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The Security Situation for Central Asia: Afghanistan, Water, and Uzbek Stability

Abstract

Central Asia has emerged on the global stage after spending decades in isolation. As developing nations, most of Central Asia possesses the resources to spur rapid development. Things would seem to be in the region's favor. There are, however, a few events that could derail the region.

Afghanistan is on the periphery of the region and presents a series of difficult dilemmas such as creating a functioning government from a country that has been at war for nearly 30 years, the problem of the insurgency in the south, and narcotics trafficking.

Water is scarce in the region, the leaders cannot agree on a water sharing treaty, and the downstream and upstream nations have different water usage needs and patterns.

Lastly, Uzbekistan presents some challenges due to its centrality in the region, clan infighting, the unresolved issue of succession, and the tenuous stability in the country.

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THE SECURITY SITUATION FOR CENTRAL ASIA: AFGHANISTAN, WATER,
AND UZBEK STABILITY

A Thesis

Presented to

The Dean and Faculty of the Josef Korbel School of International Studies

University of Denver

In Partial Fulfillment

of the Requirements for the Degree

Master of Arts in International Security

by

Carleton Wesley Becks

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Introduction

“Who rules East Europe commands the Heartland; who rules the Heartland commands the World-Island; who rules the world-island controls the world.”¹ This theory has unknowingly been put into practice for centuries, and in no area is this truer than Central Asia.

This region has passed through countless hands since the Mongols’ arrival in the 13th and 14th centuries. It is only now coming into its own as a distinct region since the end of the Cold War, and specifically in the context of post-September 11. The emergence of powerful neighbors bordering the region has only intensified Central Asia’s importance.

Central Asia² has taken on an increased global profile lately, due primarily to the abundant natural resources in the region and the subsequent scramble by a myriad of nations for them. In what has been termed the New Great Game, countries including China, India, and the United States are trying to curry favor within the region to gain access to those resources.

There is another explanation why the Central Asian republics figure so prominently on the global stage, their proximity to Afghanistan. The entire region’s security is not as substantially affected by Afghanistan; the burden is shouldered

primarily by Uzbekistan and Tajikistan. Turmoil in either country could have a spillover effect, causing significant internal instability for the rest of Central Asia. Unrest in Uzbekistan makes the rest of the region vulnerable due to its centrality, while Tajikistan's porous borders allow easy transit and access to other countries.

My thesis will have three parts in examining a question: the effect that Afghanistan, water scarcity and the conflict that could ensue, and Uzbekistan's stability will have on the region. The short term effect of Afghanistan on the greater region will be relatively easy to recognize but the longer term effects will be more difficult to analyze. On the other hand, viable water is a necessity so the long term effects are very visible; however, the short term effects are not as easily quantifiable. Lastly, Uzbekistan's ability to change the security dynamic within the region is a very abstract notion at the present. It is largely hypothetical but one that needs to be examined. Recommendations will be given for each area of concern and various scenarios will be constructed.

The instability in Afghanistan is well known. The US and the international community are working to establish a functioning government, which has its own set of complications. There are times when the goals of the international community, NATO, and the US seem markedly different. There are disputes between the Pashtuns and other ethnic groups and within the larger Pashtun groupings themselves. There is also the

problem that Afghanistan has been in conflict for the better part of three decades. It does not have the necessary human capital to construct a functioning government. The country is starting over, for all intents and purposes.

That is only the beginning. There are various non-state military formations (NMF)³ operating freely within Afghanistan, which indicates a limit on central authority. The Afghan government is not strong enough to enjoy unfettered control of its sovereign territory. There are historical examples that show this may be a hallmark of Afghan governance. The central government historically had an alliance of sorts with the rural elite.

Then there is the issue of narcotics trafficking taking place within Afghanistan, valued at \$2.8 billion dollars per year⁴. That is one of two economically viable industries left in the country; with the other being “a global arms market⁵”. Related to the trafficking, are the problems related to poverty, like illiteracy and high levels of unemployment. To put narcotics’ value into perspective, the 2009 GDP of Afghanistan was \$14 billion dollars.⁶ The other industries generating revenue are oriented towards agricultural production.

Simply put, without trafficking there would be even higher “official” unemployment and the stark poverty might be worse. As previously mentioned, Afghanistan has been in a state of conflict for the last 30 years. That does not leave much opportunity for any type of large scale countrywide skills development or even basic education.

Also there is the major sticking point of Pakistani intervention into Afghan internal affairs. There are also smaller pieces to this puzzle such as Pakistani-Indian relations and China’s effect on relations between Pakistan and India by sending arms to Pakistan. The cornerstone is Pakistani-Indian relations and everything else is secondary to that. To understand Pakistan’s involvement in Afghanistan, we must first understand South Asian relations.

The water conflict in Central Asia appears very straightforward. It is a classic case of resource security⁷, in this case water scarcity. The entire region is dependent upon the Amu Darya and Syr Darya rivers for their water needs. Simultaneously, the population for the entire region is projected to grow immensely; unfortunately, the two rivers are already severely taxed. Population growth requires increased food production which will strain the already over-stressed water resources. The region is still heavily reliant on aging Soviet-era infrastructure for farming. Due to the decrepit infrastructure, up to a quarter of the water is lost to evaporation.

The continuing water-related problems have not gone unnoticed in the region. The leaders of the Central Asian republics have attempted at various times to coordinate over the issue of water, but conflicting agendas and personal rivalries have doomed each attempt.

Then to add to the situation, dams are being planned which will siphon off more of the urgently needed water, as well as other superfluous show pieces, such as water fountains. The dams would not even be necessary if the Central Asian countries could cooperate. Dams are being considered due to unreliability.

But do not be misled. Even if Afghanistan was not a serious security concern for the region, the Central Asian countries have enough self inflicted problems of their own. The region ranks at or near the bottom of many different surveys of development, from corruption to women's rights to economic development to employment prospects. Central Asia would still have these problems regardless of Afghanistan looming so large. In fact, Afghanistan's problems seem to reinforce the region's problems, such as unemployment. Let's examine how Afghanistan arrived at this point.



Picture of Afghanistan courtesy of CIA World Fact book

Afghanistan

A fair point to start with Afghanistan is with a simple query. In the 21st century, how do we classify Afghanistan? Is it a conglomeration of ethnicities thrown together? Is it a country? Is it a confederation? The answer should become clear as Afghanistan is examined.

The religious aspect of Afghanistan will not be contemplated due to the fact the area encompassing Afghanistan was very tolerant religiously until recently. As heterogeneous as Afghanistan is, it is consolidated religiously⁸. “Religiously, Afghans are over 99% Muslim: approximately 80% Sunni, 19% Shia, and 1% other.”

The area that came to be known as Afghanistan has been organized in a political fashion since 1709 when the Pashtuns established the Hotaki dynasty near Kandahar. Its creation is more formally recognized as 1747 when Ahmad Shah Durrani established the Durrani Empire.

Afghan history 1978-2001⁹

Even though the focus is on this particular set of time, there were some developments during King Abdur Rahman's reign, from 1880 to 1901, that have continued and are important to this day. King Rahman creating an independent army, using tribes, is important because this was the moment when Afghanistan's political power began decentralizing. From that point forward, for any reforms to take hold the rural elite had to buy in. There were periods when the state depended less on the tribes, such as in the 1950's, nonetheless, the rural elite had a permanent stake in Afghan politics.

When the Soviets intervened, it was because the People's Democratic Republic of Afghanistan's (PDPA)¹⁰ heavy-handed attempt at reforms had failed. The PDPA, a small factionalized Marxist-Leninist party, took power after a 1978 coup, but it tended to sideline the elite whom were necessary for reform. What they failed to understand was that dramatic reforms were not the order of the day but rather "fragile local compromises." (Harpviken)

The Soviets' plan was to replace the radical PDPA with a more moderate course of action; however, the changes the PDPA advocated were too abrupt and far reaching, such as an ill-conceived land reform, banning usury, and the forced introduction of women into political life.

Predictably, these changes were not well received by the Afghan populace. The Soviets intervened to bolster Afghanistan. With this occurring in the midst of the Cold War, the US and its allies intervened on the behalf of the mujahideen. The majority of the aid that the mujahideen received was in cash and weapons.

There is a well known myth that the US' exportation of weapons, mainly the Stinger shoulder fired missile, led to the mujahideen expelling the Soviets, which is only partly true. There are many factors that led to the mujahideen's eventual victory.

“The Soviets applied a conventional military strategy, and brought new technology into the battlefield...the large and inflexible Soviet units were inefficient in dealing with the resistance. By 1984, the Soviets changed strategy, intensifying their attacks on guerrillas, and starting to target civilians more directly. By then, the resistance was both organizationally and technologically strengthened. There was an escalation of the war, and external supplies to the resistance multiplied through the next couple of years.” (Harpviken)

The reference to the external supplies is indeed very important. Arms and funding came primarily from the US, Saudi Arabia, Pakistan, and Europe; each providing support for different purposes. Saudi Arabia was seeking more adherents to its particular brand of Islam, while Pakistan had more geostrategic intentions. Europe was following America's lead, and the US “wanted to protect national interests and strategic objectives in the region.” (Mohmand)

The effect of the Soviet-Afghan war on Central Asia was profound. Many soldiers remarked on feelings of solidarity with the mujahideen while enlisted in the Soviet army. This eventually manifested itself in a religious reawakening in Central Asia, which is important today. This awakening took place principally in the Ferghana Valley, the most conservative area in Central Asia. It is also where many extremists recruit adherents.

There is another event that is worth noting, the Iranian revolution. After the Shah was disposed, Iran's intent was to export the revolution abroad and the Soviet Muslims were a convenient target. Tehran started beaming radio broadcasts in hopes of reviving religious feelings.¹¹ The rhetoric reached its peak during the Iran-Iraq War of the 1980s, coinciding with the Soviet-Afghan War.

To understand the extent of the effect on the region, knowledge of the past and present is paramount. During the Khrushchev era, he had advocated a decentralization of the Soviet Union.

Khrushchev sought to boost agricultural production by easing the burdens on the countryside, exemplified by the Virgin Lands Campaign in northern Kazakhstan. This initiative had the effect of loosening his grip upon the countries of Soviet Central Asia. Brezhnev also unintentionally continued these policies.

Brezhnev's era was marked by less direct control over the borderlands, due to the stagnation and endemic corruption that marked this period.¹² The leaders in Soviet Central Asia became entrenched because of the emphasis on stability and consensus. This had the effect of ushering in a new era of stability through a dominant group in each Central Asian satellite republic.

The terms were quite clear. If the leaders of the satellite republics continued to export what Moscow needed, then they could make their own internal decisions. This was the opportunity they needed. It was now permissible to clandestinely participate in religious practices, which many in Central Asia did. So there were the beginnings of a religious basis in Central Asia. By the time of the Soviet-Afghan war and its subsequent feelings of religious solidarity, it merely built upon the Khrushchev-era religious foundation.

What is most important about this period is the aftermath following the Soviet withdrawal in 1989. The mujahideen were united solely for the purpose of repelling the Soviets from Afghanistan. They had no reconstruction plans for a post-Soviet Afghanistan. This is when Central Asian leaders first had to be wary of Afghanistan, but at this point in time they were Soviet Central Asia.

As part of the Soviet Union, Moscow could provide some protection and material assistance to deal with the instability from Afghanistan. Unfortunately for the Central Asian satellite republics, Gorbachev's ascension and policies of perestroika and glasnost shifted the focus to Moscow. The brief moment when Gorbachev did turn his attention to Central Asia it was to fix the problem of corruption¹³, principally in Uzbekistan. Afghanistan was left to its own devices and Central Asia to manage the subsequent fallout. The situation deteriorated very rapidly.

Afghanistan, after the Soviet withdrawal in 1989, was in a very bad situation. The countries that flooded the mujahideen with support and arms largely disappeared after the Soviets were gone. In their wake, they left "now well-armed mujahideen." (Zarif) Kabul and the country descended into chaos.

"By 1992, the mujahideen had taken control of Kabul...ruling fiefdoms with little regard for humanitarian concern...the establishment of black market networks, including those linked to narcotic trafficking...they were able to monopolize violence by acquiring links to global illicit markets and advanced weaponry...opposing factions resorted to violent retaliatory measures against each other." (Zarif)

This is important because "over one million Afghans were killed and another five million displaced as refugees in neighboring Iran and Pakistan." Many of those killed or displaced were farmers due to Afghanistan's largely agrarian economy. The

infrastructure left untouched during the Soviet-Afghan war was not as fortunate this time, including “transportation routes, irrigation systems, and arable farmland.”

With the level of insecurity at this point in Afghanistan, the rise of the Taliban¹⁴ was a welcomed development.

The Taliban, originally Pakistani madrassa students, received support from Pakistan’s ISI, Inter-Services Intelligences.¹⁵ There are also reports the Frontier Corps, Army battalions, and regiments provided troop support to the Taliban when they fought for control of Afghanistan in the late 1990s.¹⁶

The Taliban created a more secure environment and an “almost complete ban on opium cultivation¹⁷,” however, this is a misnomer. By banning cultivation, they were able to reap unprecedented profits as demand and prices surged for the stockpiled poppy under their control.¹⁸ The Taliban provided relative stability but at a significant cost. There was no infrastructure rehabilitation for the meager transportation network that was left standing. Zarif Maseh sums up the economic dilemma quite well.

“Having been embroiled in several decades of war, the country’s economy was reduced to insignificance. Transportation systems, agricultural assets, educational capacity, and health care and public finances structures were passed on in disarray.”

This is the economic peril that existed in Afghanistan. It is what the Central Asian presidents faced regarding Afghanistan and continue to struggle with after the US

intervention in 2001. Unfortunately, the individuals in Central Asia with the most understanding of the situation and most effected were in no condition to provide aid. Central Asia, as a region, was a collective of newly independent nations and adapting to the rapid change that had been thrust upon them.

The Central Asia republics were the lone Soviet satellites that opted to stay in the Soviet Union. When they realized the direction the prevailing winds were blowing, they quickly reversed course and embraced independence. They were no longer under the auspices of Moscow, but instead were left to navigate without Soviet subsidies. Their new world order was marked by severe economic disruption, so it is not surprising that Afghanistan might have been neglected. That is not the only issue Central Asian leaders contend with regarding Afghanistan, there are several other countries with a stake in the current situation.



South Asia courtesy of CIA World Fact book

Pakistani Puzzle

No other country plays as integral part in Afghanistan's continuing problems as Pakistan. If the leaders of Central Asia seek positive developments in Afghanistan, then Pakistan is a crucial component. Some of the issues that involve Pakistan are peripheral to Afghanistan but they still factor into the security calculus. That is not to say that Pakistan is the sole reason for instability in Afghanistan. Some of the troubles are Kabul's own making. The primary place to start is Pakistani-Afghan relations, then relations between Pakistan and India, the role of other rising powers, and lastly the role the international community, mainly the US, plays into the Afghan-Pakistani-Indian nexus.

The very first issue to resolve between Pakistan and Afghanistan is the persistent problem of the Durand Line¹⁹. It is not the most perplexing issue but it continues to be a pressing concern for each country. A myriad of Afghan governments, including the Taliban, have refused to even acknowledge the Durand Line as a binding agreement, let alone the international border between the two countries. Make no mistake, even without the Taliban; Afghan-Pakistani relations have been rocky.

“Relations between the two countries have never been easy. Despite the support given by Pakistan during the jihad against the Soviet Union, suspicion runs deep in the minds of leaders of both countries. Afghanistan was the only country to vote against Pakistan’s accession to the United Nations after its independence because of Kabul’s claim on the Pashtun territories located on the Pakistani side of the Durand Line. This claim quickly generated a quasi alliance between Kabul and New Delhi, and Islamabad seized on the occasion of the Soviet invasion to try to reverse the situation. By supporting the seven parties of Afghan resistance and later the Taliban, Pakistan expected to install a friendly government in Kabul. The attempt backfired.” (Grare)

Pakistan’s interest in Afghanistan extends beyond their support of the Taliban and the Pashtun connections on both sides of the Durand Line. Pakistan is involved in Afghanistan primarily because of its relations with India. “Pakistan’s regional policy has revolved around...balance of power vis-à-vis India²⁰. “ Afghanistan matters only because Pakistan does not wish to be encircled by hostile neighbors, however, the matter is far more complex than that.

Pakistan’s concern is avoiding international marginalization, which to Islamabad boils down to the US. The US’ principal interest in South Asia is repelling the Taliban from Afghanistan while at the same time attempting to create an energy corridor for Central Asian natural resources to be exported via India or Pakistan. Afghanistan’s role would be as an energy conduit for pipelines. This places Pakistan in a difficult situation, “Afghanistan is one element in a larger game: not only is Afghanistan part of its Indian

policy, but it is also to some extent a component of its global standing.” (Human Rights Watch) Afghan and Pakistani concerns coincide on the Pashtun question; otherwise their objectives are vastly different.

As previously stated, relations between the two countries have not been encouraging, but it is less about the Durand Line and more about Pashtunistan²¹.

“Kabul has constantly sent signals to Islamabad indicating that the Pashtun community on the Pakistani side of the Durand Line was not only a population that Afghanistan considered its own but also a strategic asset that, rightly or wrongly, Kabul thought it could use in its relations with Islamabad.” (Grare)

Kabul’s assertion is the 1947 referendum²² gave Pashtuns in NWFP only two options: India or Pakistan. In the opinion of the Afghan government, the Pashtuns were not given any autonomy which could have included the ability to return to their “homeland.”

It only makes sense that Kabul would use the Pashtuns as a wedge in relations with Islamabad to attain the upper hand. Kabul found itself being wedged through the Taliban²³. They became a way for Islamabad to influence Kabul through proxy. The Pakistani government has repeatedly denied that it provides the Taliban with any military support. In an effort to show that it is also a target for extremists, Islamabad mentioned the disturbances it faced in Waziristan²⁴.

“Pakistani difficulties in Waziristan are real. Approximately 450 Pakistani soldiers have already been killed there, fighting the local Taliban and members of Al Qaeda, the militant Islamist group that took refuge in Afghanistan with the Taliban’s approval. Cities like Miranshah and Mirali are virtually under Taliban control.” (Grare)

Unfortunately, careful examination tells a different story. During the US campaign in October 2001, the Taliban escaped through the Miranshah and Mirali routes. This is not shocking considering that the entire Afghan-Pakistani border cannot be secured, but those routes were used by the mujahideen during the jihad against the Soviets. This is further evidence that Islamabad is utilizing the Taliban in case it is necessary. Events beyond Islamabad’s control forced a swift redirection in their Afghan policy.

The change came about in 2002 after intense US pressure to capture the Taliban and Al Qaeda forces retreating from the US forces in southeastern Afghanistan. The Bush administration made the situation very clear with the “either for us or against us” statement. Islamabad could not afford to be an enemy of the US so they had to swiftly change course.

Even now with the resurgence of the Taliban, they cannot unseat the Afghan government, but they can destabilize the southern portion of the country. Not only that, but they can negate reconstruction efforts contributing to insecurity, ensuring a negative feedback loop.

With Pakistani-Indian relations not showing a marked improvement, it is paramount that Pakistani leadership commits to a presence in Afghanistan or ensures the Afghan government does not have an anti-Pakistan stance. This puts Pakistan's material and political support of the Taliban in proper context. Al Qaeda and the Taliban have been using Federally Administered Tribal Areas, FATA, and the North-West Frontier Province, NWFP, as safe havens since the US intervention in 2001. Simply put, the Taliban is Pakistan's backdoor to a controlling stake in Afghanistan. At the same time, it creates another interlocking situation that must be addressed before Afghanistan's security is completely decided.

China is a very small piece of this entire puzzle; however, China does have some long standing border disputes with India, and they have gone to war over borders²⁵. So there is some rationale for China to send arms to Pakistan²⁶, which has happened, as a way to check India²⁷. "Until about 1990, Beijing clearly sought to build up Pakistan to keep India off balance." (Schaffer)

The open question regarding Chinese arms is whether they eventually end up in the Taliban's possession. That is not to insinuate that China is sending arms to the Taliban, nonetheless, the final destination has to be pondered. In the long run, Chinese-Indian relations have little consequence on the Central Asian security situation with regards to Afghanistan, but they do have influence on Pakistan-India relations. This

further complicates an already extremely problematic relationship. Beijing's support for Islamabad will matter less once Pakistani-Indian relations markedly improve.

This again shows that Pakistan-India relations are central to relieving some of the pressure as far as Central Asia is concerned. The frequent mention of the Taliban brings up an issue that Central Asia is very familiar with, insurgents.

The Central Asian region has extensive experience with insurgent groups. Tajikistan went through a civil war during the 1990s and Uzbekistan has been the site of several attacks²⁸. Coincidentally, those two countries have large numbers of fighters joining the Taliban and other insurgencies. Several insurgent groups are dedicated to the overthrow of the Karimov regime, in Uzbekistan. Some are seeking violent means others through non armed intervention.

The Karimov regime is using the insurgency as a pretext to clamp down further on all religious activity in Uzbekistan. This predictably drives more people to the insurgency's ranks. Many people see the insurgents as the only viable opposition left. All other forms of opposition have been marginalized.

The effect of narcotics trafficking

Narcotics are Central Asia's next multi-state quandary to consider. As is widely known, anywhere from 90 to 95%²⁹ of all worldwide opium production comes from Afghanistan. Much like Colombia, it is destabilizing the country. The effect is being felt far beyond Afghanistan though; Central Asia's populace is dealing with the effects as well. It is having the same debilitating effects in Central Asia as well.

The most obvious effect is on the economy. As stated earlier, Afghanistan's economy is not performing well as it can, but this further compounds its woes. In effect, narcotics trafficking is creating a second economy in the country; an illicit, or black economy. This secondary economy is producing goods that are not coming under the tax regime of Afghanistan, but it goes a step further. It is creating an entire subculture of individuals with no allegiance to Afghanistan, but instead to the continued production and export of heroin. With the value of opium in the billions of dollars, they have the resources to protect their interests. Transit through the region is also the first area that directly affects Central Asia within the realm of narcotics trafficking.

The heroin, processed opium, is not bound for Central Asia, as the final destination, but for Europe and Russia. This adds a new potential actor into the already complex web of narcotics trafficking.

The prospect of the Kremlin using narcotics trafficking as a pretext for further intrusion into the region should be noted. At present, the respective republics' presidents have each created a measure of breathing space from Moscow. If the Kremlin should deem narcotics a national security threat³⁰, then Moscow's re-entry into the region will be substantial. The overall effect on the region is that their freedom of action regarding foreign policy will be reduced.

The region is a vital transit hub for opium because it is the most direct route; it is part of the "Northern"³¹ route linking Afghanistan via Central Asia to Russia and Europe. So the Central Asian republics are facing the same trafficking-related problems that Afghanistan is facing but on a much smaller scale. The reasons, however, are very much the same.

It is more than just trafficking drugs. The incentive for people to join into this criminal enterprise speaks about the employment prospects in Afghanistan and the larger Central Asian region. Whenever employment is mentioned there are generally deeper issues to consider. Afghanistan and Central Asia are facing the same problems such as poor governance, economic stagnation, illiteracy, stark poverty, and endemic corruption.

Afghans' allegiance, regardless of ethnicity, is not to the central government but to their respective group. The government has not sufficiently crafted an Afghan identity. It is not surprising considering the difficulty in creating a functioning

government in the best of circumstances. Pashtuns holding the majority of government positions; president, prime minister, and numerous military posts; also does not help create loyalty to Afghanistan.

The intent is not to disparage Afghanistan and Central Asia, because narcotics trafficking occurs with equal regularity in the United States, Canada, and Europe; areas rife with opportunity. So it should come as no surprise that this occurs in Afghanistan and Central Asia, but the reasons are vastly different. In the developed world, this activity is pursued for various reasons; none of them directly linked to the ability to make a living. In Central Asia, it is exactly the inability to make a living that prompts many to consider this a viable economic activity.

With the exception of Kyrgyzstan and Tajikistan, the Central Asian republics have enough mineral resources to lift a significant portion of the populace out of dire poverty, to ensure an educated workforce, and to invest in industry. Unfortunately, the region's presidents see government as a means to personal enrichment to the country's disadvantage. Those in government and the elite emulate the leader's behavior and respond accordingly. These leaders neglect to maintain their countries and the unintended consequence is making narcotics trafficking a viable economic option.

Narcotics trafficking merely highlight these interrelated issues. People with prospects for socio-economic advancement do not readily consider illegal activities;

however, when your country has no viable economic substitute then alternative employment must be reconsidered. It is a relatively simple venture for those without any marketable skills or the ability to acquire any skills. It also seems to be recession-proof, even counter-cyclical. It has been an on-going activity since the Afghan-Soviet war.

Central Asia is a difficult region to quantify. It is not completely underdeveloped due to the crash course in development the region experienced as part of the Soviet Union. Unfortunately, it was a very incomplete process due to the unevenness and high selectivity³², but it was still beneficial. A fairer statement would be that region is under maintained, and this is deliberate. The dilemmas besetting Central Asia are generally the hallmarks of newly independent countries, not resource-laden countries with a decade and a half of experience in statehood. Central Asia is plagued with leaders whose only motivation is self enrichment to the detriment of the respective republics and the region at large. The problem with the Central Asian leaders also spills over into other areas: such as a lack of a comprehensive water policy.

Afghan scenario

It is July 2014 and the Obama Administration has kept its word and began a limited withdrawal of US combat forces in Afghanistan. NATO/ISAF forces have largely withdrawn ahead of the US forces. The last of the coalition forces leave with the US forces. In time, US troop levels will eventually emulate those of Iraq. It is a two-phase process. Most US troops are re-stationed at the Manas base in Kyrgyzstan. It is the Obama Administration's belief that if Afghanistan should rapidly deteriorate, then troops can quickly re-deployed. After it is determined Afghanistan will not fall apart, US forces are flown to Germany and from there eventually sent back to the US.

Pakistani, Al Qaeda, and Taliban forces as well as warlord-supplied militias step into this security vacuum to gain a foothold. In fact, Islamabad has been quietly planning for the day when Washington eases its presence in Afghanistan or withdraws altogether. Ever since the US left Afghanistan after the Soviet withdrawal, Pakistani leadership has decided to maintain the ability to quickly establish "presence" in Afghanistan.

Meanwhile, the Afghan government is not as well equipped to assume the task of mitigating Afghanistan's security slide. The Afghan National Army (ANA), while a larger and better trained force than it was 10 years ago, does not have the manpower to cover the vast swaths of the country that is needed.

Pakistan is not the only country that was planning for the US' eventual withdrawal. Immediate Central Asian neighbors Turkmenistan, Uzbekistan, and Tajikistan have created contingency plans for this as well. Ashgabat redoubles its neutrality stance, by further cocooning itself in the idiosyncrasies of the Turkmen president, Gurbanguly Berdymukhamedov. This further insulates itself from the outside world and bordering neighbors. President Berdymukhamedov is hopeful that if there is an unsavory change in government in Kabul that like the previous time his country will be left to its own devices. Tashkent's first action is to mine the border and post additional border guards. The Karimov regime's thinking is two-fold: to eliminate all alternate routes into the country that it cannot control and by doing that possibly stem the follow of narcotics into the country. Dushanbe redoubles its efforts to post border guards at the most vital transit routes along the border. The Tajik president is working against conventional wisdom because Tajikistan is still the primary transit route for narcotics.

Many farmers which had stopped cultivating opium, at the behest of the US, turn back to the crop. Fortunately, there is not a groundswell of farmers moving to opium production, and the Tajik efforts to guard the border make heroin transportation a more difficult proposition than usual.

By the fall of 2015, a precarious situation begins to take shape in Afghanistan. The north is relatively peaceful with the government in Kabul, an effectively sealed

border with Turkmenistan, and a vast array of competing warlords largely holding each other in check. The south is an altogether different situation. There are pockets of instability but the Pakistani government largely keeps the Taliban in check, for a time. Islamabad realizes the accusations about its behavior toward the Taliban and is a model citizen, however, this cannot hold. It eventually unravels due to torrential rains which force Islamabad into an internal relief role. This is the opportunity the Taliban and Al Qaeda have been waiting for. Many supporters within both groups believe this is the providence of Allah and their actions are divinely sanctioned.

The Taliban and various insurgent groups' first move are to relocate to those areas of instability in the south. Due to the harsh winter that is a slow process. By the spring 2016, there are sufficient numbers to begin attacks. Insurgent groups hostile to Central Asian governments begin making preparation to resume operations in the Ferghana Valley. Kabul is unsure of Islamabad's involvement in this movement of men and material, nonetheless, innuendo and accusations are bandied about. Pakistani leadership predictably denies all involvement or assistance.

Afghan-Pakistani relations are their lowest since May 2007³³. In an effort to stem the tide of Taliban pouring into the country, the border is mined. Unfortunately there are unintended consequences.

Many Pashtuns, both Afghan and Pakistani, still refuse to acknowledge the Durand Line as an official border and cross it at will. Many civilians are maimed and killed by mines. As a result Afghan Pashtuns' allegiances are divided between supporting Kabul and the Taliban.

At the same time, increasing numbers of farmers are returning to opium cultivation. In the late summer of 2016, there is a staggering amount of opium in Afghanistan so transport is attempted. Due to the sheer quantity being transported, the Tajik government is unable to stop but a small percentage.

The effect on Central Asia is swift. Heroin initially floods Uzbekistan and Tajikistan. Drug use soars, particularly among young unemployed and underemployed men. The heroin is not especially potent but the volume transported more than makes up for its potency. Closely tied to increased drug use are skyrocketing rates of sexually transmitted infections. Following long established practices, the Uzbek and Tajik leaders turn a blind eye to both problems, declaring the drug problem and sexual transmission rates to be far lower than reality. Each republic continues this official silence when more powerful heroin begins to filter into the country. Drug use promptly spikes again. The only thing keeping heroin use from reaching epidemic proportions is the high cost is beyond what most of the populace in their respective republics can afford.

Larger and larger quantities of heroin finally start to filter into Kyrgyzstan and Kazakhstan, and the same effect is repeated there. Only a miniscule portion reaches Turkmenistan, the country's only saving grace is its sealed border with Afghanistan. Unfortunately Central Asia is not the final destination for the heroin, it is Europe and Russia.

Russia is already home to one to two million heroin users³⁴ so the flood of heroin makes it even easier to acquire. Initially heroin is linked to the Transiberian railroad³⁵ and major cities along the rail: Vladivostok, Irkutsk, Yekaterinburg, and Moscow. In time, Afghan heroin displaces Asian organized crime as the most significant problem in the Russian Far East. The drug starts to spread to all parts of the Russian Federation, but the central point of entry is rumored to be in southern Russia. The ever increasing amounts of heroin eventually make it slightly more expensive than vodka.

Ultrationalists decry the breakdown of Russia, resulting in a period of trauma for all non-Russians living in the Federation. It is especially pronounced and severe in Moscow. Non-Russians are harassed and even beaten. This state of affairs cannot continue.

The Russian Federation's leadership chooses a decisive plan of action. The initial plan was to seal the border with Kazakhstan but that was deemed infeasible, however the Federal Security Service (FSB) drastically steps up border security operations. Instead

the Russian executive grants the Federal Migration Service within the Ministry of Internal Affairs (MVD) increased powers regarding visas. This appears to be the buildup for large scale deportations, but there is no official word from the Kremlin.

Kabul is aware it is fighting on three fronts: to stem the flow of heroin leaving the country, to win back the divided allegiance of Pashtuns, and to expel the Taliban from the south. It is not very effective at any of these three areas. A radical plan is decided that can alleviate the most pressing problem, the Taliban. The ANA gradually becomes aware that a stalemate is developing with the Taliban, and it has taken several months for Kabul to understand. The Taliban are not trying to win they want Kabul to exhaust itself from war. Kabul makes a fateful decision.

What was noticeably absent was any type of coordination among the Central Asian republics. Unfortunately, the leaders of the republics cannot come to any common solution for a myriad of issues and it continues to hinder any progress the region needs to make. Coordination is not a hallmark of Central Asian relations, to say the least. It will require the Kazakh executive to take the lead and then the others to acquiesce and come aboard. The next steps are recommendations to possibly help quell some of the potential unrest.

Afghan recommendations

Central Asia and the neighboring countries of Afghanistan must prepare for the day that the bulk of US forces withdraw from the country. That is an indisputable fact.

The utmost issue for South and Central Asia in regards to Afghanistan is the Pakistani-Indian question. That sentence says quite a lot. The simple fact that India and Pakistan's inability for normal relations is impacting Afghanistan which is further affecting Central Asia begins to shed light on the complexity of the situation.

The obvious answer is to have tripartite talks between Kabul, Islamabad, and New Delhi. A joint Pakistani-Indian communiqué more or less promising not to interfere in Afghan internal affairs would be the best possible option, although, that is not very likely.

What recourse do Central Asian presidents have? India's prime minister would not care to hear that its relationship with Pakistan is having a negative consequence on Afghanistan which is further exacerbating the situation for greater Central Asia.

What is the desired end result for Central Asia and Afghanistan? Some positive traction for Pakistani-Indian affairs is the best case scenario because progress between Pakistan and India further lessens the possibility of Pakistani interference in Afghan affairs. This would also allow Kabul to begin to get a handle on the insurgents, heroin production, and transportation; which would ultimately be positive for Central Asia, let

alone Russia and Europe. The region must be mindful that Russia considers the amount of opium transiting into the country a national security threat and will take steps to resolve it. Any Russian initiative will likely require an increased Russian footprint in the region. This could ultimately be beneficial in relation to narcotics trafficking. This would be the anti-thesis to the domino theory. The more important question is where to begin with Pakistan and India.

This is a difficult question to answer. Neither is willing to budge on Kashmir, both possess the tremendous power of nuclear arms at their disposal, there have been numerous military clashes, and each sees their role in the region in a fundamentally different light³⁶. India is the protector of the South Asian status quo, where India is the regional hegemon and there is little international interference. Pakistan is seeking to upset the established order by bringing in other great powers, namely the US. Since relations between Islamabad and New Delhi are marked by a series of intractable points, the focus can shift to Central Asia. It is important to keep a few things in mind; any coordination required should be kept to a very basic level. These recommendations should not be radically different from the country's normal mode of operation. Also, Turkmenistan will likely not participate or only nominally so.

The two front line republics, Uzbekistan and Tajikistan should develop some joint Afghan border and illegal imports monitoring group. This is not necessarily to interdict

all people or contraband attempting to enter the region, because that is not possible even for wealthier countries. The goal is to begin to foster the idea of shared responsibility in the region. This is an especially good idea for the greater region, but these two republics will bear the brunt of any instability to a far greater degree than the rest.



Amu Darya and Syr Darya courtesy of DEMIS Mapserver

Implications of water

The next problem that Central Asia must contend with is the issue of water security³⁷. The region is not water rich³⁸ even with two rivers coursing throughout the region. A water rich state has somewhere between 30,000 and 60,000 m³ of water per capita yearly. The list of water rich states is a short one: Iceland, Suriname, Guyana, Canada, Norway, Panama, and Brazil. The other end of the spectrum is water scarcity which is a country “with internal renewable water resources that are less than 1000 m³ per capita per annum.³⁹”

By contrast the two main rivers of the region, the Amu and Syr Darya have “an average annual flow of 79.3 billion cubic meters (bcm) and 37.2 bcm.” (McKinney) This sounds like a substantial amount of water until the total population of Central Asia is factored in for cubic meters per capita. The 2009 population of Central Asia stands at roughly 61.5 million people. The cubic meters of water per capita of Central Asia is 1,894.⁴⁰ This much water is not enough without allocation and distribution being considered.

The upstream nations are generally poorer and utilize water for hydroelectric power. Conversely, the downstream nations are generally wealthier and need the water for irrigation and environmental demands. Then there are a plethora of different water governance mechanisms. Beyond the differing uses and allocations are the seasons when upstream and downstream nations need water.

The upstream nations primarily need to use the water for hydro electrical purposes in the winter. This unfortunately causes downstream flooding in the winter, especially in Uzbekistan. Conversely, the downstream nations need the water for agriculture and generally in the spring and summertime. Due to the upstream nations releasing water during the winter for power generation, there will generally be less water available in the spring and summertime.

To understand how Central Asia arrived at this difficult juncture, the Soviet and post-Soviet periods must be examined. Most of the current water difficulties can be traced to that timeframe.

Soviet era water policy

Soviet planners took a more concerted look at Central Asia's water basins in the 1950s. This was largely spurred by major projects such as land reclamation and the directives to increase agricultural production. At this point and time, all Central Asian water management was directed from Moscow.

“Each republic developed five year plans that were coordinated by the state planning agencies and funded through the republican or central budgets of the Soviet Union. For trans boundary basins, such as those in Central Asia, basin plans were developed by regional design institutes and included inter-republic and multi-sectoral aspects, as well as allocation of water for various uses.”⁴¹

Moscow had to intervene in the late 1970s to ensure that water reached the lower parts of the Aral Sea Basin. The final aspect of the Soviet plan was approved for the Syr Darya and Amu Darya in 1982 and 1987, respectively. What held this all together was a barter agreement crafted by Moscow.

“The Soviet command economy would order the upstream countries to collect water in their dams to be released downstream in spring and summer during irrigation periods. In return, the downstream countries rich in fossil fuels (especially gas, oil, and coal) were ordered to provide the upstream countries with these natural resources and electricity, which they did not possess.⁴²” That was the extent of Soviet planning and control before independence.

Post-Independence era water policy

Due to the heavy reliance that Moscow placed on irrigated agriculture, by independence the Central Asian republics had to move quickly to modify interstate water relations. In October 1991, the heads of the various republics' water sectors developed a management system and signed an agreement establishing the Interstate Coordination Water Commission (ICWC)⁴³ and other operating organs.

The Commission did not do much more than continue with the previous Soviet barter system. Even so the ICWC is the highest level of trans-boundary water management in the region. The Syr Darya and Amu Darya Basins are its responsibility. The drawback is decisions are by consensus with each state having an equal vote.

The next level is the Basin Water Management Organizations (BVOs)⁴⁴. BVOs were originally created in 1986 to manage water resources according to the Soviet Ministry of Water Management. Their new role is to act as the executive arms for the respective rivers. Among other duties, BVOs divide the water supply between the republics and the Aral Sea and its zone. It is also responsible for designing, constructing, rehabilitating, and operating all hydraulic structures on both rivers, including reservoirs, measuring water flow, and maintaining water quality in the rivers.

The presidents of the region created the International Fund for the Aral Sea (IFAS). Its main aim is to “attract resources to coordinate and finance regional programs to overcome the problems associated with the Aral Sea.” (McKinney) The Interstate Council for the Aral Sea (ICAS) manages the regional programs. In 1997, ICAS and IFAS were merged into a new IFAS with one of the presidents as the rotating chairman.

The problem with this large water bureaucracy is clear.

“These main regional water and energy institutions have very limited capacity and function according to sometimes contradictory principles. The operation modes of hydro systems in the Aral Sea Basin are determined by ICWC without participation of the energy sector. The operation plans are implemented by the energy sector without participation of the water sector. All of the executive bodies of these organizations are located in Uzbekistan and their staffs are entirely Uzbeks.” (McKinney)

The politics of water in Central Asia

It is a finite resource, in increasingly short supply in the region, and at the same time absolutely necessary for the populace and the agricultural industry's continued crop production, specifically cotton. The last point highlights the impracticality of this water poor region's attempt at large scale farming. This is a dilemma on several fronts: inter and intra nationally and between industry and society. The water problem can be represented by three tiers: problems between the republics, problems between the regions within the respective republics, and the tug-of-war between agriculture and society.

Daene McKinney encapsulates the overall dilemma quite well.

“The Central Asian Republics depend on the rivers of the Aral Sea Basin for drinking water, irrigation, and hydroelectric power. In the upstream countries of the Basin, Kyrgyzstan and Tajikistan, the rivers are used for hydroelectric power, especially during winter months, while downstream, in Turkmenistan, Kazakhstan, and Uzbekistan; they are used for agricultural purposes in the summertime. The post-independence upstream shift in water use away from irrigation has created disputes between the upstream and downstream countries over how the region's trans-boundary waters should be managed.^{45,}”

Water would be problematic in Central Asia even if it were not compounded by climate change. An area that is “least responsible for the greenhouse gas emissions^{46,}” is disproportionately affected by the resultant climate change. Any effective water policy will have to factor in a trend of declining precipitation levels.

Central Asia is not the only region that will grapple with water sharing. The Middle East is having many of the same difficulties, especially with regard to the Jordan, Nile, and the Euphrates rivers. The Turkish-Syrian water predicament has been ongoing since at least the 1950s⁴⁷, so this is not a new issue and not specific to a particular region. More than 70 water related flash points have been identified, mainly in Africa, the Middle East, and Latin America.⁴⁸

The parameters of the difficulty between the republics are very straightforward. There are five republics and only two rivers⁴⁹, Amu Darya and Syr Darya, which makes a treaty or water sharing the utmost concern. Exacerbating the situation is the extreme water flow variability of both rivers, which are impacted by receding glaciers. Unfortunately, there is no water sharing agreement and it is more multi-faceted than it first appears. Many of the region's water problems stem from Soviet era decisions.

“Four decades ago, the Soviet central planners calculated that using Central Asian rivers for the irrigation of cotton would generate greater economic value than letting the majority of their flow empty into the Aral Sea, which was then the planet's fourth largest lake” (Postel).

According to the Australian Bureau of Statistics, cotton is the second most water-intensive crops behind rice,⁵⁰ and Central Asian republics grow both, although heavily skewed toward cotton. Unfortunately, that is not all to consider, there have been unintended consequences as far as the Aral Sea is concerned.

When the Aral Sea was the fourth largest lake, it acted as a sort of weather stabilizer for western Uzbekistan and Kazakhstan. Now that it is smaller and shrinking, the region is beset by wind storms and more temperature variation in the summer and winter seasons. In short desertification is occurring, and that is not the only change.

The heavy fertilizer use in the cotton industry has contributed to more polluted rivers. The water flow that does reach the Aral Sea now has a higher salinity. With the South Aral Sea shrinking, those fertilizers have crystallized and now they are being blown by the wind storms that beset the Karakalpakstan region of Uzbekistan. It is creating an acute health crisis in western Uzbekistan, particularly in Nukus.

As the Aral Sea shrank, it separated into two seas, the North and South Aral Seas, in Kazakhstan and Uzbekistan, respectively. The South Aral Sea will completely disappear before the midpoint of this century, an undisputed fact. The Uzbek government neither has the money to begin the long arduous task of attempting repair nor the ability to move away from large scale cotton production. On the other hand, the government in Astana has begun the process of trying to save the North Aral Sea. The initial results look promising, fisheries are reporting larger catches. That may be the lone positive outcome of the whole Aral Sea story, aside from that fact the Aral Sea will continue to exist in some form.

Then the region's water usage has splintered. Uzbekistan is appropriating the lion's share and using most of its share for cotton production, while Kyrgyzstan and Tajikistan, the two headwater nations, are progressively turning towards greater hydroelectric production. Obviously because they are headwater nations, their usage has effects downstream. The republics' disagreements concerning water are starting to spill over into other areas, further effecting relations.

As Central Asia, like the rest of the globe, becomes increasingly urbanized, city dwellers need larger and larger water allocations. Unfortunately for the region, agriculture has large water needs as well. In this tug-of-war, the city dwellers⁵¹ are generally the losers.

As was stated earlier, this is a region wide problem. Oxfam International⁵² wrote a report on the effect of climate change in Tajikistan and the same issues with regard to water were mentioned. The difference was a north-south schism in terms of water distribution. Northern Tajikistan is experiencing more droughts of longer durations while in the south they are experiencing heavier rain fall and increased glacier runoff. Unfortunately, the net effect is grim. The Amu Darya's water availability is projected to decrease by 40%⁵³. This river provides 40% of total water resources to the rest of Central Asia⁵⁴.

The Tajik and Kyrgyz presidents have long desired to build a dam for power production⁵⁵. The downstream nations, the Uzbek government in particular, have vehemently rejected such a proposition. The headwater nations have pressed on regardless. Kyrgyzstan essentially tried to trade the US base in Manas⁵⁶ in exchange for loans from Moscow to build the Kambarata-1 hydroelectric dam, which initially began construction in 1986 but has since stalled. Tajik president Imomali Rahmon has begun issuing “public shares”⁵⁷ for the renewed effort to complete the Rogun⁵⁸ hydropower dam. The Tashkent government has retaliated by holding up transit at the Uzbek-Tajik border. The reverberations of this spat have the potential to affect US operations in Afghanistan, where supplies are transported by rail through Uzbekistan to Tajikistan before being trucked to Afghanistan.

The next problem to consider is within the republics, between the regions. Obviously this is more an issue for the downstream nations than headwater nations. In Tajikistan, the southern region enjoys greater precipitation and thus greater access to water than northern Tajikistan. In Uzbekistan, some provinces⁵⁹ have accused others of taking more than their fair share of water. This is more Amu Darya related at present.

Central Asian water scenario

It is the summer of 2014 and the two Central Asian republics of Tajikistan and Kyrgyzstan have finally realized their long stated dream of energy security. Their hydroelectric dams, Rogun and Kambarata-1, respectively, have been completed.

Each country went to extreme measures and questionable practices to get their dam completed. Tajik president Imomali Rahmon essentially made everyone in the country buy a share in the new dam to raise the funds to complete it.⁶⁰ The Kyrgyz government used funding from the US military's ever increasing rent of Manas and Russian project assistance to complete their dam. The US withdrawal from Afghanistan in 2014⁶¹, forced Bishkek to speed up the timetable. Without Afghanistan, the importance of Manas to the US military necessarily lessened.

Many laborers worked round the clock during springs and summers to complete the dam. They are also steadily working on completing Kambarata-2. The tandem were begun in 1986 but "halted due to lack of funds."⁶² Bishkek is hoping that the revenues generated from Kambarata-1 will pay for the other dam.

The governments in Dushanbe and Bishkek are essentially shut down as both countries prepare for official ceremonies and both countries are caught up in general jubilation. For much of the populace, they do not know life without rolling blackouts,

brownouts, and fixed periods of electricity. It is a time brewing with optimism for the upstream nations. The same cannot be said for the downstream nations.

The governments of Kazakhstan, Uzbekistan, Turkmenistan, and to an extent Afghanistan are bracing for a period of uncertainty. If the dams are generating electricity during the winter, then there will be an increase in floods in the Ferghana Valley and consequently less water available for agriculture. The upstream nations have promised to be judicious in their usage of the dams. The very reason the dams were built is the lack of electricity in the winter. With no trans-boundary water sharing agreement in place, merely the old Soviet system that no country wholly adheres to, then each country is naturally self-interested. The downstream nations file official letters of protest with the Kyrgyz and Tajik ambassadors in their respective capital cities. The Dushanbe and Bishkek regimes again reassure those downstream they will be judicious with the hydroelectric energy production. An uneasy state of affairs begins to take shape.

Uzbek president Islam Karimov issues increasingly bellicose statements about the dams. The Uzbek military resume military exercises that suspiciously look like the taking of a dam.⁶³ Statements regarding “all options being on the table” begin to appear in the Uzbek media. Uzbek relations with both countries have never been great and begin to decline even more.

To forestall what ultimately occurred, Tashkent would arbitrarily hold up rail and trucks bound for Tajikistan.⁶⁴ The effect was for Tajik president Rahmon to merely reaffirm his efforts to complete the dam. As for Bishkek, repeated Uzbek incursions into Kyrgyz territory due to insurgents have not helped in Kyrgyz-Uzbek relations and the dam merely exacerbated an already damaged relationship.

Kazakh aid to Kyrgyzstan and Tajikistan wither into meaninglessness. It is Kazakh president Nazarbayev's only significant leverage and not very compelling. The two upstream countries depended on Astana to a greater extent **before** the dams were completed, however they learned to cope. Kazakhstan calculated it made more economic sense to pay Kyrgyzstan more for water than to provide aid. Kazakh-Kyrgyz relations, prior to the completion of the dam, were at the point that economic unification⁶⁵ was whispered about in both capitals.

Ashgabat is as displeased with the turn of events as the rest of the republics, however, it does not engage in any retaliatory actions. Instead, efforts are recommitted to finish creating the Golden Age Lake in the middle of the Kara Kum (black sand in Turkmen) Desert.⁶⁶

The problem here is that most of the water will have high salt content so water will have to be drawn from the Amu Darya or the lake will eventually dry out.⁶⁷ If water is diverted from the Amu Darya to sustain this lake, it will further strain relations

between Tashkent and Ashgabat. The water shortage will be directly felt in the Uzbek provinces of Urgench and Karakalpakstan. Further compounding souring relations, Turkmenistan is planning to irrigate 450,000 hectares of land, and Uzbekistan had similar plans.⁶⁸

After a period of testing the respective dams' integrity and the turbines' feasibility, the dams finally come online in the fall of 2016. There is still much trepidation in the other Central Asian capitals, particularly Tashkent. The continuing schism between wintertime and summertime water needs notwithstanding, things proceed smoothly.

The republics eventually settle into the routine of the ebb and flow of the differing water usage. Then two simultaneous events upset the balance. Tajikistan had been experiencing longer and longer drought seasons; by 2025 the effect was clearly being felt downstream. To compensate, Tajikistan would release lesser amounts of water in the wintertime, which meant less electricity. The populace did not react negatively because there had been almost 10 years of available wintertime electricity and power shortages had become a memory. In the beginning, it was not a big problem, because of government assurances that it was a temporary state of affairs. When 2028 marked the third consecutive winter of restricted electricity use, the citizenry reacted.

The citizens of Tajikistan have grown accustomed to reliable winter electricity, so when the third winter of restricted electricity occurs, tensions explode. Dushanbe figures in order to keep the peace that easing the restrictions are necessary, so a rolling schedule is implemented. It works until the temperatures drop sharply and the entire country needs to heat their homes. Tajikistan has no other alternative than to utilize the dam, conversely releasing more water downstream.

The other development is Afghanistan's decision to appropriate a greater share of water. Kabul cites a 1946 agreement with the Soviet Union regarding the Amu Darya as justification for taking the full allotment of 9 million cubic kilometers of water⁶⁹ from the Panj River⁷⁰. It currently uses about 2 million cubic kilometers. Tashkent and Ashgabat immediately decry this announcement. After a flurry of official protests, Kabul agrees to half of the allotted 9 million cubic kilometers by the middle of the 2030s, and then one half million cubic kilometers per year thereafter. Afghanistan does not plan to use the full allotment; it plans to sell the water usage to downstream neighbors Uzbekistan and Turkmenistan.

Afghanistan's assertion to its water rights sets off a chain reaction among Amu Darya states. The Uzbek and Turkmen regimes protest the Kyrgyz dam and Afghan's water allotment from the Panj River and the Uzbek government pre-emptively protests the possibility that Turkmenistan will take more than its fair share for the Golden Age Lake.

All is not well on the Syr Darya either. The governments in Astana and Tashkent have a heated disagreement regarding Uzbekistan over-appropriating water for agriculture. This leaves less for Kazakhstan and the north Aral Sea.

At this juncture, the presidents of Central Asia (including Afghanistan) decide to meet to work out the water issues. The Turkmen president initially declines to attend but is persuaded by the rest of the region. It is billed as a watershed moment in Central Asian relations; however, the meeting goes as other previous water summits. Personal rivalries, conflicting agendas, and general disagreement forestall any quantifiable progress from being achieved. A joint statement is only achieved at the 11th hour. The status quo holds.

The scenario could have gone a much worse route and it is not completely impossible. The fact that the Uzbek military has a training exercise that revolves around water makes the use of military force very real. With Uzbekistan having the most advanced military in the region, the only effective response would be asymmetrical warfare.

Water recommendations

The parameters of this issue are straightforward; however, it is a very precarious situation. There still is no consensus on whether an attempt should be made to “save” the Aral Seas or focus on the northern portion. My personal belief is that the Uzbek portion is a lost cause for a variety of reasons so all potential resources should be devoted to the northern Aral Sea. If the Kazakh portion of the Aral Sea eventually grows large enough, then work could be begin on reclaiming the southern portion, but that is decades from happening.

The scenario briefly touched on a water summit among the republics; however, not enough different viewpoints are normally present. It is usually only the republics and they debate about water usage and allocation. Industry should have a seat at the table as well as agriculture and a consideration for the populace. Each sector has different needs and there are some possible areas of intersecting usage and need.

Funding any initiative will require international assistance so organizations such as the Asian Development Bank, the World Bank, the United Nations, and the European Union should also be a part of these summits. These organizations will have to do more than merely provide assistance in the region. The World Bank and United Nations have the gravitas to get the Central Asian republics to agree to meet. The overriding concern should be what is best for the region; unfortunately, this will upset many of the regimes.

The World Bank should focus on the Kyrgyz and Tajik dams while the UN's focus should be on the Aral Sea. In order for the other regimes to accept the two dams, the World Bank would need to provide some level of development and agricultural assistance.

The development aid could be for the downstream nations to build some type of reservoir for the water released during the winter. As for the agricultural assistance, a less water intensive strain of cotton or even crop diversification could be a solution.

The infrastructure transporting the water should also be examined. All of it is Soviet-era and in dire need of repair. That will save 25% of the water that is being lost.

Climate change's effect on available water should also be taken into consideration as well as declining water flow. The republics will have to learn to do more with less in the near future.

In summary, the issue of water in Central Asia will require a multilateral stakeholder meeting. Nothing less will fix the problem, and the region is in an unenviable position because of the dependency on cotton. In Uzbekistan, the issue of water also intersects with the issue of Uzbek stability.



Figure 4 Map of Uzbekistan courtesy of Oriental Express Central Asia

Uzbekistan's effect on stability

Events transpiring in Uzbekistan could have debilitating effects on Central Asia's security situation for a few reasons. It is the only republic that borders the rest of the republics in the region. Simply put none of the other countries would have a buffer if there should be an internal disruption. Uzbekistan is also the only republic with members of its country living in every other republic. That potentially increases the likelihood that there would massive refugee outflows to other republics or inflows into Uzbekistan. It is also the only republic that insurgents have explicitly mentioned as wanting to overthrow.

These are all external issues that can be hashed out. The biggest issues are within Uzbekistan, such as the relation of water usage and stability, the clan rivalries, and succession. Before we delve into those issues, we must understand how Uzbekistan came to be in this present predicament.

The Uzbek President's role

Islam Karimov is the president of Uzbekistan, a title he has retained since the country declared independence in December 1991. Prior to becoming president, he was the First Secretary of the Uzbek Soviet Socialist Republic, a position he held for 2 years⁷¹. Karimov's magnitude is debatable. It can be inferred that this situation would occur regardless of who was the president.

The main rationale for Karimov's ascension is related the cotton scandal⁷² and its aftermath. What is important about the scandal is the large cadre of Uzbek bureaucrats in charge. This large class of Uzbek apparatchiks is due to Leonid Brezhnev's ethnicization of the republics, specifically Soviet Central Asia. In Uzbekistan, the ethnicization of the Uzbek republic was during this time, and the First Secretary was Sharif Rashidov. Unfortunately, this time was also marked by rampant corruption, namely the aforementioned cotton scandal.

What is important to keep in mind is Uzbeks were given the ability to "govern" the Uzbek Soviet Republic for the first time. These were the new elites of Uzbekistan, and this is the possible precursor to the clans.

The role of clans

Before we can begin to understand the problem, a definition of a clan is necessary. Clans are “a group with shared experience, a shared history, and a clear ethnic lineage. Clans are a part of the greater tribal heritage, which is a primary bonding agent across the whole middle Asian region⁷³” (McCray, 36-37). According to Kathleen Collins, “the clan is an informal identity network based on kinship ties and is common in semi-modern societies.⁷⁴” It is a spontaneous or deliberate grouping of families and individuals with common interests. What is unknown is the genesis of such groupings⁷⁵.

Each region of Uzbekistan has its own clan, but there is a contest for national supremacy by three clans: Samarkand, Tashkent, and Ferghana⁷⁶. Some region’s clans are left to their own devices because of the distance involved and the difficulty in reining them in; however, they are far from the center of power, Tashkent. As a result, their abilities are severely constrained. The fundamental issue of the country is the fragmentation of the Uzbek elites sub-nationally, i.e. the clan⁷⁷ system.

Given the economy and political realities in Uzbekistan, it is not hard to fathom why the clans continue to persist. There is a very low level of pertinent information available to the general public. At the same time, there is a high degree of institutional memory that exists. Knowing someone who can get things accomplished is highly advantageous.

It is difficult to determine when the clans coalesced into their present form. What gives some clans independence is that they control certain segments of the Uzbek economy. This also is crux of the problem in Uzbekistan.

The clans vs. Karimov

Islam Karimov is presumed to have unfettered control of Uzbekistan, when that is not really the case. This may also explain some of Karimov's actions and decisions. It is difficult for Islam Karimov to bring the three pre-eminent clans under his heel like the rest of the country because they are financial independent of him or he is financially dependent upon them. It is not entirely clear where one ends and the other begins. So the best he can do is referee and act as the final arbiter in disputes and rivalries among the Samarkand, Tashkent, and Ferghana clans.

Because of this predicament, his ability to govern is also severely hampered. He cannot regulate those areas of the economy that any of the three clans control because it will touch off a new round of in-fighting or possibly destabilize the entire country. As a result, he has highly centralized all decision-making abilities within Uzbekistan. He is able to control everything except for those three clans. To compensate for this deficiency, he must be able to control as much as possible.

This extends into the cotton culture, prevalent in Uzbekistan and several other republics. As previously stated, this further compounds the water issue. There is limited quantity water available in the region so a decrease in cotton production would be ideal however; it is the economic engine for Uzbekistan. So while it is adding to the environmental degradation, to decrease cotton production has far reaching consequences.

With cotton as the principal export of Uzbekistan, the entire system has a vested interest in its continuation. The funds made available due to cotton exports are the foundation for the country from the patronage systems to the rampant corruption to employment. Adding to the problem is no other viable legal employment is available. Cotton is the only thing keeping Karimov in power, and that is not his biggest problem.

There are rumors that Islam Karimov has a serious health complication, possibly cancer⁷⁸. The government of Uzbekistan will not even comment on this matter. It is admittedly very important because of the issue of succession.

The issue of succession

Uzbekistan, like most of the Central Asia, is euphemistically characterized as semi-or-quasi-democratic. Simply put, there is no realistic option for the populace to choose the next leader of the country, constitutional mandate notwithstanding. With the very public moves that his daughter, Gulnara Karimova, is making the growing consensus is she seeks to succeed him as president of Uzbekistan.

If she were to assume the presidency, that would be a first. No other republic in the region has experienced a direct handover⁷⁹ of power, compounding the uncertainty is the fact that Gulnara Karimova is a woman that would lead a nominally Muslim country with a very conservative and problematic region. This region just happens to be Ferghana, one of three clans.

Here is where problems start to occur with succession. The Karimov family could push Gulnara as the next president of the country; however, it is likely the Ferghana clan will vigorously disagree. This would allow the Samarkand clan to continue to hold the presidency. It would be logical for the other two clans to want to have a member assume the presidency. The Samarkand clan could be assumed to want to maintain the status quo.

So the lynchpin in this quandary is the Tashkent clan, unless the other regions' clans have any input that will be considered. This is not even taking into account that beyond Gulnara Karimova there are not many known candidates⁸⁰ for the presidency post-Karimov.

Uzbekistan must also contend with the unknown. All it may take to undermine the precarious stability is one more internal hiccup. Whether it is a drastic commodity price increase similar to Kyrgyzstan, a shooting like Andijon; another bombing, another Central Asian insurgency grouping plotting the government's downfall, a severe drought like Tajikistan, or a prolonged water shortage there are a myriad of issues that could send Uzbekistan into a period of uncertainty.

Uzbek succession scenario

With passing of Islam Karimov in 2030 from complications with cancer, Uzbekistan enters a period of great uncertainty. This is also the year that Kabul begins to increase its allotment from the Panj River⁸¹, which is a feeder river for the Amu Darya. Karimov's death further strains a very problematic situation and forces some prioritization. As vital as agriculture is to the Uzbek economy and adequate water allocation to continued agriculture production, determining the next president takes on the utmost importance. Quite simply the rules have changed.

The other republics are not sure how to react to this news. They are hopeful that a new era of relations can begin with Uzbekistan, as each has had a period of strained relations in the past. Official condolences are hurriedly sent to Tashkent, and the other heads of state begin preparations for the coming funeral service.

News reaches Moscow. There is trepidation among the Uzbek elite there. A large part of their recent fortune was due to taking advantage of the Kremlin trying to curry favor with Karimov. Their position within the Russian oligarchy changes overnight, literally.

The Kremlin is not one to take chances; it wants a visible presence in the region to quell potential upheaval. A request is sent to Dushanbe to increase the contingent of

troops there under the pretext of “joint border security training.” The offer is readily accepted. The Kremlin’s maneuvering is not over. Moscow proposes a CSTO counterinsurgency exercise in Kyrgyzstan in a month’s time. All member states accept the invitation except for Uzbekistan.

Within the country, the news travels from Tashkent to the Ferghana Valley to Karakalpakstan in a matter of hours. The news takes on a new meaning in three provinces: Samarkand, Tashkent, and Ferghana. For Tashkent and Ferghana, this represents a chance for even greater personal enrichment through their region assuming the presidency. It is equally if not more important in Samarkand. This could potentially imply the end of their dominance. That is also dangerous. Samarkand could merely move down a tier or completely disappear.

Political calculations are made and a gauge of the wind is taken. Contact is made with the primary clans and individuals in all the provinces. The obvious and near instantaneous consensus is the need for a new region and clan to assume the presidency. Samarkand’s time has come to an end. The consolidated Samarkand clan unravels, Samarkand is alone. Alliances are established, promises are made, and deals are done.

It is quickly determined that Gulnara Karimova will not assume the presidency, and that brings up an interesting dilemma. In other cases of succession, the family generally fled the country or gracious stepped aside. What to do with the Karimov

family; allow them to remain in the Samarkand clan? They are allowed to remain, but at a price. The Karimovs become pariahs in the clan as punishment for misdeeds committed during the rule by the father.

Over the course of the summer and fall, the provinces start to coalesce around Tashkent and Ferghana. The Samarkand contingent is slowly transitioned out of power in the government. The path has clearly been laid for a new clan and region to ascend to power. The question remains which region claims the executive, Ferghana or Tashkent?

While this is taking place, the Uzbek government takes extra precaution in regards to the Ferghana Valley, particularly with Andijon. The populace has made it abundantly clear that they have not forgotten what took place back in 2005. The government also wants to avoid any unnecessary distractions while the Tashkent and Ferghana regions determine who will assume the presidency.

That is not all. In an effort to dissuade insurgents from entering into Uzbekistan during this time of upheaval, the borders with Tajikistan and Kyrgyzstan are bolstered with guards.

Uzbek recommendations

The obvious and repeatedly cited recommendations, such as the need for democratization, liberalization of media and the economy, reducing corruption, and more responsive government among many others will not be considered because they are not likely to happen with any Uzbek government in the foreseeable future. As a consequence, the recommendations for Uzbekistan will be relatively short.

The issue of succession is the specter hanging over the Karimov regime. It is a very long shot that the Samarkand contingent will remain in power, post-Karimov. The problem with Central Asian succession is similar throughout the region. To maintain the power base, the president must constantly reshuffle the power ministries and the cabinet. The repercussion of the reshuffling is that succession is necessarily muddled. In keeping everyone off-balance, it creates more palace intrigue. Anyone with the sufficient backing and presidential aspirations begins to curry favor with the influential movers-and-shakers.

Conclusion

After all the scenarios, some forecasting for the region and the major players surrounding it are in order. The window for these forecasts to take place is 15 to 20 years from now. Let's begin with Uzbekistan.

The Uzbek republic will suffer from some severe internal conflict in the post-Karimov phase. The problem will emanate from one or both regions: Karakalpakstan or the Ferghana Valley but for very different reasons. Karakalpakstan has been left to wither and perish with the Uzbek portion of the Aral Sea evaporating; whereas for the Ferghana Valley the reason is Andijon as well as insurgents.

Water will likely become increasingly scarce in the Qashqadaryo province due to falling water tables and overtaxed aquifers.

Kyrgyzstan will likely remain the most politically free republic in Central Asia. Unfortunately, revolutions will be equated with political change and therefore be legitimized. The presidency could alternate between the north and the south.

Kazakhstan will become the Turkey of Central Asia for two reasons. The Russians in northern Kazakhstan will require Astana to continue to be politically flexible. The fear of Russia annexing northern Kazakhstan will hang over the country.

The Soviet Union devaluing religion has led to a very secular Kazakhstan. The republic will be an economic model for the rest of the region and a magnet for workers.

Tajikistan will be a climate change hot spot. The convergence of possible water conflicts and receding glaciers will likely make the Tajik republic an area of cooperation between Russia and the US.

Turkmenistan will be the hermit kingdom of Central Asia. Major powers will seek to maintain the status quo so natural resource extraction can proceed as efficiently as possible. The country will be left to its own devices.

China will be the Saudi Arabia of the region, using money to achieve desired results. The other republics will gladly receive the aid and investment. China will have qualifiers for these funds and it will be tied to Xinjiang and the radical fundamentalist Uighur groups. The republics will take the money and do what China asks. Unfortunately this will get China no closer to its goal of playing a larger role in Central Asia. The republics are already wary of the influence that the Chinese play and greater visibility will likely raise more alarms.

Even without a significant role in Central Asia, China is poised to become the pre-eminent world power by the middle of this century. When it reaches that point, the Chinese economy will be three times the size of the American economy. Even now, its

gargantuan economy is changing how business is done from the World Bank's loan practices to currency reserves to democracy in sub-Saharan Africa. China's rise will also signal the beginning of the Asian ascendancy.

India, like China, will seek more substantial relations in Central Asia. Its efforts will not be as readily rebuffed. There are already plans to stage an Indian air base in Tajikistan. India's role in the two regions will only increase. If Central and South Asia are going to be connected through an energy corridor, then India will be a catalyst for that development.

As Indian stature grows in the two regions, it will increase its footprint globally. India will come to see itself as the security guarantor for South Asia and for southern Central Asia. Protecting maritime passage and search-and-rescue operations in the Southern Ocean will be a sure sign that India has arrived.

Pakistan is in a precarious position and its maneuvers will only reinforce its problems. Islamabad has no interest in Central Asia except for Tajikistan because they are close neighbors. The real interest is in Afghanistan and South Asia. The government in Pakistan must also prepare for the day when the US withdraws from Afghanistan while tempering internal instability.

The goal in South Asia is to avoid being encircled by hostile neighbors; unfortunately, its actions will only create what it wants to avoid. Using the Taliban as a proxy will only cause Pakistani-Afghan relations to suffer. Then there's the ever present difficulty of Pakistani-Indian relations. The two countries have a contentious relationship and it shows no signs of abating.

Pakistani standing on the global stage will not materially improve nor suffer. It was already found to be a nuclear proliferator and safe haven for insurgents.

Russia will reassert some influence in the region. This goal will be achieved through security. There are many security factors to consider and Russia will use every opportunity to reestablish its presence.

The Russian Federation will keep an eye on other major powers seeking a foothold, like India, Turkey, Iran, Saudi Arabia, and China but will actively work to prevent the US from consolidating or adding to its presence. The reason is simple. Central Asia is Russia's Latin America.

Central Asia certainly has a daunting security situation, only a few aspects have been highlighted. There is also the economic aspect as well. Economic development is usually preceded by a certain level of security and stability.

The region will not be able to enjoy stability nor economic progress as long as the shadow of Afghanistan looms so immensely over the republics. It is not all doom and gloom with Afghanistan. Turkmenistan, Afghanistan, Pakistan, and India are having serious discussions to build a pipeline⁸² to transport Turkmen gas to India for export. This would be the first step in a Central Asia-South Asia energy corridor, which could be a path to prosperity and provide Central Asia with greater control of its natural resource distribution. Unfortunately, that path cannot be realized until the Afghanistan-Pakistan Pashtun regions are more secure.

This highlights the interconnectedness of the issues facing Central Asia. This also marks the problem with the issues. It is extremely difficult to find a common denominator to work from. Simply finding an issue to begin with is difficult. Afghanistan is the obvious area to begin with, however, finding a base issue is not a simple procedure.

Afghanistan intersects with the issues of insurgency, narcotics trafficking, insecure borders, development, and water allocation. Each of those is an issue facing the region; however, the impact is uneven. Water is an issue for the entire region regardless of upstream or downstream status. Water flow is an integral part of the continued agriculture production for the region. Agriculture is a major employment industry and a significant revenue contributor.

These dilemmas are not felt evenly across Central Asia, and this is where regional organizations could be of assistance. Unfortunately, all the regional organizations are either Russian or Chinese-led⁸³. With such powerful and influential neighbors, Central Asian concerns may not be at the top of the agenda, merely how to prevent or acquire further access. These organizations are more concerned with more immediate security dilemmas such as water. This merely highlights the need for a regional organization that Central Asia can claim as its own not some major powers' designs on the region masked as a regional organization.

Multilateral organizations are more or less viewed as the capital providers and project initiators. These organizations also seem to stick to “safe” areas of development such as education. That way they can be sure not to upset the regime in power. More will be required to get the Central Asian presidents to negotiate and the only organizations with the gravitas to do it are the World Bank and United Nations.

The organizations may have to upset some of the regimes if they want to work on some of the major issues, especially water. To assuage those upset feelings, the World Bank and UN will have to provide some type of assistance to navigate the transition period. As previously stated, each organization can focus on a specific area and avoid redundancy and overlap. The UN already has a development arm, so it could take the lead on development issues in Central Asia, such as reservoir feasibility. The World

Bank could take the lead on finding a solution to the water conundrum. The goal for the Bank should be the greatest benefit to the region, which could likely mean constructing at least one dam.

This paper examined the effect of Afghanistan, water, and Uzbek stability on Central Asian security. The difference among the three issues is the area of impact. Afghanistan is clearly a concern but it is more a South Asian dilemma. The outcomes that will affect Central Asia are due to intra regional problems in South Asia. Water has an immediate region wide impact. There is a variable quantity of water, no agreement on water allocation, varied water usage and needs, and general over usage. Lastly, Uzbek stability is indeed variable. It could affect the entire region or just be a country specific problem.

Then these issues are interrelated. Afghanistan has certain water rights with respect to the Amu Darya that it has not fully taken advantage of yet. While the issue of water is a central aspect of Uzbek stability due to the need for continued production of cotton.

Central Asia is not on the precipice but it is certainly in a precarious position. It cannot drastically alter its water use or the economies of the region will collapse. Unfortunately, it cannot continue to use water as it has because each republic has different water needs. It will require the collective energy and ingenuity of the entire region to come back from the brink.

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Endnotes

¹ Mackinder, Sir Halford John, "The Geographical Pivot of History," Royal Geographic Society, London 1904

² There is not much agreement about what constitutes Central Asia. Some maps include Afghanistan, some do not. For the purposes of this paper, Central Asia encompasses Kazakhstan, Uzbekistan, Kyrgyzstan, Tajikistan, Turkmenistan, and Xinjiang Autonomous Province in China. Culturally, Afghanistan is not Central Asia.

³ These are actors with state-like coercive capability often in response to the threat of a state's coercive apparatus.

⁴ Afghanistan Development Forum 2005: Theme 7 Fighting Drugs and Creating Alternative Livelihoods

⁵ Human Rights Watch. "Afghanistan Crisis of Impunity: The Role of Pakistan, Russia, and Iran in Fueling the Civil War." July 2001.

⁶ Central Intelligence Agency. The World Factbook. < <https://www.cia.gov/library/publications/the-world-factbook/fields/2004.html?countryName=Afghanistan&countryCode=af®ionCode=sas&#af> >

⁷When resource scarcity is mentioned, natural resources such as oil come readily to mind.

⁸ Central Intelligence Agency. Afghanistan. 13 December 2007.

⁹ Afghanistan has centuries of history, but for the purposes of this thesis, the period in focus is the Soviet intervention up to the American intervention.

¹⁰ The PDPA was founded in Kabul in 1965 after then-King Zahir Shah promulgated a number of reforms that permitted political groups to organize for the first time. In 1967, the PDPA split into two factions, Khalq (masses) and Parcham (flag). Both factions drew support from the same Pashtun ethnic base, although the Parchamis had some support from other ethnic groups and included some members of the ruling elite. The Khalquis advocated more radical measures, including social and agrarian reforms, than did the Parchamis. In the late 1960s and early 1970s, a number of Islamic organizations also formed at Kabul University which were opposed to the communists and all foreign interference in Afghanistan. In 1973, the king's cousin, Daoud Khan, ousted Zahir Shah in a nearly bloodless coup. As Daoud began distancing his government from Soviet influence, the Khalq and Parcham factions of the PDPA reunited in resistance. The assassination of a Parchami leader in April 17, 1978 provoked widespread protests to which Daoud responded by arresting PDPA leadership. PDPA officers in the military then launched a coup, killing Daoud and seizing power.

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¹¹ Hiro, Dilip. Inside Central Asia: A Political and Cultural History of Uzbekistan, Turkmenistan, Kazakhstan, Kyrgyzstan, Tajikistan, Turkey and Iran. Penguin. 2009

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¹³ From the late 1970s to the mid-1980s, Moscow paid Uzbek officials more than a billion rubles for cotton that was never received. The corruption that resulted came to characterize Sharif Rashidov's rule. The "Cotton Scandal" became the focus of a public campaign against corruption in 1986 when Mikhail Gorbachev launched a crackdown in Uzbekistan. Tens of thousands of Uzbek Communist Party members were purged and some three thousand police officers were fired.

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¹⁵ Rashid, Ahmed. Taliban. Yale Nota Bene Books, 2000

¹⁶ Declassified and redacted DIA cables detailing Pakistan's support for the Taliban.
<<http://www.gwu.edu/~nsarchiv/NSAEBB/NSAEBB227/17.pdf>>

¹⁷ Pain, Adam. "Afghanistan: A Failed State?" Economic and Political Weekly 3 November 2001: 1.

¹⁸ Zarif, Maseh.

US Department of State INL, 2001 International Narcotics Control Strategy Report (Washington, DC, 20001) , vii-5.

¹⁹ The line is the de facto border between Afghanistan and Pakistan. The agreement was signed in 1893 between British India and Afghan Amir Abdur Rahman Khan as a way to demarcate their spheres of influence. Pakistan became the successor in 1947. Afghanistan still refuses to officially recognize the Durand Line as legitimate for several reasons. The Pashtun areas of Pakistan (NWFP) have been repeatedly claimed by Afghanistan. Then the fact that Pakistan was not a successor to British India but a wholly separate nation extinguishes the original agreement.

²⁰ Dash, Kishore C. "The Political Economy of Regional Cooperation in South Asia." Pacific Affairs 1996: 185-209.

²¹ Historically, the name referred to a region inhabited by the Pashtun people. It encompassed NWFP, FATA, part of Baluchistan, Gilgit-Baltistan, and part of Punjab in Pakistan as well as the south and east of Afghanistan. The name has come to mean an autonomous province in Pakistan or an independent nation by radicals.

²² Shah, Sayed Wiqar Ali. "Ethnicity, Islam, and Nationalism: Muslim Politics in the North-West Frontier Province, 1937-1947." The Journal of South Asia Studies (1999): 311 pages.

²³ The Taliban are a product of the network of private, rural-based madrasas (religious schools) in Afghanistan and the neighboring areas of Pakistan. During the war against the Soviet Union (1979-1989), these schools constituted one of the important sources of recruitment for mujahideen-guerrillas fighting Soviet forces in Afghanistan. The Taliban leaders are for the most mullahs – religious leaders – from Qandahar province trained in madrasas affiliated with the Deobandi movement in both Afghanistan and Pakistan.

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²⁹ "Afghanistan Drug Market." GlobalSecurity.org
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³² The Soviet Union emphasized agricultural development for the region, exemplified by the Virgin Lands Campaign in Kazakhstan. Universal education seemed to be altruistic. During the Soviet era, literacy rates neared 100%.

³³ There were a series of skirmishes centering on Pakistan's efforts to establish an outpost in southeastern Afghanistan. The Afghan National Army eventually repelled them and both sides suffered light casualties.

<http://www.indiaenews.com/asia/20070514/51526.htm>

³⁴ "Russia criticizes US, NATO over Afghan drug trafficking fight." USA Today. March 2010

³⁵ Shelley, Louise.

³⁶ Dash.

³⁷ It is the capacity of a population to ensure that they continue to have access to potable water.

³⁸ World Water Assessment Programme. Water a Shared Responsibility: the United Nations World Water Development Report 2. New York, New York: Berghahn Books, 2006.

³⁹ Webb, Patrick; Iskandarani, Maria., Water Insecurity and the Poor: Issues and Research Needs No. 2. Bonn: Center for Development Research, October 1998, pp. 1-70

⁴⁰ The combined flow of the two rivers (116.5 billion) divided by the population of Central Asia (61.5 million).

⁴¹ McKinney, Daene C. "Cooperative Management of Transboundary Water Resources in Central Asia." 2003.

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⁴⁴ McKinney.

⁴⁵ McKinney.

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⁴⁸ Asian Development Bank. Water in the 21st Century. 2000

<http://www.adb.org/Documents/Reports/Annual_Report/1999/03theme7a.pdf>

⁴⁹ The Amu Darya and Syr Darya are the largest but there is also the Irtysh and Ishym in the east, the Chu and Talas in the south, the Ural in the west, and the Ishim and Tobol in the north.

Severskiy, Igor Vasilievich. "Water-Related Problems of Central Asia: Some Results of the (GIWA) International Water Assessment Program." Ambio February 2004: 52-62.

⁵⁰ Rice tops the water usage list at 12.3 mega liters/hectare followed by cotton at 6.4 mega liters/hectare, then nurseries (5.3 mega liters/hectares and sugarcane (5 mega liters.)

Australian Bureau of Statistics . "Water Use on Australian Farms." 2004.

⁵¹ I lived in the 2nd largest city in Uzbekistan, Samarkand; but from time to time the water was shut off with no explanation. Fortunately, these incidents were few and far between and they never lasted more than half a day. Anecdotal evidence from other volunteers suggests that I was in a unique situation. The only place with a lower degree of water rationing was Tashkent because it was the capital and the president lived in close proximity.

⁵² Oxfam International.

⁵³ UNDP, 2007. Central Asia: Background Paper on Climate Change

⁵⁴ World Bank, 2009. Adapting to Climate Change in Europe and Central Asia.

⁵⁵ There has been a long standing arrangement where Tajikistan and Kyrgyzstan would release water during the spring so the downstream nations could plant their crops and in the winter they would export natural gas so the headwater nations could make it through the winter. This agreement is slowly coming apart; however, the downstream nations still expect the water for the spring growing season.

⁵⁶ Rahmetov, Anvar. "Eurasianet.org." 18 February 2009. Kyrgyzstan: Tracking Russia's Assistance Package to Bishkek. 4 April 2010

<<http://www.eurasianet.org/departments/insightb/articles/eav021809.html>>.

⁵⁷ "Eurasianet.org "Business & Economics"." 5 January 2010. Tajikistan: Forced Rogun Payments Sowing Discontent among impoverished Tajiks. 4 April 2010
<<http://www.eurasianet.org/departments/business/articles/eav010510.html>>.

⁵⁸ Construction at Rogun began in the 1970s, was halted by the break up of the former Soviet Union and the Tajik civil war, commenced again with Russian investment in the mid 2000's, and stopped again in 2007 amid disagreements between Moscow and Dushanbe.

⁵⁹ From my experience in Uzbekistan, Ferghana would be the region most likely to over-appropriate their share of water. Ferghana is the most fertile area of Uzbekistan and the region that grows watermelons and strawberries.

⁶⁰ Boboev, Jahongir., "Concern at Funding Scheme for Giant Tajik Dam." Institute for War & Peace Reporting. 30 December 2009 <<http://iwpr.net/report-news/concern-funding-scheme-giant-tajik-dam>>

⁶¹ As mentioned in the Afghan scenario. **2Error! Reference source not found.Error! Reference source not found.**

⁶² Karimova, Chynara., "Questions over Moscow's Role in Kyrgyz Power Projects." Institute for War & Peace Reporting. 9 March 2009 <<http://iwpr.net/report-news/questions-over-moscow%E2%80%99s-role-kyrgyz-power-projects>>

⁶³ Muzalevsky, Roman., "The Rogun Controversy: Decoding Central Asia's Water Puzzles." Central Asia-Caucasus Institute. 3 March 2010

⁶⁴ Mathesius, Konrad., "Boxcar Diplomacy Puts Tajik Businesses at Tashkent's Mercy" Eurasianet.org. 6 August 2010 <<http://www.eurasianet.org/node/61678>>

⁶⁵ Bekeshova, Meri., A Kyrgyz-Kazakh Step towards Regional Union. Inter Press Service. 24 May 2007. <<http://www.ipsnews.net/news.asp?idnews=37887>>

⁶⁶ Science, "A Great Lake – or Dead Sea?" AAAS, 23 May 2008
<http://aquadoc.typepad.com/waterwired/files/turkmenistan_lake.pdf>

⁶⁷ International Crisis Group. "Central Asia: Water and Conflict." 30 May 2002.

⁶⁸ International Crisis Group. pg. 31

⁶⁹ International Crisis Group. pg. 31

Asian Development Bank. "Pyanj River Basin Project." 19 September 2008

⁷⁰ The Panj River is one of the main tributaries of the Amu Darya.

⁷¹ After the de-Stalinization of the Uzbek Party, Sharif Rashidov became first secretary, a position he held until 1983. Afterwards, Rashidov was succeeded by Inamzhon Usmankhojaev and Rafik Nishanov, who presided over the anti-corruption campaign. Nishanov then left for Moscow in 1989, to be succeeded by Islam Karimov.

Bataladen, Stephen K. and Sandra L. The Newly Independent States of Eurasia: Handbook of Former Soviet Republics. Oryx, 1993, pg. 172.

⁷² The Soviet era saw the rise of the importance of cotton. From the late 1970s to the mid-1980s, Moscow paid Uzbek officials more than a billion rubles for cotton that was never received. The corruption that resulted came to characterize Sharif Rashidov's rule. The "Cotton Scandal" became the focus of a public campaign against corruption in 1986 when Mikhail Gorbachev launched a crackdown in Uzbekistan. Tens of thousands of Uzbek Communist Party members were purged and some three thousand police officers

were fired. For Uzbek nationals, the Cotton Scandal became merely a pretext for Moscow's persecution on ethnic grounds of local Uzbek officialdom.

Bataladen, 174

⁷³ McCray, Thomas R., Modern World Nations: Uzbekistan. Philadelphia: Chelsea House Publishers, 2004, pp. 44-53

⁷⁴ Collins, Kathleen. "The Political Role of Clans in Central Asia." Comparative Politics January 2003: 171-190.

⁷⁵ I have a theory. It's similar to a rolodex. It began simply as a collection of individuals or families to turn to in specific instances. If a certain family has a connection to the notary office, the bank, the police, the utility company, then I contact them in those instances. In turn, they can contact me for a certain connection that I may have. These linkages are reinforced over time and you have a clan. I realize it is a gross oversimplification.

⁷⁶ The unconsolidated pairings are Samarkand/Jizzak/Surkhandarya, the Tashkent province, and Ferghana/Namangan/Andijon.

⁷⁷ For the duration of this paper, clans, provinces, and regions will be interchangeable. Although there are some clans that traverse regions, clans are very region specific. Many Uzbeks do not mention their region when they speak of their clan, because it is common knowledge which clan is ascendant in a particular region.

⁷⁸ I heard these same rumors concerning the late Saparmurat Nizayov, also known as Turkmenbashi. Considering that he passed away unexpectedly a few years ago, these rumors about Islam Karimov could be true.

⁷⁹ The Central Asian presidential handover does not have much precedent outside of the fact that is generally a relatively stable operation. What has preceded the handover has been revolution or a death in office. That is not a reassuring harbinger of things to come.

A country with a smooth direct handover of power was Azerbaijan from Heydar to son, Ilham.

⁸⁰ Alisher Usmanov, an Uzbek oligarch in Moscow, has been mentioned a few times as a candidate to succeed Karimov as president of Uzbekistan. The fear with Usmanov is that Moscow could more easily use him as a proxy to gain a foothold in Uzbekistan.

⁸¹ As mentioned on page 48 of the Central Asian water scenario.

⁸² There are two proposed pipelines. The aforementioned is referred to as Trans-Afghanistan pipeline, TAPI and the other is the Iran-Pakistan-India gas pipeline, also known as the Peace pipeline or IPI.

⁸³ The Collective Security Treaty Organization (CSTO) is headquartered in Moscow and the Shanghai Cooperation Organization (SCO) is headquartered in Beijing.

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