "Russia's Putin offers support to new Uzbekistan leadership," 6 September 2016.

	Pakistan also has a long history of relations with Afghanistan, and is pushing to receive some of the region's plentiful natural gas, supporting pipeline projects. As leaders become increasingly suspicious of growing Islamisation in civil societies, they look towards Pakistan as the root of extremist thought.
Turkey	Turkey holds strong ethnic and linguistic ties with Turkic peoples across Central Asia, but particularly in Turkmenistan. It has also been involved in the Baku-Tbilisi-Ceyhan oil pipeline, and is using its economic investments to become closer to the Turkic republics and recently eliminated visa requirements. Turkey convenes the Cooperation Council of Turkey with Kazakhstan and Kyrgyzstan as members.
Iran	Following the Iran nuclear deal, the state has been given tacit approval from the US to expand in hydroelectric, trade, transport and security agendas as a growing influence in Central Asia. The Persian nation is a strong trade partner of Central Asian states, vying to construct an oil pipeline from the Caspian to the Persian Gulf and could prove a powerful counterbalance to US and western diminishing influence. The country is also developing security ties with Turkmenistan to improve security capacity, in addition to signing a water protocol in September 2016.



Grid Arendal (2006): "Land Issues in the Ferghana Valley."

4. Competition over scarce water and land resources caused by poor state oversight and outstanding border disputes triggering ethnic conflict

Water is a persistent source of conflict in the Central Asia region, caused by poor water-sharing agreements and a lack of border demarcation, inefficiency and decreasing resources. The glacial-fed Kyrgyz and Tajik Syr Darya and Amu Darya amount to 75% of water for irrigated agriculture and 90% of the Central Asia's regions total resources[32]. Uzbekistan and Kazakhstan are

[32] Burghart, Dan, Daene McKinney and Theresa Sabonis-Helf. *In the Tracks of Tamerlane: Central Asia's Path to the 21st Century*, Honolulu: 2005. Kyrgyzstan controls the Syr Darya flow at Toktogul and Tajikistan is slowly building the Rogun Dam on a major Amu Darya tributary. Salinisation is increasing, with over 50% of Uzbek irrigated land impacted- caused by over-irrigation. FAO: "Uzbekistan – CACILM."
The Kyrgyz-Uzbek border is 1,378km, with 371km in dispute; the Kyrgyz-Tajik border is 970km, with 403km in dispute; the Tajik-Uzbek border is 1,333km, with 187km in dispute. International Crisis Group: "Water Pressures in Central Asia," 11 September 2014.

receiving a decreasing share of the rivers' flows. Water-sharing agreements between the riparian states are outdated, and hindered by outstanding conflict over border demarcation.

Population growth and a lack of concurrent state infrastructure is causing land degradation due to over-grazing, and problems with water quality, rising groundwater, salinization and water logging. In the Ferghana Valley, the population has increased by ten million people since 2000[33]. This trend is continuing. Despite rapidly increasing population density, more efficient farming and irrigation methods have not been implemented to improve productivity.

The impacts of climate change on growing seasons, temperature and water access remain a frightening unknown. In the last decade, competition over decreasing resources has increasingly taken on ethno-nationalist overtones. During the Soviet Union, resources were shared as part of a broader system of collectivized agriculture. In exchange for water to support Uzbekistan's production of cotton and other goods, the energy-rich state provided coal, gas and electricity to Kyrgyzstan and Tajikistan.

After the 1991 collapse, the agreement fell apart, with Uzbekistan claiming its unalienable right to water resources, while demanding compensation for its energy. To secure their electricity needs, Tajik and Kyrgyz governments developed hydroelectric dams that required the release of water in winter months to produce electricity, ultimately decreasing the amount of water arriving downstream in spring months of cultivation, causing tensions with Uzbekistan.

Grid Arendal (2006): "Water issues in the Ferghana Valley."

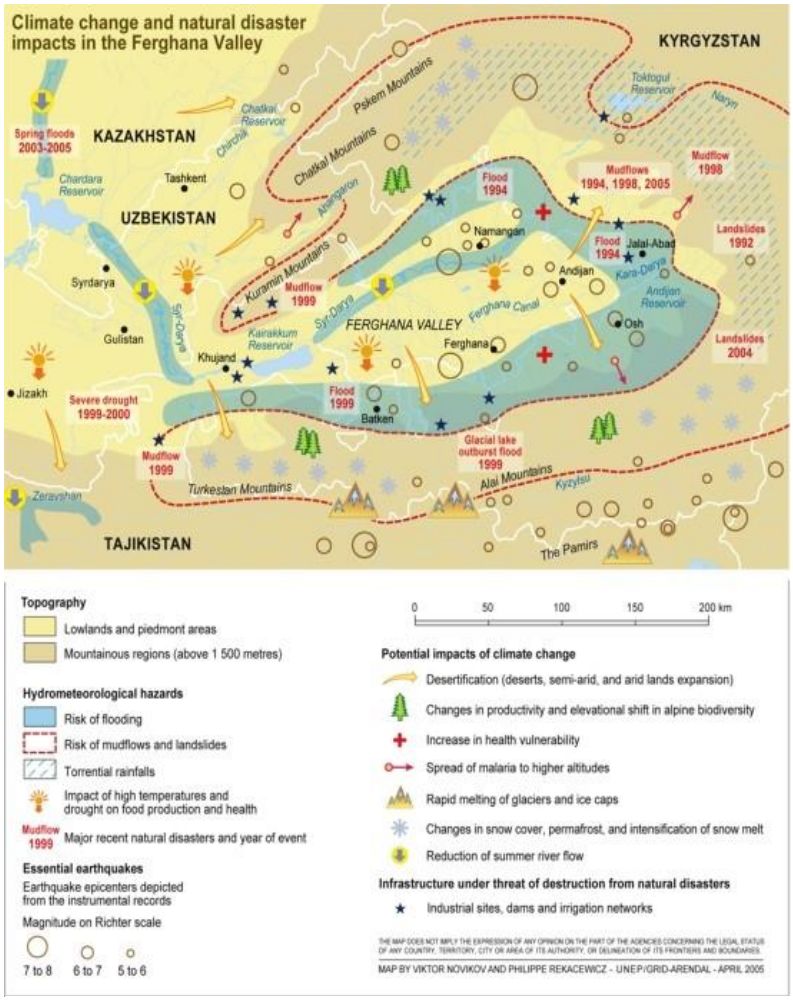
States have also failed to improve or even maintain water infrastructure built during the Soviet Period, intensifying cross-border and ethnic conflict in the Ferghana Valley over access, but also worsening living standards in urban areas. Approximately one-quarter of the 29 million people in Uzbekistan, one-third of Kyrgyzstan's six million and more than half of Tajikistan's eight-million-strong population lack adequate access to clean drinking water[34].

The lack of rural access has contributed to ethnic tensions in border areas, culminating in the 2010 ethnic pogroms in Kyrgyzstan against Uzbek populations that killed hundreds. While ethnic difference features in the perception of local communities, conflict is ultimately caused by scarcity, poor state policy and economics. In the past, though governments used the clashes to stir up nationalist sentiment and justify increasing fortification of border areas, they did not intervene at the state level. When hundreds of thousands of Uzbeks

[33] Ibid.
[34] Normand, Olivier. Towards the Sixth World Water Forum- : "Regional Rural Water Supply and Sanitation Project Ferghana Valley", Tashkent, 12-13 May 2011. Almaz Isman and Mirlan Toktaliev. *Radio Free Europe*: "Кыргызстан без воды"/"Kyrgyzstan without water," 13 December 2012.

fled violence across the Kyrgyz border into Uzbekistan in 2010, the Uzbek army forcibly pushed them back into Kyrgyzstan after two weeks.

It is likely that the death of the intransigent and isolationist Uzbek dictator Islam Karimov will lead to de-escalation between states along the tenuous borders of the Ferghana Valley. Since his death in September, his successor Prime Minister Shaukat Mirziyoyev has undertaken several steps to decrease tensions in the region, reaching provisional agreements with Kyrgyz and Tajik government over the 324 km of unresolved border in November[35] however the immediate causes of conflict remain.



Grid Arendal (2006): "Climate change and natural disaster impacts in the Ferghana Valley".

Even if borders have witnessed demilitarization by armed forces in recent years, clashes between ethnic groups continue because of poor infrastructure. In January 2014, clashes, between Tajik and Kyrgyz border guards near the Kyrgyz Tajik enclave Vorukh were caused by a disagreement over a road to circumvent territory but would hurt grazing land. In 2010 clashes between ethnic Uzbeks and Kyrgyz populations in Osh and Jalalabad devolved into the death of thousands partly because of perceptions of Uzbek supremacy in the economy in trade and services, and their attempt to turn this into political power, as well as rural-to-urban migration of young people leading to criminality and gangs. The death of Karimov has already led to a decrease of tensions on the border[36], but conflicts relating to access to water and grazing pastures will inevitably increase without state intervention.

Urban areas do not fair significantly better, and as a growing population migrates to urban areas, poor water and sanitation will have a worsening impact on health indicators[37]. A study conducted by the Swiss Agency for Development and Cooperation (SDC) in the early 1990s stated that in many urban areas, infrastructure had not been modernized since the 1950s due to the limited budgets of newly-independent states, causing significant loss and waste[38]. It was found that in poor neighborhoods of the Kyrgyz capital of Bishkek, some

[35] *Eurasia Net*: "Uzbekistan, Kyrgyzstan Reach Provisional Border Agreements," 1 November 2016.
[36] Belafatti, Fabio. *Geopolitika*: "Borders in the Fergana Valley: an inevitable source of conflict?" 3 February 2014.
[37] The World Bank attributes Kyrgyzstan's worsening health indicators to poor sanitation and hygiene. World Bank: "Implementation completion and results on a credit in the amount of SDR 12 million (US $ 15 million equivalent) to the Kyrgyz Republic for a Rural Water Supply and Sanitation Project", 15 May 2009.
[38] SDC project "Clean Water in Central Asia, taking the water supply into their own hands" International Crisis Group: "Water Pressures in Central Asia," 11 September 2014.

residents spent hours carrying water home[39] despite regular protest to the government—a destabilizing factor that has upturned two administrations in the last twelve years. The city is considered a microcosm for the region as a whole, reflecting similar dynamics particularly in poor, new and informal settlements in the region's major cities. In the Bishkek region of Altyn-Kazyk, residents negotiated with private contractors to build roads and water systems not provided by the government.

The environmental factors leading to tensions in the Ferghana Valley will continue to have a substantial impact on border tensions, as farmers and herders fight for access to less water and grazing land. In addition to the impact of natural hazards (detailed below), the dearth of state funding and increase in poverty will trigger greater unrest in the region and more conflict with those appearing to benefit more. The impact on urban areas is more unknown, and potentially a far greater destabilizer in the coming five year period as internal migration trends increase.

5. Cost of disaster recovery and climate insecurity

The Central Asian region continues to witness above-average numbers of small to medium scale emergencies and compound emergencies including floods, earthquakes, mudflows and extreme temperatures. This is impacting agriculture and food security, access to electricity and water and long term household resilience.

A recent Food Security Monitoring survey (FSMS) of risks in Tajikistan between 2014 and 2015 show marked increases in households impacted by crop pests and diseases, severe weather conditions, landslides/flooding and harvest failure.

Such precipitous changes reflect a steady worsening of environmental indictors and more temperature extremes that will continue to weaken resilience[40]. Emergencies in Central Asia have been of both an environmental and sociopolitical nature. In the last decade, Central Asian governments requested foreign assistance to respond to natural shocks, which caused the decrease of crop yields and livestock. Alongside these environmental conflicts came interethnic violence, clashes between government forces and civilians, displacement and the destruction of shelters. For Tajik and Kyrgyz farmers who rent and own small plots of land respectively, the lack of state assistance in the recovery of assets lost to climate-related events, and the high interest rates for loans disincentivizes investment and growth in the region causing farmers to take on an unbearable proportion of risk in cultivating the insecure area.

Climate change and food insecurity are multiplying concurrent risks of conflict and civil unrest, and increasing food insecurity substantially[41]. Naturally, dynamics relating to food security are intrinsically tied with economic resilience and access—impacted by the high proportion of Tajiks living in rural areas and income inequality. According to a recent FSMS humanitarian needs assessment, the majority of the population spends between 70 to 80 percent on food with a shocking 33.2% of population suffering from undernourishment, including high rates of stunting. The impact of climate change on agriculture also worsens economic vulnerabilities, as the sector employs 53% of population[42]. As a result wasting, chronic malnutrition is a worsening issue in Tajikistan.

This has unintentionally created a push factor translating into external migration flows to Russia and Kazakhastan as well as emerging markets like Turkey and Korea. In the last decade, international donors have been directing greater resources towards improving Disaster Risk Reduction across Central Asia, particularly in the environmentally-vulnerable states of Tajikistan and Kyrgyzstan. Nevertheless, this assistance has failed to fundamentally insulate the Ferghana Valley from shocks, or mitigate risks faced by its inhabitants or the

[39] Ibid.
[40] Accion Contra el Hambre Central Asia Between Economic Disruption and Growing Surrounding Conflicts- March 2016.
[41] DFID, WFP and UN Children's Fund: "Tajikistan Food Security Monitoring Bulletin June 2016 Issue 17."
[42] Ibid.

agricultural sector, likely due to the necessity for long-term government support of humanitarian and development initiatives and better integrate the region into economic development programmes and market support.

Furthermore, dealing with these challenges requires stronger regional cooperation, as environmental systems span borders, and improved resilience and capacity-building measures to deal with crisis as it comes. State capacity in the region has been impeded by a slow recovery from the 2008 economic crisis, and concurrent austerity measures. Long term challenges relating to water management and demographics do not pose a significant threat in the five-year period, but will aggravate the response to inter and intra-state unrest and disaster response.

Earthquakes

Located at the intersection of the Indian and Eurasian tectonic plates, much of Central Asia and virtually all of Kyrgyzstan, Tajikistan and Uzbekistan—faces a significant risk of earthquake. Of all the disaster risks the region faces, the World Bank stated that earthquakes represent the greatest risk regarding loss of life and economic damage[42], exacerbated by greater population numbers, higher density, and poor building standards. All major cities and population centers apart from the Kazakh capital of Astana are located in seismic zones of high and severe risk and have witnessed major earthquakes in the last century[43]. But it is not only cities at risk. The valley faces very high risks of severe earthquakes, in addition to flood risks from the Sarez lake[44].

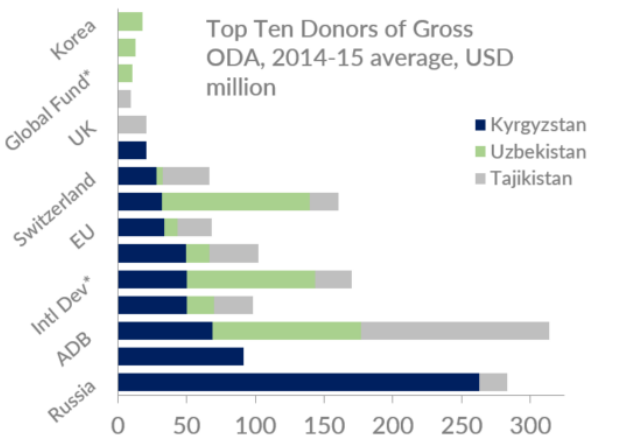
Floods

Many parts of Kazakhstan, Turkmenistan and Uzbekistan are also in flood-prone zones, which occur in the spring and summer on main rivers and tributaries[45]. Dynamics are intrinsically tied with other weather phenomena including landslides and earthquakes, and impact access to drinking water and electricity supplied by hydropower plants. When the Amu Darya and Syr Darya rivers[46] flood due to volatile rain and snowfall, it often coincides with harsh winter conditions that impact reservoirs upstream and their ability to produce electricity for Kyrgyz and Tajik citizens to run generators, health centers, and pump water. Lakes like the Sarez in the Pamir mountains of eastern Tajikistan, risk flooding into lower valleys. The risk of this kind of flood in Tajikistan could impact five million in the country as well as Afghanistan and Uzbekistan. In May 2016, 15.1% more households reported being impacted by landslides or flooding compared to the previous year[47]. Rudaki and Panjakent districts in Tajikistan were particularly impacted. Crop pests and diseases also affected 32% more households due to warmer temperatures.

6. Surge in regional and bilateral donors and decline in western funding decreasing humanitarian space

In the last five years, funding trends have begun to shift in terms of donors and destinations. As the US counterterrorism strategy in Afghanistan winds down, so has US funding in the Central Asia region. Surprisingly, funding from Western states has followed suit, with the closure of the UN coordination office OCHA closing in January 2017. In its stead, regional actors are growing in influence, including the Asian Development Bank, Russia, International Development Association, Japan and then the United States[43].

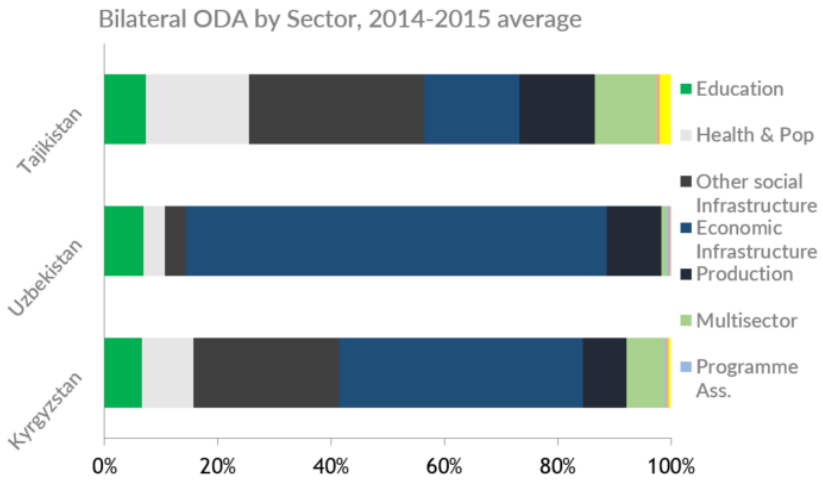
[43] Modelled on the World Bank, 15.7% of shares held by Japan, 15.6% by US, 6,5% by China and India 6.4%



OECD: "Financing Sustainable Development: Top Ten Donors of Gross ODA, 2014-15 average, USD million."

Kyrgyzstan, as the only member of the triad to be a member of the Russian-led Eurasian Economic Union, received a significant proportion of aid from Russia, whereas Uzbekistan received most aid in this period from the International Development Association, Japan and the Asian Development Bank. Tajikistan, which has increased military cooperation substantially with China, received most aid from China, followed distantly by Switzerland and the United States[44].

As per the objectives of varying donors, more than two-fifths of Kyrgyz aid went to economic infrastructure, followed by one-quarter devoted to other social infrastructure. For Uzbekistan a full three-quarters of aid was directed towards economic infrastructure. Tajik aid targeted a broader range of sectors more evenly, with the biggest proportion of aid (31%) towards other social infrastructure, nearly 20% towards health projects, 17% for economic infrastructure, 13% to production and 11% for multisector aid.



OECD: "Financing Sustainable Development: Top Ten Donors of Gross ODA, 2014-15 average, USD million."

A breakdown of humanitarian sector funding falls along similar lines, and offers insight into the possible direction of future funding. During the height of the US operations in Afghanistan, the country was by far the largest donor, followed by ECHO.

2011 and 12 figures show a shift towards bilateral funding from key European Union countries, and the absence of US funding.

Also of note is a surge in regional funding for humanitarian purposes, of which Kazakhstan is by far the largest donor. This suggests the willingness and ability for the region to manage and run its own disaster relief response and the preference for bilateral negotiations for funding, rather than multilateral consortia.

The shift in the regional balance of power caused by the US withdrawal and concurrent aid decrease has also impacted conditions surrounding the provision of aid and the culture towards international NGOs representing western values surrounding political representation, civil society and protection. The ongoing case of Uzbek human rights defender Azimjan Askarov in Kyrgyzstan sheds important light onto the changing operating environment of western humanitarian organisations intervening in the regional political environment, and the adopting of a suppressive Russian model of restricting political opposition and critical expressions of civil society. Following the 2010 ethnic clashes in Osh and Jalalabad between ethnic Kyrgyz and Uzbek

[44] International Development Association: EU includes the European Bank for Reconstruction and Development.

communities, Askarov was presented with a human rights defender award by the US government. He was then alleged to have killed a police officer, in what was perceived as a highly corrupt investigation. After intense international criticism led by western governments, Amnesty and Human Rights Watch, the Atambayev government recently upheld a verdict of imprisonment, widely seen as a signal to the intervening international community to back off. In the run-up to elections, some analysts have perceived the actions as efforts from the current president to secure support from its Russian ally[45].

KEY UNCERTAINTIES BY 2021

1. Political Instability

Uzbekistan

Since Uzbek president Karimov's 30-year rule ended in September 2016, the country's political transition under the helm of former Prime Minister Shirkat Mirzoyoyev has proven remarkably smooth. Over his 25 year rule, the president was known for his brutality towards dissidents and his own children, and poor relations with Kazakhstan—with whom he competed for regional leadership; Kyrgyzstan—with whom he cut off natural gas supplies when he desired an end to democratic reforms, and mined the border in 2010; and Tajikistan, for its water projects, which it stated would threaten resources and supplies to agricultural lands. Now, political elites are navigating the political transition through an election likely to bring groomed PM Shavkat Mirziyoyev to the helm of the country. Since the death of Karimov, Mirziyoyev has embarked on a series of symbolic gestures to ease tensions with Central Asian presidents. Since being announced transitional president on September 8, he began the much-needed process of reviewing border demarcation with the Kyrgyz and Tajik governments and restoring some simple trade and travel relations. Nevertheless, Mirziyoyev still faces a host of challenges: economic stagnation, migration, Islamist extremism and challenges from the Uzbek political elites attempting to dominate the presidency.

Kyrgyzstan, Kazakhstan, Tajikistan destabilizing one another

Regional leaders navigating Uzbekistan's political transition are moving towards more autocratic governance, risking political instability vis-à-vis local and regional stakeholders. Following in the footsteps of Azerbaijan President Aliyev's constitutional referendum of 2016, Kyrgyz president Atambaev has moved against his political party to institute amendments to the constitution, diverting powers from the presidency to the role of Prime Minister, likely in preparation for taking the post. Rumors have similarly followed Kazakh president Nazarabayev who is reportedly also considering a similar move.

Meanwhile, in Tajikistan, President Rahmon's crackdown on political opposition and constitutional intrigues continue. The president has now removed any legal obstacle to continue his rule, and has lowered the eligibility for the presidency to allow his son to succeed him. He has also crippled the largest opposition party—the Islamic Renaissance Party (HNIT) by banning the party as a terrorist organization and sentencing two of the party's leaders to life imprisonment[46]. Despite the tight lid on media freedoms, the president has continued to clamp down on dissent by charging politicians, activists and lawyers who speak out against the government[47]. Rahmon's ties with Russia, which also include a military base near the Afghan border, preclude any significant steps closer to other international influences, yet Russia's inability to financially support its ally could lead to a greater crackdown in the country, and a deeply worsening human rights situation, or turns towards other allies, particularly China and western states as much as possible.

[45] Kasym, Elmurad. *Registan*: "US DoS's recognition of Uzbek rights advocate makes Bishkek so unhappy that…" 8 November 2015.
[46] *Radio Free Europe Radio Liberty*: "Tajikistan Jails Leaders of Banned Islamic Party," 2 June 2016.
[47] *The Diplomat*: "OSCE manages to irritate Tajikistan and Kyrgyzstan and human rights advocates too," 27 September 2016.

It is unclear whether or not these political maneuvers would trigger unrest, yet the possibility of Uzbekistan's own political transition shifting the status quo of neighboring states, compounded by freefall, exacerbate the risk.

2. New water-sharing realities

Under the Soviet Union, Tajikistan and Kyrgyzstan delivered water in exchange for energy resources from Uzbekistan, Kazakhstan and Turkmenistan. This agreement collapsed alongside the collapse of the Soviet Republic, with Uzbekistan claiming its unalienable right to free water resources while concurrently suspending its supply of natural gas to Kyrgyzstan and Tajikistan to punish Dushanbe and Bishkek for decisions Tashkent did not like. In 2015, Russia successfully negotiated with Uzbekistan to continue its supply to Kyrgyzstan in exchange for forgiving a substantial part of Uzbek debt to the nation, yet the solution is only a temporary one. The supply has been inconsistent and insufficient for the needs of the Kyrgyz population, particularly during harsh winters when electricity consumption increases. As a result, Bishkek has been forced to deplete water levels at the Totktugul dam to produce hydroelectricity, decreasing the flow of water that will reach Uzbekistan downstream during the spring months of cotton production. A more permanent agreement is certainly needed for the energy-poor economies of Tajikistan and Kyrgyzstan, and the lack of one will cause the states to try to meet their own energy needs by the building of new dams along the Syr-Darya, which will further impact Uzbek agricultural production and likely cause further tensions between the Central Asian states. Tajikistan, with purported building of the decades-long-awaited Rogan dam and the building of two more hydroelectric dams in addition to Sangtuda-1 and Sarikamysh gas field—could meet its energy needs and be an exporter[48].

Grid-Arendal: 2006 Industrial pollution and waste hotspots in the Ferghana Valley

Of the three countries present in the Ferghana Valley region, the mountainous Tajikistan and Kyrgyzstan are the largest sources of fresh water in Central Asia, harnessing glacial rivers in large dams to provide electricity to the vast majority of citizens in the countries, and allowing a portion of water to flow to Uzbekistan and support large-scale cotton production. Toktugul Dam in Kyrgyzstan provides 90% of the country's power and is the valve of the Syr Darya river. Since the summer of 2008, water resources Syr Darya, Amu Darya and Aral Sea shrunk mismanagement of the dam led to shortages in Uzbek and Kazakh and power cuts in Kyrgyz. This caused unrest that triggered deposing President Bakiyev in April 2010[49]. Rapid melting of glaciers will decrease flow over time. While the Aral lake has been decimated by decreased flows of the Darya and Amu Darya, Kazakhstan arguably has resources and a small population to deal with water stress. Yet for Uzbekistan, the decreased flowonly 10% of its 1960

[48] *Radio Free Europe Radio* Liberty: "Tajikistan On Road To Energy Self-Sufficiency, Dicier Relations With Tashkent," 20 December 2010.
[49] *China Dialogue*: "Central Asia's dam debacle," 1 March 2012.

volume- has created salisation, dust storms, in Kazakh will have a huge impact on Uzbekistan[50]. Roghun hydropower dam in Tajikistan and – for Uzbekistan existential risk to agriculture sector.

Two dams in Kyrgyzstan and Tajikistan were meant to be built in the last few years with Russian investment, yet the Russians failed to deliver on their part of the agreement, leaving the door open for alternate investors, like China. The building of another dam would severely impact Uzbekistan's cotton production and cause regional conflict, if not instability at the national level. If China goes ahead with such investment, it is likely that border securitization will increase, and farmers living in the Ferghana Valley region will face increasing scarcity of water.

3. Pollution and waste-caused conflict

With a profitable extractives and mining sector in the Ferghana Valley extracting mercury and uranium, in addition to chemical and textile industries, processing plants and oil facilities, soil contamination by toxic heavy metals is a continuing challenge to the region. Prior spills and contaminations have caused tensions and yet have failed to be regarded as a security issue. Treated as an economic or political issue, states fail to recognize the potential of largescale land contamination on extant ethnic tensions and agricultural livelihoods. As Kyrgyz and Tajik glacial ice begins to melt, the risk of nuclear contamination and the leeching of contaminated waters into larger sources like the Syr-Darya increases, alongside the general effect of gravity and the prevalence of mudslides and landslides.

Preparedness

Humanitarian assistance to Central Asia faces three challenges: the need to further develop state disaster risk reduction capacity, stronger regional coordination to confront regionalized challenges and dynamics and an aversion to Western donor pressures in exchange for aid. Intra and inter-state coordination remains the key obstacle to preparedness, which amounts to poorly funded, integrated and empowered government departments siloed from their regional counterparts—a death knell in an area where large population centers are divided by borders. In the event of a serious earthquake, only Kazakhstan has the fiscal resources to respond to the disaster. Furthermore, as the US has lost geostrategic interest in supporting Central Asia, and Russia is financially constrained by a recession and war, it is difficult to ascertain who indeed could step in and carry the shortfall for long-term development and preparedness funding commitments, though short-term emergency assistance needs would likely continue to be met.

Regional security dynamics remain a destabilizer across Central Asia primarily due to a lack of coordination between states and their neighbours, including Pakistan and Afghanistan, on all levels: security, economic integration, ongoing water disputes and the impact of largescale infrastructural projects on other states. Religious radicalization across the region—perceived by Tajikistan and Kyrgyzstan as originating from Pakistan—and potential hiccoughs from the withdrawal on NATO in Afghanistan are potential spoilers. Though drug trafficking and crime transgress these borders, dynamics remain stable because they serve ruling elites, and therefore would only destabilize if there are high-level contests for power. Several key dynamics stand out: the impact of Afghanistan and Pakistan on Tajikistan and Kyrgyzstan, in terms of withdrawing US support and growing instability due to Taliban activities and drug smuggling across borders, and the threat of Islamic extremism across the region, and growing ethnic separatist groups.

The European Union has tried to focus on preparedness with a regional focus through support to the Central Asian Center for Disaster Response and Risk Reduction (CACDRRR), yet political conflict has already arisen around the long-standing issue of water and energy management. Not all countries have signed up. Aid has still

[50] *China Dialogue*: "Central Asia's dam debacle," 1 March 2012.

been predominantly focused on the 2008 Georgia-Russia conflict, the 2008 Kyrgyz and Tajik energy and food security crisis and Kyrgyz civil unrest in 2010[51].

CONCLUSION

Though it is certain that there are greater humanitarian priorities captivating the attentions of international donors today, the slow deterioration of Central Asia economically and environmentally deserves concerted efforts. With coordination and disaster preparedness programming, as well as nimble responses to emergencies, humanitarian actors could have an immense impact—not only in lessening the effect of these natural tragedies, but also in encouraging dialogue and self-sufficiency in a unique moment of geopolitical shifts and uncertainty.

[51] EUCAM: "The EU's humanitarian aid and civil protection policy in Central Asia: Past crises and emergencies to come," January 2013.