

Without land, there is no life: Chinese state suppression of Uyghur environmental activism

UHRP

UYGHUR HUMAN RIGHTS PROJECT

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Cover image: Dead toghrak (populus nigra) tree in Niya. Photo courtesy of Flickr

Summary

The intimate connection between the Uyghur people and the land of East Turkestan is celebrated in songs and poetry written and performed in the Uyghur language. Proverbs in Uyghur convey how the Uyghur culture is tied to reverence of the land and that an individual's identity is inseparable from the land from which they came. Uyghur religious practice further reflects Uyghurs' deep connection to the land and a religious impulse toward environmentalism.

Given the physical survival and cultural integrity attributed to the land of East Turkestan, Uyghurs have developed sustainable practices in order to live in a fragile environment composed of deserts, oases and mountains. For example, the underground water transportation system of the Turpan area called *karez* has provided drinking water and water to grow crops for centuries to communities living in an exceptionally arid part of the region.

Since the early 1990s, the Chinese government has targeted East Turkestan with a series of economic development initiatives demonstrating a cumulative effort to exploit the region's strategic location in Central Asia to boost China's political and economic presence in the wider region. These centrally led campaigns have transformed East Turkestan bringing Chinese migrants and increased economic activity to the region that have had a profound effect on the environment. In addition to economic motives for regional intervention, the Chinese authorities exploited the vast landscape of East Turkestan to conduct nuclear weapons testing from 1964 to 1996. The full consequences of these tests are unknown, but credible evidence suggests a health catastrophe has occurred due to nuclear fallout and polluted land.

Without land, there is no life: Chinese state suppression of Uyghur environmental activism reports on three aspects of the environment in East Turkestan that indicate clear violations of the Uyghur people's democratic rights to voice concerns over environmental degradation and to contribute to the development of sustainable regional policies. The three topics explored are: government policies and their impact on the purity of water, air and land; nuclear testing, the development of other types of weapons and related health issues; and Han Chinese migration to East Turkestan, predominately in the south of the region.

Following an examination of these topics, the Uyghur Human Rights Project (UHRP) concludes the following concerns with environmentalism in the region:

- Suppression of the right to protest environmental problems stemming from government actions, particularly the rights to association and assembly.
- Lack of Uyghur participation in environmental decision-making and a deprivation of knowledge sharing on environmental conditions in East Turkestan.
- Disregard of Uyghur knowledge on sustainable practices in state economic and agricultural policies.

Without land, there is no life: Chinese state suppression of Uyghur environmental activism is divided into five main sections. The first section describes the cultural importance of the environment to Uyghurs through an analysis of Uyghur artistic works and the creation of sustainable practices. The subsequent section considers China's nuclear weapons testing program. The report looks at the specific details of underground and atmospheric nuclear tests conducted near in the Lop Nur area of East Turkestan. While tests were ongoing, during the 1980s and 1990s Uyghurs publicly protested not only in East Turkestan, but also in eastern China the negative health consequences of detonating nuclear weapons in an area predominately inhabited by Uyghurs. The demonstrations were suppressed and weapons testing continued. The report describes evidence of abnormal levels of cancer among the public close to Lop Nur. Although, the government has offered compensation to veterans of the nuclear weapons testing program, civilians have been exempted from such payments. In the section, UHRP describes ongoing weapons testing in East Turkestan, including subcritical nuclear tests.

Section 3 is dedicated to the effects of government policies on water, land and air purity. Although the Chinese Communist Party (CCP) allows research on the drastic environmental degradation in these areas, particularly desertification, reduction of water resources and destruction of natural vegetation, such research is circumscribed from critiquing government policy that has directly led to the problems. Public protest against rampant pollution is strictly prohibited. The section includes how the government has disregarded methods traditionally employed by Uyghurs to balance agricultural activity with physical resources. In particular, the Xinjiang Production and Construction Corps (XPCC) has been responsible for degradation of water resources through expansions of commercial activity, and especially in its mandate to produce cotton unsustainably an in areas with inadequate water resources. Air quality has seen a sharp decline in East Turkestan through the relocation of polluting industries to the region from eastern China where environmental regulation has become more stringent. Furthermore, the expansion of the energy industry has resulted in both air pollution and further drain on inadequate water resources.

The last topic area highlighted is the close relationship between Han Chinese migration and the increasing incidence of rural land grabs from Uyghur farmers. The section asserts the increase of Han settlers to East Turkestan, particularly to the south, has resulted in displacement of Uyghurs through compressive forces driven by competition for land. Uyghurs subjected to land grabs are often left with no recourse for adequate compensation or justice given high levels of collusion between local officials and developers. The compressive forces stimulated by increased numbers of Han Chinese has also been felt in urban areas, such as Kashgar, where the demolition of traditional Uyghur neighborhoods was documented in UHRP's report *Living on the Margins: The Chinese State's Demolition of Uyghur Communities*. In many cases described above Uyghurs were sidelined as participants in the decision making involved in appropriation of either land or houses.

Public participation in environmental affairs is an internationally acknowledged right and protected in Chinese law. Participation in the decision making process is understood to be a contributing factor to equitable environmental policies and recognizes the integral role of

grassroots communities in solving environmental problems. Public participation provides a means with which individuals and civil society groups hold the state and private enterprise accountable for obligations in regard to sustainable development and ensures transparency in environmental governance. Accurate and complete information is essential to effective and meaningful public participation in environmental affairs. Therefore, respect for the principle of access to and freedom of information is necessary for the public to evaluate environmental policy and to seek forms of redress. Public participation allows for the development of a democratic form of governance that places individuals and communities as key stakeholders in environmental matters thus forming a broad legitimacy for policy formation.

Without land, there is no life: Chinese state suppression of Uyghur environmental activism concludes with the following key recommendations for the Chinese government:

- Guarantee the fundamental right of the Uyghur people to participation and consultation in the decision-making process regarding environmental impacts of development and agricultural planning as outlined in international and domestic legal instruments.
- Open public forums for genuine and meaningful debate on environmental issues. This includes the freedoms to seek, receive and impart information online. Uyghurs should be free to conduct research into the causes of environment degradation in East Turkestan and to access government information on the environment.
- Respect the fundamental rights to freedom of assembly and association. International human rights standards assert the right for individuals to form non-governmental organizations to monitor the state's compliance with environmental benchmarks.
- Mainstream Uyghur knowledge of the environment into decision-making on development and agricultural planning. The government should pursue a balanced approach to development planning that considers the interests of small-scale Uyghur farmers.

Cultural Significance of the Environment and Environmentalism

For the Uyghur people, the environment has a deep cultural significance as well as a spiritual dimension, and a concern for the environment is an essential part of the Uyghur culture. Examples of the relationship between the people and the land, as well as a cultural impulse toward environmentalism, exist in Uyghur proverbs, songs, stories, religious practice and a wide variety of cultural productions.

Proverbs

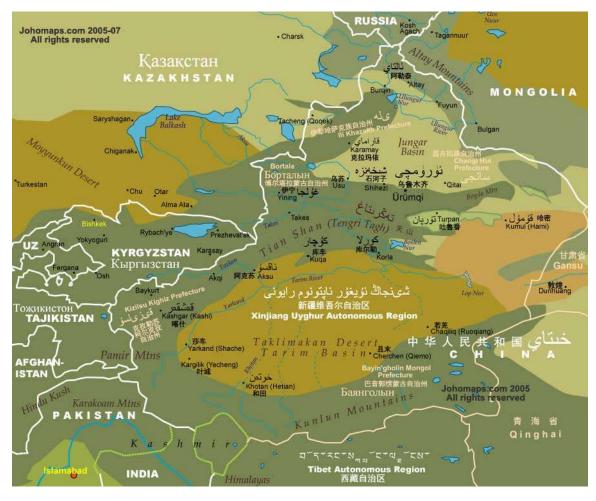
Certain phrases in the Uyghur language evidence the extreme importance of the land. For example, "*Yeri yoqning, jeni yoq*" means, "Without land, there is no life." Another phrase that indicates the essential importance of land is, "*Yeri yoqlar shahlanmaydu*," which means "People without land cannot grow." These phrases reflect a belief that the people require land for their very lives.

Uyghur phrases also indicate that people are defined by their homeland. "*Yurtwaz*" is a word that refers to one's allegiance to the place they are from. "*Kindik qenim tokulgen jay*" refers to a person's birthplace as that place where their blood was shed upon the severing of the umbilical cord. Within Uyghur society, the land on which a person is born is a defining and unchanging part of their identity.

East Turkestan is a region of dramatic physical landscapes – vast deserts, towering mountains, and precious streams and rivers of water. Mountains are particularly prevalent. The Tengri Tagh (known as Tianshan Mountains in the Chinese language) divide the region into northern and southern basins. The Borohoro Mountains, a range of the western Tengri Tagh, form a border of a basin around the Ili River. In the southwest are the Pamir Mountains and Karakoram forming borders with Tajikistan, Afghanistan and Pakistan; to the south bordering Tibet are the Kunlun Mountains; and to the northeast bordering Mongolia are the Altai Mountains.

Mountains hold special significance within Uyghur expressions. The phrase, "*Taghdak ishinish*" means, "I trust you as firmly as a mountain." Names of certain places reflect their importance. For example, Tengri Tagh literally means "God's mountains." The great heights of the mountains often take on a celestial significance in Uyghur folklore. Hantengri, the highest peak of the Tengri Tagh Mountains, is said to have been climbed by a great Uyghur hero who communicated with the Sky God – hence the blue color of the East Turkestan flag.

Water is notable for its scarcity in the desert region, and it also holds special significance. *Binam* is a special kind of land – even without irrigation, the land is still so fertile that wheat can grow. This land is held in especially high respect, even worshipped. The beauty of water is reflected in the beauty of the greenery to which it gives life, particularly flowers, as can be heard in many Uyghur songs.



Topographic map from Johomaps via chinadiscovery.com

Songs

Uyghur folk songs celebrate the wide diversity of landscapes in the region, perhaps most notably, its mountains. All songs described in this section have been collated by a volunteer researcher, who provided translations of the lyrics from the Uyghur language into English. The first song, *Taghlirim*, or "My Mountains," was written by rock singer Abdulla Abdukerim in the early 2010s. The song illustrates the importance of the mountains for local peoples' spiritual life, describing the mountains' roles in providing spiritual healing when people are upset or desperate, endowing courage and protections in the face of difficulty and war, and inspiration and wisdom in the face of challenges. The song invokes the same basic principle as the proverb, "*Taghdak ishinish*."

<u> Taghlirim/ My Mountains</u>

When I hang my head from grief and indignation You always stand up, never yield, my Mountains When I cry due to righteous indignation and depression You are heroic, never crying, my courageous Mountains You are heroic, never yielding, my courageous Mountains When I cry, you never cry, my courageous Mountains When I challenge you with my braveness You always are illuminated like a sword, my Mountains

Your vast embrace always extends to the world Your chest is a shield against enemies, my Mountains Don't hang your head, when I hang mine, my Mountains Don't cry when I cry, my Mountains Don't cry when I cry, my Mountains...my Mountains

Hantengri is another song that celebrates the beauty of the mountains, their spiritual significance, and their monumental effect on people's lives. The song, from around the mid-2000s, by Abdulahat, praises one of the highest peaks of the Tengri Tagh. The song evidences both religious sentiment and respect for the environment by referring to the mountain as holy and envisioning a mother's soul in its face. In addition, the song highlights the sacredness of water, describing it as "water of life" and underscoring its heavenly connections through orchards and oases.

<u>Hantengri</u>

When the world was created You existed Hantengri You will stand permanent Steady and great Hantengri,

You are unmatched and splendid, You are the pillar of the solar system This is the Holy land, and You are the heart of the land The soul of my Mother Shown in your face The water of life Dripping from your peak

Your embrace illuminates Heaven like orchard and oasis Permanent songs everlasting And beautiful novels

Hantengri...Hantengri Your embrace is magnificent and vast

Tarim River is a folk song showcasing locals' praise, admiration and respect for the Tarim River. Again, the song treats the water with special regard. The river is described with reverence, in contrast to the vast desert, and the singer pins their hopes and desires to it. In

addition, the song strongly emphasizes the importance of beautifying the river with flowers in order to create an oasis, demonstrating a vision of a sustainable future.

<u>Tarim River</u>

Tarim, your edges are oasis Tarim you are located in a vast desert I praise you for being so great and precious, You give me yearning and hope of life

I want to be in your arms, to work hard And cover you with flowers and greens Please do not be sad my lover, if you come to the Tarim, I will greet you holding flowers

I am going to Tarim, so say good-bye to my lover, to my friends who have grown up together sharing the same goals and aims

In addition to praising the land for its beauty and spiritual significance, Uyghur songs describe the way that challenges posed by the environment have shaped their identity. *Ili Yolliri* is a love song about the winding roads located in the valleys of the Ili Mountains. Historically, this stretch of road was considered the most dangerous part of the Silk Road. In the song lyrics, love is likened to twin sparrows, singing together. By singing love songs on their long and dangerous journeys, travelers built courage to face the risks of the roads.

<u>Ili Yolliri/ Ili Roads</u>

The Ili roads turn sharply on the curves a pair of sparrows sings Singing, singing, without stopping a pair of sparrows

Another song that emphasizes dangerous journeys, risks posed by the physical landscape and the result of these risks empowering and shaping travelers' identities is called *Karvan Sadasi*, a modern song from the past decade, based on the *muqam*, by Abdurehim Heyt. The song describes the strong will of those in caravans enabling them to cross difficult terrains such as icy mountains and desert.

<u>Karvan Sadasi</u>

We are travelling caravans, and we won't be soft because we knew there would be icy mountains along our roads We have climbed over many icy mountains in our past and had experiences both sweet and bitter We can't live without risking our lives, so death will be on our roads We are still boys in the orchards of love, and lovers are always calling us You will see friends; we have marvelous magic in our weddings The importance of home place identification, also central to Uyghur language proverbs, is similarly expressed in song. One song that illustrates these sentiments is *Ana yurt*, or *Motherland*, a song written by Ablet Ismail in the mid 2000s. *Motherland* captures the rich emotional connection to one's place of birth, particularly through blood, and the nostalgia one feels for this home. The song also links Uyghurs' close connection to the land to their desire for a country.

Ana Yurt/Motherland

Everyone in this world has their own country All are willing to sacrifice their soul and body for their country Because you gave birth to me, my first blood dripped into you You are my mother, my motherland, I love you.

I left from you for a faraway place My heart filled with deep sorrow My eyes leaked like a saddened spring My mother, my motherland, I have missed you so much

My tears flow because of you My heart is burning from pain because of you How could I fulfill my desire to meet you My mother, my motherland, I love you

Wherever I go you are in my mind Even if I am flying within the universe I look like a poor beggar without you My mother, my motherland, I love you.

Another song that expresses native place loyalty is *Ili Boyliri*, written by Kasim Sidik after the Ghulja Massacre in 1997. The song celebrates the geographic features of Ili, its beauty and its flowers, and its important relationship to the Uyghurs' history, referencing Sadir Palwan and Nuzugum (or Iparhan), two heroes of Uyghur history.

<u>Ili Boyliri/Land of Ili</u>

The land of Ili is full of flowers There is a strong cold in the summer months The red roses of our homeland Is the blood of our martyrs shed for this land

The land of Ili is very bright and full of passion Its caves and valleys are full of rich miracles Songs of Sadir echoes

Lyrics of Nuzugum resonate all around

The land of Ili is full of mysteries Even dark nights don't fall into sleep They awaken the light of dawn The sheer lyrics of nightingales

The land of Ili is full of lilacs

Finally, building on the sentiment of homeland attachment as well as reverence for the land is *Yerni Satmanglar*, a prescriptive melody from 1994 by Koresh Sultan urging Uyghurs not to sell their land. Sultan, who passed away in 2006, met political problems that led him to flee China after writing the song. It emphasizes the value of land to Uyghurs, and urges them not to sell it. He discussed the song with scholar Rachel Harris in 1999, saying: "I performed in many towns across Xinjiang over the years. And everywhere I saw that the Uyghur peasants were very poor. They sell their land to the Chinese for cash. Soon they have spent all the cash, and then they are no better than slaves."¹

Yerni Satmanglar/Don't Sell Your Land

Land is father, land is mother. It is inherited from our ancestors Land is great, land is big. Land is the source of life I beg you brother farmers, please don't sell your land This land belonged to our ancestors. You have no rights to own it You did not invent this miracle You are with the land from morning to night But you still don't have enough to eat or enough clothes to wear

You've been deprived of food for so long Even your own houses are not built from bricks All summer and winter you are in the mud From whom is this suffering inherited? This is your singular opportunity. Land is a form of richness Is not a strong, outspoken person also nothing compared to such richness? If you do not value the good land you have In the end will you end up living in the tidal flats?

You wish to earn money by selling your land? You wish to wipe off your grandfather's light You don't have any wealth that you can leave for your descendants Do you wish to add more suffering onto your existing ones?

Environmentalism in Religion and Other Cultural Productions

Uyghurs' religion emphasizes reverence toward the land and environmentalism through involvement of the land in various aspects of religious worship. Uyghurs practice a form of Sunni Islam that incorporates Islamic faith with Uyghurs' own traditional beliefs including Shamanism. This practice also incorporates influences from East Turkestan's historical position on the Silk Road and Uyghurs' involvement in transmission of world religions including Buddhism, Zoroastrianism and Nestorian Christianity.

Environmentalism is a part of traditional Islamic belief. Anthropologist Joanne Smith Finley explains the environmentalist connection is informed by Islamic concepts of cleanliness, which refers to both ritual and personal hygiene. "According to Islamic scholars, cleanliness comprises three types: purification (ritual ablutions); keeping the body, clothing and environment clean; and removing the dirt that collects in various parts of the body."² Uyghurs' cultural relationship to the land reflects this Islamic principle of cleanliness.



At a mazar site burial markers erected around poplar trees. Photo courtesy of Lisa Ross, 2009.

A Uyghur religious practice that demonstrates a direct union of religion and reverence for the environment is the worship at mausoleums, called *mazar*. *Mazar* are Sufi shrines to Muslim saints, which blend Islam with non-Islamic elements, and are sites of pilgrimage as well as festivals. One scholar writes: "Mazar combines religious elements of Islam—by being ideologically based on worshiping Muslim saints—and elements rooted in popular beliefs."³ Those popular beliefs include reverence for the land as well as non-Islamic religious influences tied to land worship. For example, some *mazar* have non-Islamic origins, like the Ujma Mazar, whose name, Mulberry, indicates pre-Buddhist roots and worship of an important crop within Uyghur culture.⁴

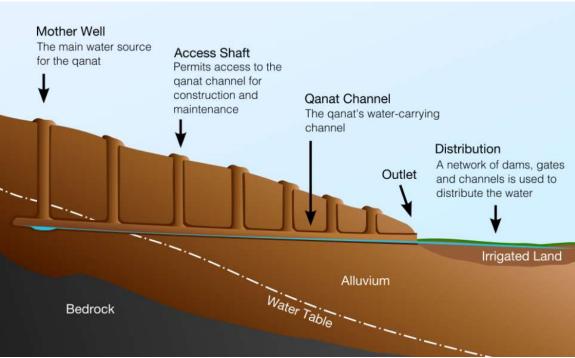
One Uyghur scholar has noted: "*Mazar* provide an ecological and spiritual balance in a Uyghur community... The shrines are evidence of Uyghur identity expressed through material culture and spiritual culture. Most important, this is where people come to 'clean their soul'... If one were to remove these materials artifacts and the shrines, the Uyghur people would lose contact with the earth. They would no longer have a personal, cultural and spiritual history."⁵ As the scholars' testimony illustrates, *mazar* form a link between Uyghurs' reverence for the land, the impulse toward cleanliness, and their religious worship. A 2013 photography exhibit of *mazar* by Uyghur photographer Ali K. also highlights the reverence for land inherent in these practices. A review of the work states: "[The photographer's] sense was that many practices, particularly in burial, are related to quite ancient ideas about the way 'the earth is the source of meaning.""⁶

Other examples of the spiritual value of land exist in popular stories. In one interview, a Uyghur told UHRP of a successful entrepreneur whose great respect for the environment was thought to be the source of good fortune.⁷ The entrepreneur highly respected the environment and plant life in particular. When he opened his business in the midst of an urban area, rather than cutting down a large, ancient tree on the plot of land where the shop was proposed to be constructed, he built his shop around the tree and decorated its large trunk with advertisements. His small shop gained popularity with locals, who applauded his intelligence and strategic marketing. To the local community, the business thrived mainly as a result of the entrepreneur saving and respecting the tree.

A recent documentary filmed by two Uyghur student filmmakers in rural Kashgar prefecture is another example of Uyghurs' respect for those with knowledge of the earth. A recent review described the film's treatment of its main subjects, craftsmen who create goods to sell in a local bazaar. The review states: "While they received little formal education, we see the skill with which their hands can work with wood and reeds – using very few tools – to produce something precise and beautiful. We see men who know the desert, plants, and trees with an intimacy of someone who has lived close to the earth over the long duration of their lives. There is a beauty to the pace of life we see in the film; a poetics of movement, of form, and of the stark reality of the environment at the edge of an oasis town."⁸ Like many songs before it, the film captures and celebrates Uyghurs' mastery of their land and the way it has shaped of their identity.

Karez

The Uyghur cultural impulse to protect and live sustainably in their environment is demonstrated in the *karez* water irrigation system. This man-made adaption to desert living, a water harvesting and underground water transportation system allows communities in the arid region to have a supply of drinking water and also to grow crops. Concentrated in Turpan, the *karez* have a long history in Uyghur communities, and today have been revitalized for their ability to support a sustainable lifestyle.



Karez system. Image courtesy of Wikimedia Commons

The *karez* have a meaning beyond simply providing water, and are also a part of what a scholarly paper describes as the "history, culture, and unique knowledge of its builders." This is because: "*Karez* have created strong cohesion in their communities owing to the traditions and beliefs attached to them. Religious beliefs and cultural traditions also helped the *karez* system to be handed down as a legacy. In the past, the social arrangements in *karez*-based communities were directly related to the *karez* system. Essentially, people's importance and value were judged according to their water ownership rights in the system. A household's proximity to the system was a good indicator of the social or economic status of its residents."⁹

As part of the Uyghurs' cultural history, the *karez*, like so much of the Uyghur identity, has been targeted by China's assimilatory policies that rely on tight control of information. Historian Justin Rudelson explains that: "[The Chinese] have attempted to give a chronological date to the *karez* wells, the ancient underground canal system in Turpan, to prove that the technology was introduced by Chinese and not by Iranians or other peoples to the west of Xinjiang. The Uyghurs believe that the *karez*, which are unique in China to Turpan and similar to the *qanat* system found in Iran, are a symbolic link to the Islamic world to the west. They also hold that the *karez* have been in Turpan for at least 1,000 years. The Chinese, on the other hand, claim that Han Chinese introduced *karez* technology to Turpan in the seventeenth century." Such is the sentiment in a recent article from the state-run Xinhua news agency, which writes that: "The Great Wall, Beijing-Hangzhou Grand Canal and karez are called China's three major projects in ancient times." ¹⁰

The state apparatus has focused increasing attention on the *karez*, both as part of a nation building effort and, it appears, a genuine interest in the sustainability benefits offered by

the irrigation system. In 2006, the government passed legislation to protect the *karez*.¹¹ In 2007, the Turpan Water Museum was opened as a major tourist site to inform about the *karez*. A recent article in Xinhua explains that the deterioration of *karez* is slowing considerably, and the rate of repairing them has increased 30 percent following an initiative under China's National Cultural Relics Department, initiated in December 2009, to work with local farmers to restore *karez* and provide them both tools and health insurance.¹²

Restoring the *karez*, a prominent symbol of Uyghurs' reverence for the land and its water in particular, as well as a part of Uyghurs' historical legacy in East Turkestan, would be a powerful opportunity to embrace Uyghurs' pride in their unique identity and its sustainable results. By removing the Uyghur people from this process, and by discrediting welldocumented histories embraced by Uyghur communities and structuring discourse about the *karez* so as to remove Uyghur voices, the government does a great disservice to the community.

Nuclear Testing: Suppression of Uyghur Activism

Between 1964 and 1996, China conducted 45 nuclear weapons tests in the Lop Nur area of East Turkestan.¹³ The series of tests, according to one observer, were carried out "without having established any safety measures, in a place mostly inhabited by the Uyghurs."¹⁴ Some of the nuclear weapons were 300 times more powerful than the one detonated on Hiroshima in August 1945.¹⁵

The Lop Nor test area covers 38,610 square miles (100,000 square kilometers); of this number 7,722 square miles (20,000 square kilometers) were requisitioned for atmospheric and underground nuclear weapons testing. The entire test area is the largest weapon-testing zone in the world.¹⁶ The headquarters for the Lop Nur testing area was Malan (42° 11' 30" N, 87° 19' 52" E), which is 70 miles northeast of Korla. According to the nonprofit organization Nuclear Threat Initiative, Qinggir (41° 28' 0" N, 88° 46' 0" E), 88 miles southeast of Malan, was the site for thirteen underground tests and an area approximately 71 miles (115 kilometers) to the southeast of Qinggir was used to conduct atmospheric tests.¹⁷



Anticipating the commencement of its nuclear weapons testing program in 1964 and "driven by a desire to possess the same 'sophisticated weapons' as other major powers,"¹⁸ China did not sign the 1963 Partial Test Ban Treaty (PTBT), which prohibits nuclear weapons testing in the atmosphere, underwater and in space.¹⁹ Twenty-three of the

succeeding 45 tests conducted by China were atmospheric, with nuclear fallout reaching as far as Europe.²⁰ If China had been obligated to the conditions of the 1963 PTBT these 23 tests would have been in violation of the treaty's restrictions. China carried out the world's last known atmospheric nuclear weapons test on October 16, 1980.²¹



Lop Nur Test Fallout Pattern

Each number represents the location of the cloud per day

Daily observations of the cloud of radioactive dust particles after a Chinese test at Lop Nur on May 9, 1966. The cloud moved about 1,400 miles per day.

Graphic and text courtesy of atomicarchive.com

From 1967 to 1980, China conducted eight atmospheric nuclear weapons tests with known yields of between one megaton and four megatons (six of the eight blasts were three megatons or greater). According to a United States government website, the fallout effects on humans within 250 miles of a one megaton surface blast include "a temporary decrease in white blood cells, although there are no immediate harmful effects. Two to three years will need to pass before radioactivity levels in this area drop low enough to be considered safe." However, within a distance of 160 miles, the effects are: "extensive internal damage, including harm to nerve cells and the cells that line the digestive tract, and results in a loss of white blood cells. Temporary hair loss is another result."²²

Qinggir is approximately 260 miles from Kumul, 173 miles from the regional capital of Urumchi, 137 miles from Korla (capital of Bayingol Prefecture) and 105 miles from Turpan.²³ According to the 1982 census the population of Kumul was 378,000 (20 percent of which were Uyghur), Urumchi 1,121,000 (11 percent Uyghur), Bayingol Prefecture 755,000 (35 percent Uyghur) and Turpan 410,000 (70.8 percent Uyghur).²⁴ Regarding the dangers facing residents in Urumchi and Turpan from nuclear weapons testing, Japanese physicist Jun Takada, a specialist on China's testing program wrote in 2008 of harmful internal and external effects resulting from radioactive fallout.²⁵

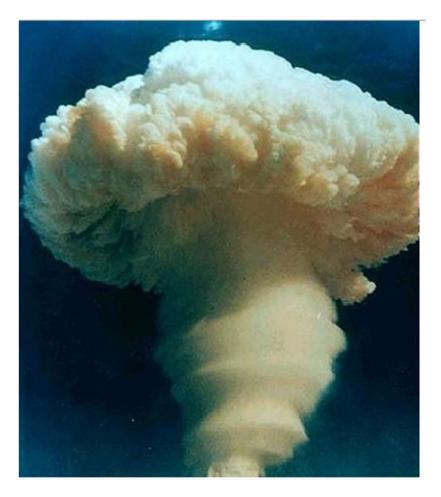


Jun Takada condemns large-scale surface nuclear tests. Photo courtesy of Zhang Benzhen, Epoch Times

China is one of 183 signatories to the 1996 Comprehensive Nuclear Test-Ban Treaty (CTBT); however, it is also one of nineteen states to have not ratified the treaty.²⁶ According to documents collected by the National Security Archive of George Washington University, China accelerated its scheduled nuclear weapons testing in Lop Nur in the early 1990s in anticipation of the CTBT.²⁷ A 1993 document approved for release in 2003 outlines Chinese reluctance to sign a test ban treaty and explains how such an agreement in the 1990s would "significantly inhibit China's development of new warhead designs."²⁸ A further document issued in 1994 and released in 2003 indicates that China's signature to the CTBT was contingent on the success of its nuclear testing program.²⁹ China conducted its last nuclear weapons test in the Lop Nur area on July 29, 1996 "before issuing a formal moratorium on nuclear weapons testing the following day."³⁰

Claims have surfaced that China may have authorized Pakistan to test nuclear weapons at the Lop Nur testing area; however China has never acknowledged such assertions. According to an undated article on the *Global Security* website:

China's nuclear assistance predates the 1986 Sino-Pakistani atomic cooperation agreement, with some of the most critical transfers occurring from 1980 through 1985. China is reported to have provided Pakistan with the design of one of its warheads, as well as sufficient HEU [highly enriched uranium] for a few weapons...Pakistan Foreign Minister Yakub Khan was present at the Chinese Lop Nor test site to witness the test of a small nuclear device in May 1983, giving rise to speculation that a Pakistani-assembled device was detonated in this test.



Mushroom cloud from China's first thermonuclear test on June 17, 1967. Image courtesy of CBTO.org

In 2012, a veteran of the nuclear weapons testing program alleged China permitted the Pakistani government to conduct a nuclear test in the Lop Nur area in September 1986. Under condition of anonymity, the individual claimed: "Pakistani nuclear experts were wearing People's Liberation Army uniforms at our nuclear testing site. If they were ever spotted by outsiders, they might be mistaken for Uyghur soldiers. But we all knew that there was not a single Uyghur soldier in our unit."³¹ In a 2010 book titled *The Nuclear Express: A Political History of the Bomb and Its Proliferation*, authors Thomas C. Reed and Danny B. Stillman allege China conducted a nuclear weapons test on behalf of Pakistan in 1990.³² In a report referencing the research of Reed, Chidanand Rajghatta of *The Times of India* wrote about the "extensive hospitality extended to Pakistani nuclear scientists [during the late 1980s] which would eventually lead to the joint China-Pak nuclear test." The report also cites Reed's claim that: "China conducted underground hydronuclear experiments—though not full-scale device tests—for France at Lop Nur."³³ A Uyghur exile quoted in an April 20, 2009 *Digital Journal* article asserted Pakistan conducted a total of three nuclear weapons tests at Lop Nur.³⁴

Additionally, further to claims China permitted Pakistani nuclear weapons testing at Lop Nur, a second Uyghur exile maintains Chinese officials offered Taiwan the site as a location for storing nuclear waste: "Taiwan is dumping its nuclear waste at Lop Nor. We do not know how the transport to the former test site is organized but this is happening today."³⁵ According to overseas sources, in 1993 China discussed the possibility of storing nuclear waste from Taiwan and Germany in return for financial or technological transfers.³⁶ However, the same sources indicated the probable location of such a dumpsite would be in Tibet and that both Taiwan and Germany had not taken up the offer.

Five years after the formal suspension of China's nuclear weapons program, allegations surfaced in the United States media that China was preparing for an underground test in the Lop Nur area. Citing U.S. intelligence officials, a May 11, 2001, Washington Times article stated: "China is engaged in covert nuclear testing that relies on small, low-yield underground blasts. The suspicions are based on intelligence reports indicating Beijing's agents purchased special containment equipment from Russia several years ago that masks the effects of underground nuclear tests." The article also claimed: "The last Chinese nuclear-related test took place in 1999."³⁷

The alleged preparations for the 2001 test, according to the Washington Times' sources, "may be [aimed at] a 'subcritical' nuclear test-- a small explosion designed to simulate a nuclear blast."³⁸ An April 3, 2009 article by Dr. Jeffrey Lewis, the Director of the East Asia Nonproliferation Program at the James Martin Center for Nonproliferation Studies, asserted there were signs China was conducting subcritical nuclear tests at Lop Nur. Through satellite imaging Dr. Lewis concluded tunnel constructions at Lop Nur indicated "strong evidence that China — like Russia and the United States — conducts subcritical nuclear tests." Subcritical nuclear tests are not prohibited under the conditions of the CTBT and Lewis added China had purportedly conducted four of them in 2001.³⁹ According to a paper delivered at a 2005 Center for Strategic and International Studies conference on nuclear issues, one analyst concluded: "China would have the most to gain among the recognized nuclear weapon states from a resumption of testing and would surely take advantage of the end of the moratorium."⁴⁰



Chinese soldiers view a hydrogen bomb test at Lop Nor in 1973. Photo courtesy of Epoch Times

Not only has East Turkestan been important to Chinese government efforts in securing a nuclear weapons arsenal and in seemingly conducting ongoing subcritical nuclear tests, the region has also been the site for missile interception testing. According to various sources tests were conducted in 2010, 2013, 2014 and 2015.⁴¹ Catherine Dill, a research associate at the James Martin Center for Nonproliferation Studies, reports the center of operations for inceptor missile testing is in Korla, demonstrating East Turkestan's continuing importance to wide-ranging Chinese weapons development.⁴² Moreover, former Soviet scientist Ken Alibek alleged in his 1999 book *Biohazard* China had been conducting biological weapons tests since the early 1980s at a facility close to Malan. Alibek adds that an accident occurred at a biological weapons plant in the Lop Nur area in the late 1980s causing "two epidemics of hemorrhagic fever," a condition previously unknown to the region.⁴³ According to one media report published in 1999: "Nobody knew the names of the epidemics, so they were identified as 'No.1 disease, No.2 disease'...according to the year the disease struck."⁴⁴

The effect the 45 nuclear weapons tests have had on the people and the land of East Turkestan has been devastating. Research undertaken by Professor Jun Takada indicates that as many as 1,480,000 individuals in East Turkestan were exposed to nuclear fallout as a result of weapons testing.⁴⁵ In an article dated July 1, 2009 in the *Scientific American*, Takada asserts that those exposed to nuclear fallout were done so in "doses high enough to induce leukemia, solid cancers and fetal damage" and that approximately 194,000 people died due to radiation related illnesses. In the report, Takada added: "My estimate is a conservative minimum."⁴⁶ An August 27, 1997 essay in *The Christian Science Monitor* estimated the number of deaths at 210,000 although no source is cited for the figure.⁴⁷

A report published in the UK's *Independent* on October 4, 1998 detailed a number of health concerns in East Turkestan linked to nuclear weapons testing. The report cited information gathered during the filming of a documentary titled *Death on the Silk Road* for the UK's Channel 4. According to leaked Chinese government documents, "the incidence of cancer and related diseases in areas around the test site [Lop Nur] is up to 39 per cent higher than in the rest of China. Among the more common diseases are tumours, leukaemia and birth defects such as cleft palates."

The documents disclosed that specific kinds of cancer linked to radiation exposure, such as malignant lymphomas, lung cancer and leukemia, were on the increase in the wider testing area. Dr. Laura Watson, a medical professional attached to the documentary team, called this finding "absolutely astonishing." A local doctor referenced in the *Independent* article said: "Basically cancer is everywhere in Xinjiang ... the increase has been dramatic over the past 20 years or so. There is a lot from the south." Another doctor claimed eight out of ten children in the villages near to testing sites at Lop Nur are born with cleft palates: "Nobody has ever said it but we think the nuclear pollution causes them,' he said."⁴⁸ In 1999, a Mongolian academic and a visiting scholar at the East Asian Institute at Columbia University told reporters that during a recent visit to Malan a local hospital director "told him that many local residents suffered from hair loss and various skin diseases. The number of patients found having pathological changes in their blood was five or six times that of the other areas."⁴⁹

Although China does not deny an increase in cases of cancer, the government has routinely denied the existence of ill effects arising from its nuclear weapons tests in East Turkestan.⁵⁰ As a matter of practice it has refused access to independent researchers, such as Professor Takada, investigating the effects of the tests, while at the same time suppressing internal documents pointing to the existence of a human and environmental catastrophe. One of the doctors cited in the *Independent* article echoed the policy of official repudiation: "The nuclear explosions have increased air and water pollution. We can't do any research into it, it's not allowed."⁵¹

Even though the state acknowledges an increase in cancer victims, according to observers little has been done to provide adequate healthcare to those affected. Doctors in the Lop Nur testing area attempt to treat illnesses with scant resources and many victims do not receive medical attention.⁵² Research in *The Central Asia-Caucasus Analyst* on the general condition of healthcare in East Turkestan published in 2001, three years after *Death on the Silk Road*, reported substandard medical services. Writer Ruth Ingram described the contents of an interview she conducted with a medical professional from the region:

'The only decent hospitals we have are in the capital and even they are underequipped and our doctors are ill-trained,' said a young doctor. He said there was a divide between health care available to Uyghurs and Han Chinese. 'Many of our people outside the capital don't speak Chinese and most would prefer to go to a Uyghur doctor. Uyghur hospitals are in bad condition and our people cannot afford proper treatment,' he said. 'The Han tend to be wealthier and can usually afford the best treatment...'⁵³

Ingram also described that as a consequence of the exclusionary cost of state care: "Unregistered medical clinics set up as cheap alternatives to the government service in small cities and villages where people are at the mercy of untrained or semi-skilled practitioners. But locals often have no choice but to use these facilities, as they can't afford to pay for the state-provided ones."⁵⁴ According to Jun Takada, approximately 75,000 people have died from symptoms related to exposure to nuclear fallout as a result of "inferior medical care."⁵⁵ Nevertheless, Enver Tohti, a Uyghur doctor who was one of the first individuals to independently link cancer with nuclear testing in East Turkestan and formed an integral part of the Channel 4 documentary team, told a journalist in 2015:

To compare the province with another region: In Henan province, 100 million people are living. The cancer hospital there was established in 1997 with 500 beds. Until 2008, the capacities expended to 800 beds only. Our hospital in Xinjiang, opened in the same year, starting with the same amount of cancer treatment facilities, expended to 2000 beds until 2008...So 2000 beds for a population of 20 million people, and 800 beds for 100 million is a clear indication for the urgent need for more cancer treatment facilities.⁵⁶

Tests Despite Protests

Uyghur discontent about nuclear testing in their homeland is long documented;⁵⁷ Chinese propaganda claimed the Chinese people's happiness with the government's achievement of developing a nuclear arsenal. ⁵⁸ One Uyghur exile commented: "We were all brainwashed. Even me, a Uighur, I was proud of being a Chinese [citizen]. We had the bomb! None of us had the slightest idea about radiation effects, resulting from nuclear weapons testing."⁵⁹ In a 2015 interview with UHRP, Enver Tohti described how after a three-megaton atmospheric test in 1973 the air in Urumchi was thick with sand for two days. That year Tohti was a student at the Railway Bureau School in the city and said teachers explained the high winds were due to a storm.⁶⁰ During the interview Tohti also mentioned conversations he had started with farmers in Hotan who had complained of rapid land degradation following nuclear weapons tests. One shepherd, who worked south of Kumul, told Tohti in 1994 that he had been given 50,000 Chinese Yuan for burn injuries he had incurred as a result of a test. Tohti added any information on the testing program made available was predominately in Mandarin Chinese and not Uyghur.⁶¹

As awareness of the human and environmental problems mounted, Uyghur activists led several protests against Chinese nuclear weapons testing. In 1985 Uyghur college students in Urumchi organized demonstrations that included demands nuclear testing at Lop Nur be halted due to rising concerns over the effects they were having on the health of East Turkestan residents. In a display of black humor, Uyghurs in the region remarked they had become "shorter and stupider" since beginning of nuclear weapons testing.⁶² Despite escalating concern, China conducted a further thirteen tests after the 1985 protests, which took place in December in cities across China, including Urumchi, Beijing and Shanghai.

According to overseas media reports, the December 22, 1985 protest in Beijing was led by Uyghur students from the Central Nationalities University and comprised approximately 200 to 300 participants. The protesters marched from Tiananmen Square to Zhongnanhai, where senior leaders of the Chinese government maintain residences and offices. One of the significant demands made by the students was an end to nuclear weapons testing in East Turkestan. In response, Chinese officials insisted the tests had not led to any negative health effects. Conflicting accounts from eyewitnesses make it difficult to confirm if demonstrators had been arrested.⁶³

On December 26, 1985 about 100 students from East Turkestan protested in Shanghai against unfair treatment of minorities in East Turkestan citing nuclear testing as one of the main grievances. A *Chicago Tribune* article references banners held by protestors demanding China: "Stop Nuclear Testing." One participant told reporters: "Nuclear testing is a danger to health, and this is universally recognized." The *Chicago Tribune* report noted: "Foreign Ministry officials in Peking declared Monday [December 23] that China's nuclear program was safe and said opponents were 'naive.' 'In conducting nuclear tests, full attention has been paid to nuclear safety,' a spokesman said. 'Repeated checks and surveys have found no harm done to the health of the inhabitants.'"⁶⁴

The Beijing and Shanghai protests followed a December 12, 1985 protest in Urumchi that attracted crowds of 2,000 to 15,000 according to different sources.⁶⁵ One of the protest leaders, in an unpublished account, adds that besides Urumchi, Beijing and Shanghai

protests also occurred in Kashgar, Aksu, Hotan and Bortala inside of East Turkestan and in Guangzhou and Nanjing outside of the region; however, it is not clear if demands to cease nuclear testing were also made at these demonstrations.⁶⁶ A document authored by World Uyghur Congress (WUC) Executive Chairman Dolkun Isa cites nuclear testing as the first of the Urumchi students' grievances:

Chinese authorities had carried out nuclear tests more than 30 times from 1964 to 1985 in Lop Nur. Because of nuclear testing, the natural environment of East Turkestan was seriously polluted and the situation had become very dangerous. Hundreds and thousands of people had died. Moreover, children were born with deformities because of the effects of nuclear radiation. Even today a large number of children have deformities.

The Chinese authorities never paid any attention to these victims and even carried out one more nuclear test in 1985 in Lop Nur. That cruel action was not only dangerous for the Uyghur people, but also dangerous for all of humanity, and it was dangerous for the peace of the world.⁶⁷

A second prominent Uyghur activist in exile and Chinese Outreach Coordinator at the Uyghur Human Rights Project, Zubayra Shamseden was also at the Urumchi protest and recalled how she had assisted protest leaders in producing leaflets to distribute at the demonstration. In an interview with UHRP researchers, Shamseden, who was attending the Urumchi School of Engineering, said Uyghur undergraduates at Xinjiang University approached her and other students on the eve of the 1985 protest and asked her to hand copy a list of demands to be circulated among people at the demonstration. Shamseden remembered writing about eight to nine one-page documents that included a request to end nuclear testing in East Turkestan. She added that prior to undertaking the task the only thing she knew about the tests was that "many Uyghurs in the south had become sick" because of nuclear fallout.⁶⁸ Dolkun Isa's testimony of the protest states that among the six demands of the protest leaders, the second was to seek an end to "nuclear tests in East Turkestan."⁶⁹

In the interview with UHRP, Shamseden described how a large number of students had assembled at People's Square. She arrived at the square after the timetabled lunchtime despite attempts by the school authorities to prevent students from attending the protest. Shamseden said the school gates were locked in order to prevent student participation. At the demonstration, Shamseden said she could not always determine the content of speeches made by Uyghur student leaders, which included Dolkun Isa. Only later, when in Kazakhstan, did she read transcripts of the speeches made on December 12, 1985 and discovered the leaders demanded the government cease nuclear weapons testing in East Turkestan.⁷⁰ However, in his account of the event, Dolkun Isa explained that at People's Square: "Students shouted slogans seriously and angrily such as: 'stop nuclear tests,' 'stop importing illegal settlers from China,' 'end false elections and start democratic elections,' 'East Turkestan isn't a criminal camp,' 'stop the birth control policy for indigenous people,' 'promote the condition of Uyghur education' etc."⁷¹

According to Dolkun Isa's account, government representatives agreed to meet with twenty student leaders in a measure to quell the protest. In the course of the talks, Isa describes how uninformed Chinese government officials were on the effects of nuclear fallout on the population:

After a student raised the issue of nuclear tests and using academic language explained the dangers they posed to health, Janabil, a Vice Chairman of the Communist Party of Xinjiang rose from his chair and responded. He said: 'We carry out the nuclear tests only when the wind blows from the west to the east. We do this so it will not bring any danger or pollution to Xinjiang.' The laughter of the audience interrupted his speech.⁷²

Shamseden told UHRP researchers that she had been cautious at the protest because of her family history of political dissidence and feared the authorities would not only punish her for participation, but also because of her background. After the protest dispersed, she recalled the school administration increased political education classes from one day a week to two and began to require permission for students to leave the campus. Shamseden detailed how two students were expelled from the school for their participation in the protest during a public meeting. She said that many accomplished young Uyghurs were denied education and career opportunities as a result of their attendance or activism.⁷³ In an article dated July 9, 2009 scholar Stanley Toops also described the extra political study classes mandated for Uyghur students after the 1985 protest and added that all students from Xinjiang University had boycotted their classes in order to attend.⁷⁴

According to the Amsterdam based World Information Service on Energy (WISE): "The Uighur people, who live in the region, are demonstrating constantly against the tests. But protesting is very difficult in China, as demonstrations are quickly suppressed by the Chinese army. Many demonstrators have been arrested and hurt."⁷⁵ In an article dated September 8, 1995 WISE reported in its journal Nuclear Monitor that an antinuclear testing protest occurred in Kashgar on May 1992.⁷⁶ UHRP has been unable to confirm further details about this demonstration. However, numerous sources have described another incident cited by WISE that occurred in March 1993 when approximately 1,000 Uyghur protestors attempted to occupy a part of the nuclear weapons testing site.⁷⁷ In one secondary account published in 2003, the author described how demonstrators "broke into the compound, setting fire to aircraft, tanks and other vehicles, and pulling down the perimeter fence. The People's Liberation Army [PLA] fired on the crowd, killing some, and hundreds were arrested."78 The Nuclear Monitor article cited above repeats the claim that the PLA used live fire on protestors and simply states there "was much damage to the site" without offering details. Writing on the 1993 incident, scholar Dana Carver Boehm concludes: "Although Beijing may view its exploitation of the region as a legitimate prerogative of national authority, its refusal to respond to Uighur concerns may lead to an increased number of violent encounters."79

The *Nuclear Monitor* article also claimed a protest took place in 1995 after China conducted a nuclear weapons test on May 15. The author of the report claimed 300 Uyghurs marched to the testing area and that such protests "do not get much attention in the rest of

the world."⁸⁰ Nevertheless, during 1995, overseas activists organized demonstrations against Chinese nuclear weapons testing in Lop Nur. Despite closer ties on security between China and Kazakhstan in the immediate post-Soviet era that resulted in restrictions on Uyghur political activism across the Chinese border, exiles were permitted some latitude in expressing discontent on nuclear weapons testing.⁸¹ This was largely due to concerns among the Kazakh public over nuclear fallout effects resulting from weapons testing in Lop Nur, which had precipitated "several public demonstrations."⁸² During the April 1994 visit to Kazakhstan by Chinese Premier Li Peng, Kazakh President Nazarbayev raised the issue of detrimental effects Chinese nuclear testing had incurred on the environment⁸³ and an activist group, the Nevada-Semipalatinsk Movement, planned to protest China's nuclear program.⁸⁴ According to Reuters, approximately 200 Kazakhs marched to the Chinese-Kazakh border on August 7, 1995.⁸⁵ An overseas source also reported demonstrations against Chinese nuclear testing in four Australian cities (Sydney, Canberra, Brisbane and Perth) on August 17 to 18, 1995.⁸⁶ The protests were sparked by an August 17 underground nuclear test in Lop Nur, which also resulted in Japan freezing aid grants to China and the Japanese Diet passing a resolution of protest.⁸⁷ A rally against all nuclear weapons tests was held in Taiwan on September 3, 1995 and included its disapproval of the Chinese testing program at Lop Nur.⁸⁸

In response to increasing concern overseas over Chinese nuclear testing and to forestall criticism of planned tests before the implementation of the CTBT, the Chinese government issued the following statement in November 1995 directed at the United States, Russia, the United Kingdom and France condemning attempts to limit the development of weapons in developing countries: "They resort to discriminative anti-proliferation and arms control measures, directing the spearhead of arms control at the developing countries...There must not be a double standard whereby anti-nuclear proliferation is used as a pretext to limit or retard the peaceful use of nuclear energy by developing nations."⁸⁹

In advance of the 2016 Nuclear Security Summit held in Washington, DC, UHRP noted China's unreliability as a partner in the control of nuclear technology. In a press release, UHRP detailed how the Nuclear Threat Initiative and Carnegie Endowment for International Peace have documented Chinese government transfers of nuclear and missile technology to Iran since the 1990s. The transfers occurred even though the U.S. government placed Iran on a list of State Sponsors of Terrorism in 1984.⁹⁰



UHRP Chinese Outreach Coordinator Zubayra Shamseden and World Uyghur Congress Executive Chairman Dolkun Isa attend a Nuclear Security Summit protest on March 30, 2016 organized by Students for a Free Tibet. Photo courtesy of Facebook

Compensation for Veterans, not the General Public

Although the Chinese government has not made information on the effects of nuclear weapons testing publicly available, evidence of the ecological damage to East Turkestan, such as the drying up of the Lop Nur lake, and studies into grave public health issues related to the tests became difficult for the authorities to avoid towards the late 2000s.⁹¹

In July 2007, the Ministry of Health and Ministry of Civil Affairs, as well as three other national level ministries, indicated they would be looking into offering veterans of the testing program at Lop Nur compensation and an increase in pension. By January 2008, Li Xueju, Minister of Civil Affairs, announced "subsidy" payments to "participants of nuclear tests,' military and civilian" had already started.⁹² According to a *New York Times* article dated January 26, 2008, in 2007 the government had paid over USD 2 billion in benefits to all "eight million veterans and families of service personnel killed in combat or

in public service," including veterans of Lop Nur. ⁹³ This was the first public acknowledgement of payments to veterans of the nuclear testing program and qualification for the benefits was contingent on a medical assessment.



Soldiers rode on horseback towards the mushroom cloud after China's 1964 nuclear test. Photo courtesy of CBTO.org

The change in policy regarding benefits may have been the result of sustained pressure from testing program veterans.⁹⁴ Much of the activism is driven by the Malan Veterans, whose website is a clearinghouse of information on the various issues facing the former soldiers.⁹⁵ Many of the veterans had sent written requests for compensation to the State Council and Central Military Commission and related accounts of their health problems to the media.⁹⁶ One, Yang Tianyu, went on the record in 2014 describing how unaware he was of the risks he was taking by serving so close to the blast site.⁹⁷ The 2009 *Digital Journal* article cited above also related the medical problems confronting veterans, as well as the absence of adequate safety measures when tests occurred:

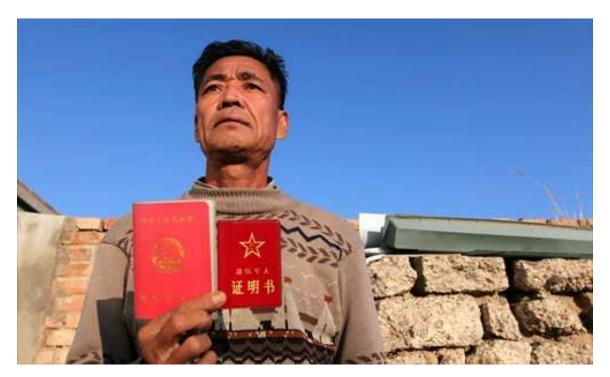
They have described how they used to use their bare hands to pick up radioactive wastes, how soldiers died due to strange and rare diseases and children took birth with mysterious cancers. They also have talked of sluicing down bombers that had flown through mushroom clouds.

One old soldier said: 'I was a member of Unit 8023 for 23 years. My job was to go into the blast zone to retrieve test objects and monitoring equipment after the explosion.'

He also talked about his daughter who was born with a huge tumor on her spinal cord. He said: 'The doctors blame nuclear fallout. She's had two major operations and has lived a life of indescribable hardship. And all we get from the government is 130 yuan (\$19) a month.'

The veterans said they lived only 10 kilometers away from the blast site and they often entered the zone without any protective suits. They used to use only gas masks and goggles. While returning home they used to wash themselves with plain water.⁹⁸

Although the central government granted benefits to the Lop Nur veterans, implementation at the local level has been inconsistent. The 2009 arrest of Huang Yunmin, a retired judge living in Kashgar and a veteran of the nuclear testing program, demonstrated the problems veterans were having in receiving payments from the state. Huang was detained on February 10 ostensibly on suspicion of gun possession; however, advocacy group Chinese Human Rights Defenders (CHRD) described how Huang's associates believed his arrest was due to his "work leading fellow veterans in pressing the local government to fulfill its responsibility to these veterans [of nuclear the nuclear testing program] and provide them with subsidies if they qualify."⁹⁹ According to the CHRD article, in 2008, Huang had "realized that local government officials had not implemented the measures stated in the regulation [for veterans to receive benefits]. Since then, Huang has led a group of 17 fellow veterans to complain to the Ministry of Civil Affairs at Kashgar, including submitting a petition dated August 18, 2008."¹⁰⁰



State media photo of atomic bomb-test veteran Su Chunchai Photo courtesy of Cui Meng, Global Times

A Global Times article dated January 28, 2015 described continuing problems with local authorities' management of the benefits system. One former soldier cited in the article said: "Some of the veterans have diseases, such as skin conditions, but weren't evaluated as handicapped veterans after medical examinations in designated hospitals." The report added three former scientists at the Malan facility had written an open letter to the government requesting a raise in benefit payments to Lop Nur veterans and an easing of qualification standards.¹⁰¹

The January 2008 announcement made by Li Xueju regarding compensation did not include any offer of reparation offered to the general public affected by nuclear fallout. Individual cases described in the 1998 Independent article, such as "an 18-year-old man who has not been able to walk since he was six because of a degenerative disease" and a 17-year-old female who has "suffered from cracked bones and a wasting of her flesh, similarly diagnosed as being caused by a degenerative disease," would not qualify for benefits.¹⁰² In 2015, Enver Tohti told a journalist "civilians were not protected...soldiers received compensation for exposure to nuclear fall-out but civilians not...nothing is in place to help civilian victims.^{"103} According to Tohti, senior military officials during the time of the tests knew about the adverse effects on health caused by nuclear fallout, but maintained the official policy of denial. Asked if it would be possible for Uyghur civil society to organize a similar campaign initiated by the Lop Nur veterans for compensation, Tohti replied: "That is impossible, unimaginable. Those veteran organizations are predominately Han. It's not even allowed for three Uyghurs to gather without raising suspicion."¹⁰⁴ Despite the continuing difficulties faced by veterans in securing benefits and the absence of compensation for the general public, in 2012, local officials announced USD 1 million would be used to convert Malan into a "red tourism" site. "Red tourism," promoted by the Chinese government since 2004, opens places significant in CCP history to the public. Details on the beneficiaries of the revenue generated by the opening of the Malan site were not made available at the announcement.¹⁰⁵

Pollution and Ecological Destruction in East Turkestan

Indigenous Knowledge Around Water Preservation

The climate in East Turkestan is extremely dry. It is a self-balanced hydrological system in which the total volume of water in the region is basically stable, including surface water contained in rivers, lakes and streams, groundwater reached by digging wells or *karez*, and water contained in glaciers in the high elevations of the major mountain ranges, which gradually melts into freshwater streams. Precipitation is rare. As a result of this ecological situation, the balance of water in the region is especially fragile and vulnerable to human impact.

The Uyghur people have settled the harsh environment of East Turkestan so as to adapt to the scarcity of water. In a region dominated by mountain ranges and basins, most of the Uyghur population lives in the desert-mountain contact zone, including oases such as Kashgar, Hotan, Turpan, and Urumchi. Water from surrounding mountains as rivers or runoff serves to irrigate crops and support agriculture.¹⁰⁶ The character of each oasis is unique. An oasis region may be composed of several villages, and an oases county region may be made up of several oasis towns. As opposed to the desert oases in the south, steppe oases in the north enjoyed relatively better-watered land, further differentiating cultural practices in the various regions.¹⁰⁷

Historically, Uyghur civilization has been built according to the shifting oasis environment. One researcher explains: "Based on historical documents, there were many ancient, prosperous oases along the inland rivers in the Tarim Basin, however most of the ancient oases were abandoned between the third and fourth centuries, and others in the eighth century, and still others in later periods up to the 15th century because of environmental changes such as land degradation...[which] results primarily from vegetation destruction and misuse of water resources."¹⁰⁸ As the twin processes of destruction of vegetation and misuse of water resources continue, Uyghurs have continued to adapt and change. However, China's government has limited Uyghurs' ability to pursue sustainable practices.

Even as Uyghur civilization has adapted to the shifting climate and environmental factors, and particularly water scarcity and limitations on water for crop irrigation, these factors have in turn become rooted in the Uyghur culture itself."¹⁰⁹ Climate has a major impact on local products that have developed over the centuries, and the unique ecological conditions between different cities have created distinct cultural identities.

One example of the connection between water-based adaptation and local Uyghur culture is the saying: "No Karez, No Turpan." Today, as a result of climate change as well as commercial sale of the *karez* water in Turpan for its mineral properties, this water is running out and some parts of the *karez* system have already become dried riverbed. For the Uyghurs, the destruction of the *karez* is a destruction of Turpan culture.¹¹⁰ In the appraisal of one researcher, destruction of East Turkestan's ecosystem destroys the Uyghur culture itself.¹¹¹



Daman town, 18: Tuohushalai, 19: Kalayurgun, 20: Dawangkum, 21: Tongguzibashi, 22: Yangdakeqin, 23: Yangdakesar, 24: Qiongsar, 25: Ganshijiati, 26: Pijlak, 27: Heitaiqin, 28: Zhaoguot, 29: Yeyungo, 30: Ziniquanzi, 31: Yinpan), 2 old oases, 3, new oases, 4, sandy desert, 5, marsh, 6, salt marsh, 7, lake, 8, seasonal lake, 9, river, 10, dried river, 11, city and town, 12, road.

Abandoned oases in the Taklimakan Desert region. Image from Muhtar Qong PhD Thesis

The quality of water for various uses including drinking, irrigation and industry is a major issue in East Turkestan. Clean drinking water is a particular challenge. A recent film by Radio Free Asia (RFA) highlights the issue of low iodine content found in naturally occurring sources, which in the past caused iodine deficiency throughout the population. The most recognizable sign of iodine deficiency is the swelling of the thyroid gland and a growth on the neck known as a goiter, in addition to other mental and physical developmental difficulties. In the 1990s, goiters were a major problem in East Turkestan, particularly in Yarkand where the goiters have a long documented history and have earned the local population the monicker "*Yarkantlik pochaq*," or "Goitered Yarkand people." In the RFA film, a doctor in Kashgar reports that various means of increasing iodine intake, from adding it to irrigation water to working with UNICEF to distribute salt rations, has helped to eliminate iodine deficiency and associated health problems.¹¹²

Many expressions in the Uyghur language deal with water storage and cleanliness, reflecting vast indigenous knowledge. "Wells and ponds actually carry the wisdom of ecological ethics of Uyghur ancestors as they adapted to their living environment and transformed the people through a unique process of recreation of man in harmony with nature symbiotically," wrote Uyghur researcher Gulnar Eziz in a presentation for a 2015 academic conference.¹¹³ In her presentation, she examined Uyghur language expressions as well as accounts from the manuscripts of Swedish Turkologist Gunner Jarring who

visited the region in the 1930s, describing rules for water storage and determining cleanliness. These include:

- To determine if water is fresh enough to drink, a person can drop in a few leaves. If they flow away, it's good to drink; if they remain in place, the pond is brackish and not healthy.
- Don't pollute a stream's water, it will go to your pond.
- If a pond has sides measuring at least seven meters, the water of this pond is considered the equivalent of flowing water.
- The water of a pond with three wide sides and one very narrow one is unfit for human consumption.
- If a dirty object fell into a pond of water, when a person scoops up water with his hand, only if he cannot see the bottom of the pond, the water could still be drunk.
- If a dirty object fell into the water of an irrigation canal or any other natural stream, after it had 'rolled' seven times, the water was considered clean. ¹¹⁴

Prior to Chinese land collectivization in the 1950s, water management was part of the religious order. In the 1930s, the *waqf*, an Arabic word for a religious endowment in Islamic law, was an important source of public water. As was practiced elsewhere in the Islamic world, a person could decide to turn a piece of his land into *waqf* and allocate it to a mosque, Islamic school or *mazar*. Ponds were an important type of *waqf* in Yarkand. When wealthy landowners donated land, local people would dig a pond to store water for drinking. According to Eziz's analysis, textual evidence retrieved from Gunner Jarring's 1930s manuscripts suggests that a clearly delineated set of rules governed pond digging and maintenance. In this traditional Uyghur society, water maintenance was tied to Islam and deeply rooted in the social fabric.¹¹⁵

Dismantling the *waqf* system was one of the first initiatives of the Chinese government in East Turkestan during the land collectivization campaign in the 1950s. Eziz writes that after the dismantling the *waqf* system, public water distribution remained a major challenge through the 1980s, when the government began to install water pumps throughout East Turkestan. Even after the Chinese government instituted a water improvement policy in the arid southern Tarim Basin in the early 1990s stating that every family should have a water pump, in order to grant access to clean water for daily life, some small villages in Yarkand only received water pumps after 2010. As water quality improved, water-borne diseases endemic to the region were reduced significantly.¹¹⁶

By abandoning the indigenous knowledge system surrounding water storage, and cleanliness, as well as turning increasingly to well water as streams became more polluted and less available, new health problems have plagued Uyghur communities throughout the Chinese administration. An RFA documentary entitled *A Fading Oasis* explores some of the issues involved with the water drawn from these wells. In Kashgar, a doctor explains that water sourced from underground has caused medical problems in the local community. "In Kashgar, kidney stones are now a common disease. This is caused by contamination of groundwater." The doctor attributes the stones to excessive fluorine.¹¹⁷ East Turkestan also ranks among the highest proportion of well water containing arsenic in China, which was

discovered after Kuitun village switched from drinking river water with low levels of arsenic to a well that was highly contaminated.¹¹⁸

Limited Water Resources and Water Pollution

There has been a notable lack of consultation with the indigenous Uyghur population as government policy threatens the ecosystem in East Turkestan, particularly through management of water resources. Water resources are threatened as demand has grown throughout the region, largely as a result of massive Han migration, particularly through the *bingtuan*, a paramilitary organization that has engineered migration to the region and will be covered in the next section of the report. In addition to the increasing water needs in growing urban centers, water usage for agriculture and extractive industries have put a further strain on resources. This strain has resulted in destruction of vegetation, which form a natural barrier to desertification. Although research on these crucial environmental issues in East Turkestan has been conducted with the Chinese government's approval, Uyghur consultation has been absent. Furthermore, the government is extremely restrictive about what topics are acceptable for research, with limitations on any critique of the CCP's unsustainable decision-making.

The increasing usage of wells represents a serious ecological threat – a drawing down of the underground water table. Researcher Stanley Toops writes that this decline in the water table has been poorly measured: "The impact of withdrawal on the water table has neither been mapped nor measured for any specific area or community in all of Xinjiang. Neither the causes of change nor its socioeconomic and ecological impacts can be really understood until changes in groundwater are mapped at the scale of individual oases, quantified both spatially and temporally, and reviewed by those local people and organizations most affected by change and responsible for dealing with its consequences," he writes. ¹¹⁹ According to a 2006 analysis, the groundwater table has fallen 60 meters since the 1970s, a rate that exceeds almost every country. ¹²⁰

In addition to depletion of groundwater reserves, depletion of the glaciers that feed most of the oases in East Turkestan is another threat. The depletion of glacial reserves is particularly true in the capital city of Urumchi, which itself has witnessed a massive population growth as well as growth in industry. A glacier to the north of Urumchi loses mass each year, even as growing demand for clean water in the city increases. The glacier has shrunk about 140 meters over the last 40 years, with the total area reduced to about 40 square kilometers. In a 2014 interview, a former associate professor of geography told RFA the glacier is "the most important water resource for the Urumchi region… The ice cover is gradually melting due to global warming and damage to the area's ecology, and the face of the Say'opa Lake is receding year by year."¹²¹ Although the government has intervened by preventing glacier tourism starting in 2004, other industrial water uses such as directly tapping the glaciers for sale as drinking water have exacerbated the glacial melting.¹²²

Like Urumchi, Kashgar is another major city in the Uyghur region threatened by scarce water resources. The Tuman River, which traverses the city, has been both diminished and polluted. *The Fading Oasis* documentary shows imagery of the Tuman River in Kashgar

as muddy and shallow. In the words of a local farmer: "The River used to be as blue as Kashgar's East Lake, but not anymore. It's been more than 10 years like this. Now it can only be used for irrigation. The water level is low."¹²³

Government reports on the Tuman River pollution indicate the government acknowledges the problem but does not acknowledge criticism of its own policies. A June 21, 2006 report from the state media outlet *Tianshan* described growing concern about Tuman River pollution and government pledges to prioritize river cleanup.¹²⁴ In July 2006, another *Xinhua* report delved into further detail, pointing to development as a main driver of river pollution. "In addition to the natural river pollution, in recent years due to the continuous development of the urban economy, the population increase in Kashgar and rapid industrial development, pollution of the Tuman River is increasing. After transformation of the Old City, aging sewers and unobstructed leakage of sewage from long-time residential areas into the river, including medical sewage from the Regional People's Hospital, have increased disease in the river, not only rendering it undrinkable but also causing irrigation from the water downstream to be harmful." ¹²⁵ Although the reports acknowledged development as a factor in the Tuman River pollution crisis, state media reports fail to identify the specific policies and instead focused on government efforts to improve the situation.

Uyghur academic Ilham Tohti recognized the importance of environmental issues and directed attention to it on *Uighurbiz*, his Chinese language website, a multi-ethnic forum that explored major issues affecting East Turkestan. *Uighurbiz* frequently reposted state media reports such as the two mentioned in the previous paragraph, both before and after it was blocked by authorities in 2009, and up until Professor Tohti was imprisoned in 2014. For example, in November 2006, *Uighurbiz* reposted an article from state-run *China Environment News*, which echoed the call to encourage and support public participation in environmental supervision and management.¹²⁶ In a 2011 interview with RFA, Professor Tohti described development of resources in the region as predatory; and stated that enterprises in the region ignored the interests of local people in order to maximize profits, particularly in terms of unlawful appropriation of farmland, unauthorized mining, pollution and environmental damage.¹²⁷

In describing the psychological effects of this environmental exploitation, Professor Tohti explained to RFA in the 2011 interview that this has led to the radicalization of Han who come to the region:

In Mr. Tohti's view, Han settlers in the region desire to exploit the regions' resources, and in this process, they see the local Uyghurs as an obstacle for them to benefit from the resources. Further, in addition to Han settlers' feeling that the government is on their side to exploit the region's resources, years of excessive Chinese government propaganda on 'three evil forces' attacks, calls to 'stand against splittism', and 'attacks on terrorism' fuel Han settlers' mindset to view Uyghurs with extreme contempt, and in fact this has made them far more radicalized than local Uyghurs.[Uyghur translated by UHRP]¹²⁸

A lack of government enforcement of anti-pollution efforts is another longstanding issue. It too was featured on *Uighurbiz*. For example, one report described an investigation into widespread subversion of pollution law.¹²⁹ Another described legislation jointly proposed by the Xinjiang Uyghur Autonomous Region (XUAR) People's Procuratorate, Department of Environmental Protection and Regional Public Security to crack down on environmental crimes.¹³⁰ Other efforts highlighted on the site include mandatory environmental disaster insurance and a special fund to manage environment pollution catastrophes.¹³¹

Uighurbiz not only reposted Chinese state media stories; in addition, it also pulled stories from overseas sources such as Voice of America Chinese which are blocked in China to highlight important issues in the region, and circumvent Chinese censorship. In one such case in 2013, *Uighurbiz* reposted a VOA story highlighting netizens who tried to speak out against a garbage incineration power project being constructed in close proximity to their homes. Their posts were later deleted, but not before being captured by VOA, and subsequently re-circulated on *Uighurbiz*.¹³²

At times, *Uighurbiz* itself investigated pollution emergencies. In a June 16, 2006 article, *Uighurbiz* investigated a water treatment facility in Shihezi, which allowed polluted water to contaminate Mogohu Lake Reservoir. According to the Shihezi Environment Protection Department director, industrial factories upstream let industrial waste into the reservoir, in addition to sewage, and water treatment facilities were insufficient to clean the water. As a result, not only were farmlands damaged, but drinking water was also endangered.¹³³

Surface Water Reduction, Desertification, Plant Destruction

Research on pollution as well as on the effects of government policy driving mismanagement is a sensitive issue in the People's Republic of China (PRC). According to researchers interviewed for the report, scientific research on the effects rather than the causes of environmental damage is permitted, so long as the underlying policies like mass migration, non-enforcement and noncompliance with environmental regulations are not mentioned.¹³⁴ One of the most robust areas investigated is depletion of surface water, lake salinization, and destruction of plants that prevent desertification.

Lakes in East Turkestan have dried up at an alarming rate. Reservoir construction has been a major factor in this process. There was only one reservoir in the region prior to land collectivization in the 1950s, and due to large scale agricultural development by the CCP, more than 189 reservoirs have been constructed since that time, containing more than 3,190 million cubic meters of water in the Tarim Basin alone. As a result of the Dashihaizi Reservoir in 1972, the Lop Nur Lake at the lower end of the Tarim River disappeared entirely.¹³⁵

Lop Nur Lake is one of many lakes to disappear under CCP administration. Between the 1950s and 1980s, East Turkestan saw a huge decrease in the total surface area of its lakes, from the high of 9,700 square kilometers down to 4,953 square kilometers.¹³⁶ A 2009 report stated that the surface area of lakes in East Turkestan had reached half of what it was in the 1950s.¹³⁷ A June 2016 report on treatment of wastewater in Ebinur Lake, the largest

Lakes	Sea level(m)	1950s(km²)	1960s(km²)	1970s(km²)	Location
Lopnur	792	3006		dried up	Bayingulun
Bostan	1048	988	960		Bayingulun
Ayakkum	3867	645	549	570	East Kunlun
Akukol	4250	380	357	345	Kunlun
Ayding	-154	120	113	87.2	Turpan
Aksay	4963	105		158.1	Kunlun
Tarma	825	83	dried up	0	Bayinglun
Saljima	5416	56	49	43.1	Kunlun

saltwater lake in the region, described the lake's shrinking from 1,250 square kilometers in the 1950s to around 400 square kilometers due to demand for irrigation and industry, resulting in regular sandstorms and threatening a variety of endangered species in the lake.¹³⁸

Chart: lake reduction (square kilometers) in the Tarim basin region. Courtesy of Muhtar Qong PhD Thesis

In addition to drying up of lakes, lake salinization also threatens lake ecosystems. Bostan Lake, or Bagrash Lake, is the largest inland freshwater lake in China, and salinization has posed a major threat. According to a state media report reposted on *Uighurbiz*, the government has made promises to clean up the lake, which has gradually become salinized as a result of reduced overall water volume and pollution from farmland drainage, industrial wastewater, and domestic sewage.¹³⁹ The effects of salinization on Bostan Lake also stand to damage the local economy, which is fed by the lake ecosystem. Bostan Lake is rich in fish, with over 2,500 tons of fish caught in 1998 according to a research report, and as many as 24 species of fish including grass carp and silver carp. In addition, the lake is a source of dry reed, which is used for paper production.¹⁴⁰ Reports of widespread reduction in the number of fish resulting from salinization have occurred at times of severe pollution, threatening the fishing industry.¹⁴¹

Research on surface water depletion has been particularly focused on the Tarim Basin. In particular, the three rivers feeding the Tarim River, the Yarkand, Hotan and Kashgar Rivers, have all been dramatically reduced in the previous decades, causing the lower reaches of the Tarim River to dry up. Water reaching the lower part of the Tarim River decreased from 900 million cubic meters in the 1950s to nothing today. The result has been an intensification of desertification in the Tarim Basin. 3,430 square kilometers of formerly

productive farmland surrounding the lower reaches of the Tarim River has been desertified. $^{\rm 142}$

One major cause of desertification is the destruction of natural vegetation, especially poplar tree forests that play a major role in keeping the desert at bay. An extremely resilient plant, poplar trees grow both in the flood zones along the rivers in East Turkestan as well as in arid regions with high levels of salinization. Called *toghrak* in the Uyghur language, destruction of the poplar trees is a particular concern for Uyghurs. In the Uyghur language, the name *toghrak* itself means "beautiful tree."¹⁴³ A 2006 *Uighurbiz* report describes a netizen outcry over poplars cut down within Urumchi city, citing a 2,000-year-old penal code in the Kingdom of Kroran for cutting down the tree.¹⁴⁴ In 2007, an in-depth historical analysis of the plants from the Kashgar Teacher's College journal explained that due to their great ecological value, the trees and forests are seen as one of the "most important markers of life" to Uyghurs.¹⁴⁵

Figure 1. (a) Oasis desertification and natural vegetation decline in the lower Tarim River before the ecological water conveyance project (EWCP); (b) degenerated *Populus* euphratica trees; (c) water conveyance in summer (June, 2010); (d) water conveyance in autumn (October, 2010).



Text and images from academic paper on toghrak forest reduction in the Tarim River¹⁴⁶ Poplar destruction has been well documented, though as with other areas of research, government policy is not a subject of scrutiny. Official sources state that between the 1950s and 1970s, poplar forests were reduced by about 60 percent.¹⁴⁷ In the Tarim River Basin region alone, soil salinization is one cause of poplar forest destruction, particularly after thousands of square kilometers of soil were salinized between 1964 and 1994 as a result of a rise in the local water table after the overuse of water for irrigation. As a result of depleted water resources, 3,000 square kilometers of poplar forest have been destroyed, and only 5,000 square kilometers still remain, according to a 2003 scientific report.¹⁴⁸

Following water policies causing the lower Tarim River to dry up in the 1950s-1970s, China has invested more resources and academic attention to combating desertification. A 2013 state media article described the growing state resources devoted to managing desertification in the Tarim Basin: the Chinese Academy of Science (CAS) research on the issue began in 1976, a major investment in CAS research was pledged in 1993, and in 2001 the government launched the Tarim River Basin Comprehensive Management Project.¹⁴⁹ A 2012 *Legal Daily* article beseeches the government to implement policies to preserve the poplar forests and to severely punish illegal activities exacerbating the crisis, but fails to acknowledge the government's role in the crisis through inaction or through policies that caused poplar destruction in the first place.¹⁵⁰

One researcher, who spoke to UHRP anonymously, explained that Uyghurs know the problems exist, but there is no protest, or opportunity for it. Research on the topic is also circumscribed – research may focus on ecological destruction, but not about the factors causing it, such as massive migration of Han Chinese and growing number of *bingtuan* cities upstream along the Tarim River. The researcher shared a further example of the sensitivity of the government to this research. In one instance, a Japanese academic was preparing to study soil samples, and the samples were confiscated by a special Foreign Affairs agent at the airport, and not permitted to leave the country.¹⁵¹

Research published outside of China has put ecological problems into perspective by including analysis of government behavior absent from domestic research. A 2009 scientific paper about the licorice industry published overseas examines the near extinction of the licorice plant in East Turkestan.¹⁵² In spite of its critical role preventing desertification in East Turkestan, licorice has become endangered. The use of licorice in Chinese medicine has made the plant a valuable cash crop. The drying up of the Tarim River has had a major effect on the crop. Since the 1950s, over 329,474 acres of licorice plants have been destroyed and the total acreage of licorice today is reduced 68 percent from the 1950s, while the reserve has dropped 84 percent. Although the government has done some regulation of licorice harvesting, a lack of inspection and monitoring has resulted in poor enforcement. As the market price for licorice has skyrocketed, harvesting has similarly increased, even as the supply has dwindled. As a result, licorice has become endangered as has the livelihood of Uyghurs engaged in this economy.

In the 2009 paper, the researchers examine the changes to the previously sustainable licorice harvesting by Uyghurs compared with the current system, and discover that government policy has effectively shut down Uyghurs' control over the industry and contributed to destruction of the ecosystem. The authors conclude: "Displacement of local peoples from decision making is the main cause of biodiversity decline in Xinjiang, as much as in many other parts of the developing world."¹⁵³

A similar process of government policy disrupting a fragile ecosystem, which has been examined outside of the restrictions of research controlled by the CCP, is the case of the

rabbit carrot. Rabbit carrot, wolf garlic, desert broomrape or *Cistanche deserticola*, like licorice, is valued for its use in traditional Chinese medicine. Like licorice, the case of rabbit carrots illustrates how the government's decision-making around water resources are able to supplant indigenous knowledge, resulting in environmental degradation. As with licorice, this process also disproportionately affects indigenous Uyghurs.

Rabbit carrots grow wild on the roots of mesquite trees, such as *yulghun*, which like the poplars play a role in preventing desertification. Mesquite trees form another layer in the defense against desertification. In order to harvest rabbit carrots, locals strike into the *yulghun* root system, which can damage or kill the tree if done unskillfully or if harvesting is undertaken too quickly or in too great of mass. Skilled Uyghur laborers can remove the rabbit carrots without damaging the tree, and in the past, the industry was a sustainable part of life in certain village economies.



Map including Deryabuyi's location in the Taklamakan Desert

The situation in one Uyghur village has become particularly unsustainable as a result of government policy. In the village of Deryabuyi, situated along the Keriya River north of Keriya city, diversion of river water, specifically for use by *bingtuan* settlements, has been a major contributor to increased desertification of an already extremely arid outpost village. Meanwhile, development has fueled the local industry in rabbit carrots. Growing demand as well as increased cultivation of domesticated rabbit carrots, which fetch a lower price, have led to a scramble to harvest more wild rabbit carrots. Further exacerbating the situation is that the local tax post collects taxes only on goods leaving the village like the harvested rabbit carrots, and not on any goods entering. Thus, the post lowers the price paid to the local people for the rabbit carrots, and as it staffed entirely by outsiders, it also perceived by residents to represent outside government control over the local lifestyle. The

net result is that rabbit carrots are quickly becoming depleted, desertification is increasing, and the economic viability of Deryabuyi is threatened. The lack of consultation with Uyghurs on policies affecting the town is particularly concerning, given that the town's existence is threatened by environmental changes.¹⁵⁴

Black and White Gold – Cotton and Oil in East Turkestan

Policies around cultivated crops also display the government's ability to circumvent local knowledge, just as in the cases of harvesting wild licorice and rabbit carrots. Specifically, the government has implemented a series of unsustainable policies targeting the cotton industry, which has rapidly expanded as part of Western Development, further discussed in the next section. Not only has the government ignored sustainable farming practices in order to grow more cotton in East Turkestan, it has also required growth of the long-staple cotton, which requires the greatest amount of both nutrients for cultivation. Although Uyghur farmers are part of the large cotton economy in the region, the *bingtuan* dominates the industry, and also receives high subsidies on their cotton from the government.¹⁵⁵

Uyghurs have traditionally adapted farming practices to grow cotton sustainably. One Uyghur researcher explains that because it requires soil that is high in nutrients, Uyghurs farmers have developed a system to rotate crops. Cotton growth is limited on a given parcel of land to one year and then the land is allowed to rest for another year, or instead the land will be used to grow alfalfa or corn, crops that have opposite characteristics of cotton and will return nutrients to the soil. Uyghur farmers have practiced this methodology for centuries so as to ensure sustainability of the soil and water resources.¹⁵⁶

New government policies have led Uyghurs to abandon these traditional practices. One researcher explains that not only is crop rotation discouraged by government policies that focus on exclusive cotton growth, but in addition, the region has been designated especially for long-staple cotton, which is even more nutrient-consuming than other strains, particularly in the Aksu, Korla and Turpan regions, in which 93 percent of long-staple cotton has been produced in these areas each year. Excessive fertilizer use has also caused further soil degradation in order to increase long-staple cotton. Without these subsidies, the long-staple cotton would not be a financially viable crop in the region, due to its water and nutrient requirements.¹⁵⁷ Thus, the government has used subsidies to create an otherwise unsustainable industry. Scandal has embroiled the government which has destroyed poplar forests in order to make way for cotton growth, according to a 2011 state media report, further illustrating the threat posed by the cotton industry.¹⁵⁸



Cotton processing plant in Aksu, December 1, 2015. Courtesty of Dominique Patton, Reuters

Resource extraction similarly aims to maximize profit at the expense of the environment, with little benefit or even consultation with indigenous Uyghur populations. Both the ownership and employment in this economy reflect the exclusion of Uyghurs in favor of Han immigrants. One researcher found that Han in East Turkestan occupy about 80 percent of jobs in the manufacturing, transport, communications, oil and gas, and science and technology sectors, as well as 90 percent of the jobs in construction.¹⁵⁹ Uyghurs report difficulty getting jobs in these industries. A 2014 Bloomberg News article on an energy plant in a Uyghur area found that the local Uyghur residents who applied for jobs said they were offered only menial work like taking out the trash or cleaning toilets. ¹⁶⁰

A major shift has occurred in the energy industry in China to reduce pollution in the wealthier eastern cities by moving energy extraction and processing westward, particularly to East Turkestan. Coal production and coal to gas conversion in East Turkestan has increased especially in recent years. Greenpeace explains the two main consequences of the westward energy migration are air pollution and further misuse of water in East Turkestan.¹⁶¹ A 2014 Bloomberg report concluded: "In the short term, these projects will help the coastal cities a little bit, but in the long term this is really, really bad for the environment...It will help the smog on the coast and move the pollution to western provinces."¹⁶²



Oilfield in Karamay owned by PetroChina. Photo courtesy of the New York Times

A westward shift in the coal industry began following the 2010 Xinjiang Work Forum at which the government announced ambitious development plans for the region. In 2011, the US-company Peabody International announced it would pursue a giant mine project in East Turkestan, in collaboration with the government, which would be one of the largest coalmines in China.¹⁶³ Peabody also announced it would construct a major coal to gas conversion plant in Zhundong in the northern part of East Turkestan. ¹⁶⁴ Subsequent development has brought even more energy industry projects to East Turkestan. Twenty coal-to-gas plants were proposed for East Turkestan in 2014.¹⁶⁵ Sixteen new coal plants were proposed in the region in 2016, the second most of any province in China.¹⁶⁶

In 2012-2013, state media covered a number of proposed changes to grow the coal industry in the region, and the reports reflected a degree of caution about the ecological consequences. An August 2012 state media report discussed massive plans for growth in the coal industry as well as mining and other industries including aluminum; it also noted serious ecological consequences and specifically the risk for regional water sources.¹⁶⁷ A January 2013 state media report analyzing coal production prior to the new coal to gas plant that was being proposed at that time identified four existing serious problems the region had already experienced because of the coal industry: air pollution; soil degradation; desertification and sandstorms; and depletion of groundwater.¹⁶⁸

During the 2013 National People Congress, the Xinjiang delegation announced three recommendations in East Turkestan – prevent desertification, reduce air pollution and build the coal industry. ¹⁶⁹ A *Uighurbiz* report cited one netizen who posted about the contradictory nature of building coal while stopping desertification and air pollution. ¹⁷⁰ A Chinese blogger's post called the coal to gas development proposed for the region "suicide" and pleaded with the government not to proceed. ¹⁷¹ The post was circulated widely, and Ilham Tohti also spoke out against the project, citing insufficient water resources and

noting the economic troubles that would result from companies' inevitable failure due to the environmental insecurity.¹⁷² When concrete plans were announced for the coal to gas plants later in the year, the Chinese newspaper *Caijing* investigated the plans and implications of the project in depth, highlighting concerns about water.¹⁷³ An analysis by the overseas research group World Resource Institute emphasized that eight approved plants in East Turkestan were located in arid regions without major reservoirs, and would expect to reduce production capacity or experience temporary outages due to the lack of resilience in the water supply.¹⁷⁴

Other forms of resource extraction also pose a significant threat to the environment in East Turkestan, including mining and hydrofracking. In 2012, *Uighurbiz* reposted a state media report which stated that in East Turkestan the mining industry had destroyed 90,734 hectares of land, including 55,385 hectares of desert, 27,344 hectares of pasture, 6,193 hectares of farmland and 1,810 hectares of forest.¹⁷⁵ Hydrofracking, a process that uses pressurized water to reach underground shale gas reserves, has also grown in the region through a partnership with US company, Halliburton, and also poses a threat to water.¹⁷⁶ In a recent China Dialogue report, a fracking expert commented on the threat posed to water in East Turkestan from the process, stating that water shortages haven't yet slowed down the shale industry's development in China, but that they would be a major issue once the industry scales up operations in the Tarim Basin.¹⁷⁷

In addition to threatening a water crisis and desertification, the most extreme short-term consequences of the extractive industry and specifically coal to gas plants is air pollution. As extractive industries grow in East Turkestan, the air quality has degraded. Greenpeace found in the first quarter of 2016 that East Turkestan contained the five cities in all of China with the highest level of PM 2.5 particulates, pollution small enough to deeply penetrate the lungs. Kashgar moved to the top spot as the worst polluted city in China, with the concentration of PM 2.5 particles up 99 percent on the same period in 2015, and Kashgar's average concentration was more than 27 times the maximum annual average of 10 micrograms per cubic meter recommended by the World Health Organization (WHO). In addition, the pollution level went up 49 percent in the Uyghur-majority city of Hotan.¹⁷⁸

Although state media has covered pollution and ecological consequences of the growing resource extraction industry, protest by individuals affected is severely restricted. In March 2014, Bloomberg covered a rare environmental protest in Oriliq Village, Yining County. Since a coal to gas plant opened there in August 2013, villagers report a burning sensation in their throats, keeping them awake at night, as well as dizziness and repeated colds. One worker interviewed in the report commented: "In the east it is Chinese, that's the difference. Here it's over 90 percent minorities – Uighurs, Kazakhs. If there's pollution, they will just say, 'Oh well, there's pollution.' If people die they will just say, 'Oh well, people die.'"¹⁷⁹

The protest in Oriliq was a rare event, and one that reflects the Uyghur villagers' hopelessness. One said: "If we do nothing, then we live with the pollution and the damage to our health...If we stand up and protest, that also brings hardship." Residents who attended the protest told Bloomberg that police threatened them with arrest and party cadres

warned that their demonstration could be hijacked by separatists. Bloomberg cited a China scholar who noted that in terms of environmental protest, the stakes are highest for minorities. She said: "There's a tremendous risk especially for the largely Muslim population...If there are environmental protests in an area which is heavily minority populated there is a tremendous risk they will be tarred as separatists or even terrorists." The Bloomberg journalists themselves were interrupted by police officers, and prevented from conducting some interviews for their report.¹⁸⁰

RFA reported in 2014 that another major factor contributing to pollution – lax government controls on factories. As with the coal industry, Han Chinese from eastern provinces have moved factories to the region that have been closed due to stricter pollution controls in the east. Regarding the effects of these factories on one township, RFA wrote: "Factories opened by a rapid influx of majority Han Chinese migrants have devastated the environment and public health of a once-fertile township in northwestern China's Xinjiang region, according to ethnic minority Uyghur residents who say the local government has ignored their pleas to have them shuttered." ¹⁸¹

The issues of government complacency and inaction pre-dates expansion of the coal industry or the recent move to East Turkestan by eastern factories. A 2008 report from *Legal Daily* reported on widespread falsification of environmental standards found by companies in the region, indicating that the government has been aware of this issue even before the current wave of development.¹⁸² Reports also indicate that the government has at times covered up environmental issues itself. For example, state media reported in 2007 that an underground coal fire that had been burning for over 50 years in the Terak minefield near Urumchi had been put out.¹⁸³ However, an American scholar who investigated the fire shortly after the announcement was made found the fire still ablaze. He told *Time Magazine*: "I decided go to see how it was extinguished, and flames were visible and the entire thing was still burning. They said it was put out, and who is to say otherwise?"¹⁸⁴

By concealing pollution data, preventing researchers from investigating unsustainable policies, suppressing local protests, and allowing lax implementation of anti-pollution laws, China's government has supplanted indigenous knowledge that Uyghur communities have developed to live sustainably in East Turkestan. Worse still, the exploitation of the Uyghur homeland provides little benefit to Uyghur communities. Uyghurs largely sit on the sideline of development projects that destroy the fragile desert ecosystem which has come to define their unique identity.

Lack of Participation in Decision Making: Development and Displacement

Since the dissolution of the Soviet Union in 1991, the Chinese government has energetically pursued a development agenda in East Turkestan in order to connect China to new political and economic opportunities in Eurasia. Successive state-driven initiatives, including Open up the Northwest (1992), Western Development (2000), the Xinjiang Work Forums of 2010 and 2014, the establishment of the Shanghai Five (1996) and later the Shanghai Cooperation Organization (2001), as well as the Silk Road Economic Belt (2013), demonstrate a cumulative effort to exploit East Turkestan's strategic location in Central Asia to boost China's political and economic presence in the wider region.

These state-led development campaigns in East Turkestan have been characterized by center-driven priorities and suffer from an absence of genuine and meaningful consultation with Uyghurs. The benefits of state-led development serve national rather than local concerns. ¹⁸⁵ If the opportunities generated by large-scale state investment in East Turkestan result in negative effects for indigenous communities, it is a localized by-product of a nationwide project. However, in authoritarian contexts, such as China, economic, social and cultural aspirations of minorities that counter national priorities cannot be articulated without fear of state retribution.

Centrally led development has overwhelming effects on vulnerable communities, especially in regard to displacement.¹⁸⁶ Most of the research on displacement resulting from development campaigns emphasizes the physical aspects, i.e. removal of individuals and communities. According to the research, development induced displacement often occurs when the following kinds of interventions occur: (1) water supply (irrigation, reservoir and dam projects); (2) urbanization and transportation (highways, railroads, building construction); (3) energy (mining, pipelines, natural resource extraction); (4) agriculture and natural resources (monoculture, cultivation enlargement and conservation) and (5) population redistribution schemes.¹⁸⁷

In East Turkestan, there are examples where physical displacement has occurred under all the aforementioned conditions. Land and water degradation in the lower Tarim River from extensive agricultural use resulted in an outflow of the population in the area during the 1990s.¹⁸⁸ One study on the Tarim River Basin suggests that the movement of peoples further upriver as degradation continues in the lower reaches will eventually result in a drastic shortening of the Tarim and a significant loss of water resources in East Turkestan.¹⁸⁹ Water conservation projects have also displaced peoples in the region. The World Bank backed Xinjiang Turfan Water Conservation Project estimated over a hundred displaced individuals in an effort to increase supply to boost local incomes.¹⁹⁰ In 2004 reports emerged of Uyghurs protesting forced evictions to make way for a dam project in Ghulja County. The government planned to displace 18,000 rural residents in order to build a reservoir.¹⁹¹ The direct effect of energy *projects*, rather than the associated opportunities stemming from natural resource extraction, on displacement among Uyghurs is far from well documented.¹⁹²



Train brings Han migrant workers from Lanzhou to Urumchi. Photo courtesy Xinhua

As the examples in the previous paragraph show, displacement involving physical removal is a recognized process in East Turkestan. However, displacement of Uyghurs *in situ*, especially in the south, is distinctly apparent in population redistribution schemes and subsequent urbanization programs to settle Han Chinese migrants. Therefore the displacement of Uyghurs is not only a process of physical removal, but also a phenomenon characterized by forces of compression as Uyghurs and Han Chinese compete in diminishing spaces.

Population Redistribution through Han Migration

In a 2004 monograph, demographer Stanley Toops outlined how the perception of China's frontier regions as having available resources and development opportunities had caused the movement of people to East Turkestan.¹⁹³ Toops argues that migration was not unprompted and state "inducements and incentives" featured heavily in promoting East Turkestan as a desirable destination, especially during the Western Development campaign.¹⁹⁴ Scholar Michael Clarke writes that the notion of East Turkestan as a region full of "untapped' resources and abundant land is undermined by the fact that most of the arable land in East Turkestan is already under cultivation and water resources are increasingly scarce, while there has been significant desertification due to urbanisation, extensive irrigation and land reclamation projects spurred by increased Han settlement since 1949."¹⁹⁵ Academics Howell and Fan attribute the motivating factors for migration to East Turkestan to reform of the economy, looser restrictions on controls governing migration and state development initiatives.¹⁹⁶

Increased state presence in East Turkestan and state-led development has resulted in a rapid growth of Han Chinese in the region.¹⁹⁷ The following figures are taken from Chinese official sources and do not include the "floating population" of migrant workers. Records

demonstrate that between 1953 and 1990, the Han Chinese population increased from 0.3 to 5.7 million in East Turkestan.¹⁹⁸ From 1990 to the 2000 census, the number of Han Chinese grew to 7.5 million and by the 2010 census the figure had reached 8.8 million.¹⁹⁹ Between 2000 and 2012 another 1.2 million were added to the number of Han Chinese in East Turkestan.²⁰⁰ In the post-Soviet era until 2012 (22 years), the number of Han Chinese increased by 4.3 million, whereas in the 37 years between 1953-90 the rise was of 5.4 million. However, despite such growth, the percentage of Han Chinese in the region between 1990-2010 has been recorded at the 38-40 percent level. Nevertheless, during the rule of the CCP the proportion of Uyghurs in East Turkestan has shrunk from 75 percent to 45 percent.²⁰¹

Much of the migration to East Turkestan has occurred in the north of the region. In particular, Urumchi, Shihezi and Karamay, of which the latter is a center for the natural resource industries, a sector of the economy dominated by Han Chinese.²⁰² In 1949, 75 percent of the population lived in the south; however, by 1990, more of East Turkestan's population lived in the north of the region.²⁰³ Data from the 2000 census shows that Han Chinese constituted over 75 percent of the total population of the regional capital Urumchi, as opposed to 20 percent in 1949.²⁰⁴As scholar Reza Hasmath has observed in the nineteen years after the Soviet collapse, the population of Uyghurs in urban areas dropped significantly except for in Kashgar and Hotan.

As a surge in migration under government encouragement resulted in compression of Uyghurs in the north of the region, the Xinjiang Work Forums of 2010 and 2014 stimulated a slow migration of Hans to the south, an area predominated by Uyghurs. The proposal to establish a Special Economic Zone (SEZ) in Kashgar during the 2010 Work Forum was promoted as an initiative to generate economic opportunities and draw outside investment. With financial capital from Guangdong in the amount of 1.4 billion Chinese Yuan (USD 186 million), ambitious plans to transform Kashgar as a hub for Central Asian trade modeled on Shenzhen were outlined.²⁰⁵

According to anecdotal evidence collected by overseas reporters, construction and real estate opportunities were available in Kashgar after the SEZ designation, especially to Han Chinese with social and financial capital to take advantage. One Han Chinese property developer told a journalist working for Newsweek: "When I went to Kashgar on May 26 [2010] to try to do a building [sic], all of the desirable properties had already been taken...I talked to some locals in March who said that they couldn't even sell their apartments, but by May locals and nonlocals, from places like Guangzhou, Shanghai, Jiangxi, were all buying."²⁰⁶ In an interview with a New York Times reporter in 2010, a salesman at a new development in Kashgar said: "We can't build apartments fast enough for demand...Come back here in five years, and you won't recognize the place." The same reporter observed: "With few exceptions, the bricklayers, plumbers and electricians are Han, as are about 90 percent of the buyers." When questioned "why the promotional materials [for the new developments] did not include Uighur-language text, the salesman...was frank. 'What's the point?...They can't afford this place."²⁰⁷

From a demographic analysis, in Kashgar Prefecture approximately 202,000 Han Chinese resided in the area according to the 1990 census.²⁰⁸ In 2012, the number of Han Chinese in Kashgar Prefecture stood at nearly 285,000 (approximately one third growth). In 2000, nearly 56,000 Han lived in Hotan Prefecture and by 2012 the figure was roughly 75,000 (approximately 50 percent growth). Comparisons of data between the two prefectures from 2011 and 2012 show modest increases in population, especially in contrast to absolute numbers of Uyghurs. However, what the population statistics also illustrate are the increasing populations of both communities and of demographic growth in the south, which had long been resistant to migration. In addition, it appears Uyghurs are not moving from the region in large numbers.²⁰⁹ The encouragement for increased migration in the south has strong indications of continuing given the tendency for migration in East Turkestan to follow boosts in transportation infrastructure.²¹⁰

The promotion of "ethnic mingling" in the Xinjiang Work Forum of 2014 has encouraged local officials to implement measures encouraging Han Chinese migration to the south. Reports of cash rewards for couples entering mixed marriages in Cherchen and the announcement of a new mixed ethnicity settlement near Hotan were illustrative of the approach.²¹¹ The relaxing of *hukou* requirements in southern East Turkestan has been another means the state has attempted to stimulate migration. ²¹² The measures compounded Uyghur exclusion from the fledgling economic and social mainstream, particularly among Uyghurs choosing to opt out of "ethnic mingling" incentives. As such proposals to induce migration continue in the south, economic imbalances between Uyghurs and Han in East Turkestan will become even more localized and divisive.²¹³ In an article dated December 16, 2015 in *The Diplomat*, journalist Wade Shephard wrote after a visit to East Turkestan:

This influx of migrants and workers from other parts of China creates competition for the local Uyghurs and other minority ethnicities for employment, farming rights, and resources. Most of the region's top jobs, especially in the petrochemical industry, are disproportionately taken up by Han workers, many of which are intentionally shipped in from other parts of the country. Through an analysis of 2005 census data it was found that Uyghur workers in Xinjiang, on average, earn just 66 percent of what their Han counterparts do.²¹⁴

Howell and Fan argue prior to the 1970s migration to East Turkestan was state managed and that most migration in the reform era has been self-directed. While this may be the case, the role of the state should not be diminished in orchestrating the demography of the region. Incentives drive the process under centrally led development campaigns that promise to deliver on continued economic growth and opportunity for a section of the Chinese population.²¹⁵ The state has strong motives to provide these opportunities so as to incentivize Han presence in East Turkestan and strengthen ties between the region and the center.²¹⁶

Demolition and Reconstruction in the Absence of a Uyghur Voice

Since 2009, demolition and reconstruction projects across East Turkestan have highlighted the lack of Uyghur agency in addressing center-led urbanization efforts in the region. Under the moniker *anju fumin* (安居富民) [peaceful resident, prosperous citizen] these projects have also raised concerns over the cultural rights of the Uyghurs, as traditional neighborhoods are razed to make way for new construction.²¹⁷ A number of Uyghur communities have been targeted by the initiative including Kashgar City, Kashgar Prefecture, the Tashbulaq district of Urumchi, Turpan, Hotan, Ghulja, Kumul, Aksu, Korla, and Uyghur neighborhoods in Karamay, and Bortala.²¹⁸

Anju fumin projects in East Turkestan began as part of the pairing assistance program under the framework of the first Xinjiang Work Forum in 2010 and the 12th Five-Year Plan.²¹⁹ Among the more than 150 pilot projects carried out in East Turkestan by the 19 donor provinces and municipalities in eastern China under the auspices of pairing assistance, were projects to rebuild "old and dangerous residences in shantytowns."²²⁰ In 2010, one Shanghai official commented *anju fumin* projects remained a top priority of pairing assistance and the municipality would carry out work in Maralbeshi, Poskam, Yarkand, and Kargilik counties in Kashgar Prefecture that would affect 130,000 households.²²¹ Also in 2010, Guangdong Province announced an investment of over 100 million Chinese Yuan (approximately USD 16 million) for *anju fumin* projects.²²²



CCP Central Committee member Jia Qinglin visits Ghulja in 2010. Photo courtesy Xinhua

During a visit to East Turkestan in August 2011, Jia Qinglin, member of the Politburo Standing Committee, stressed the need to accelerate development in the region under Western Development and the 2010 Xinjiang Work Forum. During visits to Urumchi, Hotan, Ghulja, Sanji and the new Khorgas Free Trade Zone, Jia called for efforts to "turn

Xinjiang into an important gateway and base for China's opening-up policy." As part of the development rhetoric of the tour, Jia inspected *anju fumin* projects in Hotan County, the Nanshi district in Ghulja, and Heijiashan in Urumchi and emphasized the need to implement the reconstruction projects in East Turkestan.²²³ In 2010, Xinjiang Party Secretary Zhang Chunxian explicitly linked the reconstruction projects with the promotion of long-term stability in East Turkestan, citing the development and improvement in people's livelihoods that would be accelerated under the region's 12th Five-Year Plan.²²⁴ Prior to the annual session of the National People's Congress (NPC) in March 2012, regional authorities told reporters that by 2015, 1.5 million houses would be rebuilt or transformed in East Turkestan, with 300,000 homes remade or transformed each year beginning in 2011.²²⁵ In 2012, the government announced a 20-year program to "completely revamp and urbanize the region with expanded cities, new cities, a fresh grid of transport infrastructure. The goal was to raise the urbanization rate to 68 percent."²²⁶

The demolition of Kashgar's Old City has been a well-publicized example of the reconstruction projects occurring in East Turkestan, due to its historical and cultural significance to the Uyghurs. The greater publicity surrounding Kashgar Old City's demolition over *anju fumin* projects in other parts of the region has permitted not only a closer examination of cultural loss, but also the absence of Uyghur agency in decision-making in reconstruction projects. The demolition of Kashgar Old City had been piecemeal prior to the 2009 announcement of a residents' resettlement project. By the 1980s, when the moat surrounding the Old City was paved to create a ring highway, the original 35-foot high city walls were demolished. In 2001, 2,500 relocations occurred during a redevelopment of the Old City's Id Kah Square area.²²⁷

The February 2009 announcement of a project to transform Kashgar Old City was the most ambitious demolition to date. It aimed to demolish five square kilometers of eight square kilometers of old city, and at its conclusion would affect 65,000 households, an estimated 220,000 people representing about 42 percent of Kashgar's total population. Demolition work was expanded in 2010. The state media reported in March of that year that the pilot project, under which demolitions had been carried out in five neighborhoods in the Old City, would be extended. A total of 4,817 houses had been demolished by the end of 2009, 3,434 families had been relocated to new houses or returned to rebuilt houses, and 522 families had been given compensation money for their own relocation.²²⁸ By 2011, two-thirds of Kashgar's Old City had been demolished. In comparisons of satellite images the construction of new buildings in the Old City has taken place almost immediately after old houses have been demolished.²²⁹As the old city demolition progresses, according to the official announcement: "In its place will rise a new Old City, a mix of midrise apartments, plazas, alleys widened into avenues."²³⁰



Uyghurs walk against a backdrop of new and old Kashgar. Photo courtesy Gaia Photos



Uyghur residents in a new development on the outskirts of Kashgar. Photo courtesy Un oeil sur la Chine/Le Monde



Demolished homes in Kashgar Old City. Photo courtesy Un oeil sur la Chine/Le Monde

China's official media has asserted that Kashgar Old City residents were consulted regarding the redevelopment project.²³¹ A March 23, 2009 article claims that 20,000 surveys were sent to Kashgar Old City residents and that meetings were held with community members regarding the demolition; however, online forums in Uyghur and Chinese indicated an overwhelming opposition to the demolition of the Old City. The now banned Shabnam, Diyarim and Salkin website forums all hosted several discussions and a survey that expressed wide opposition from Uyghur participants on the Kashgar Old City demolition.²³² Furthermore, anecdotal evidence collected by the overseas media offered a glimpse into the extent of opposition, unhappiness and resignation over the demolitions in Kashgar.²³³ The benefits of the tourism industry from the remains of Kashgar Old City that according to state official Wang Zhengrong would be "protected, managed, and developed" are also moving out of the hands of Uyghurs. The annual value of tourism to the Kashgar economy is approximately USD 94 million, and management of sections of the old city, currently subject to admission fees, falls to the Zhongkun Company of eastern China.



A woman sits atop the ruins of a demolished home in Kashgar Old City. Photo courtesy Stefan Geens. Note: Stefan Geens is not affiliated with UHRP.

The redevelopment of Uyghur neighborhoods is also physical manifestation of the compression felt in Uyghur society and cultural life. As the physical appearance of urban East Turkestan becomes less distinguishable from eastern China, Uyghur residents will occupy the same spaces, but without the organic arrangement the redeveloped areas once embodied. Further anecdotal accounts from overseas media, especially from Kashgar Old City residents, relate the reordering of the social fabric towards the impersonal through the loss of institutions such as the *kichik masjid* (or small mosques).²³⁴ Scholar Agnieszka Joniak-Liithi has written about the transformation of East Turkestan into a region that is becoming more familiar and comfortable to Han migrants:

The sheer numbers of incoming Han result in an ever-expanding transfer of Han spaces to Xinjiang. Because the number of temporary, seasonal, and permanently-settled Han in the region is greater than ever before, incoming Han are followed by yet other Han migrants and middlemen who offer their services to make the immigrants feel "at home"...Owing to their increasing numbers, and also to missing mechanisms that might otherwise control this phenomenon, the Han migrants of the past two decades have been able to recreate in Xinjiang their 'spaces of familiarity' to an unprecedented extent...That most of the post-1980s migrants have arrived in the 'gold rush,' driven by money and opportunity, makes it even

more difficult for the Uyghur, and also for local Han and earlier Han immigrants and their descendants, to establish a positive relationship with these newer arrivals.²³⁵

Rural Land Grabs

The compression of Uyghur society through increased Han Chinese migration to East Turkestan is also recognizable in rural areas of the region. One of the primary drivers of compressive forces in East Turkestan is the Xinjiang Production and Construction Corps (XPCC) or *bingtuan*, an entity under the purview of the central government and tasked with encouraging Han Chinese settlement of East Turkestan as well as paramilitary support for Chinese security forces. According to an article published in The Economist on May 23, 2013, 86 percent of the 2.6 million *bingtuan* population is Han Chinese.²³⁶

As one journalist who traveled to East Turkestan in 2015 relates: "The actions of the XPCC have been contested since its inception, often because there were already people living in the areas they took over in the name of development and security."²³⁷ The author adds: "One of the common complaints against the XPCC is that they forcibly appropriated land from local farmers, took complete control of the area's natural resources, and shipped in millions of Han migrants, leaving many of the local people marginalized within their own region."²³⁸

As an example of the *bingtuan*'s role in encouraging Han Chinese migration to East Turkestan, The Economist article cited above reported:

Over the past year it [the *bingtuan*] has begun to build a satellite district. The grey shells of dozens of apartment blocks have sprouted on the dusty plain near the foothills of the Tianshan mountains. Officials say that by 2015 the new district's population will reach 100,000. By 2030 it will be 350,000. Some will relocate from the old city, but many will be newcomers from farther east, attracted by work in new factories. Of Shihezi's current population of 640,000, 95% are Han. Few expect that ratio to change much.²³⁹

The XPCC is also instrumental to urbanization efforts in the south. The 38th Regiment located between the towns of Niya and Cherchen, established in 2010, grew to 4,800 people within three years with new residents coming from Henan Province and families resettled from earthquake hit communities in Gansu Province.²⁴⁰ A number of the settlers received apartments and land. By 2013, the 224th Regiment of the *bingtuan*, created near Hotan in 2004, had a population of 12,000 of which 98 percent were Han Chinese.²⁴¹ The announcement in 2016 that a new city, Kunyu, had been constructed 47 miles from Hotan with the aim "to secure the border area, preserve national security and further develop the economy" is demonstrative.²⁴² The 14th Division of the XPCC, charged with " cracking down on separatism, extremism and terrorism," will administer the city.²⁴³

The imprisoned Uyghur economist Ilham Tohti referred to these cities as "apartheid immigrant cities" and his online forum Uighurbiz frequently reported on the building of

new settlements in southern East Turkestan.²⁴⁴ Uighurbiz also commented on how government designations of towns and cities as an industrial center outside the bingtuan context leads to mass migration and a boom in the Han Chinese population.²⁴⁵

In interviews with Uyghur farmers, RFA has documented a series of government land grabs to accommodate state development initiatives and/or resettle Han Chinese migrants that demonstrate a continuation of rural displacement of Uyghurs initiated under the XPCC. RFA's documentation indicates an increasing conflict between the interests of the state and the rights of Uyghurs to farm traditional lands. Although land grabs are common across China, in East Turkestan land transfers appear to be moving out of Uyghur hands and into Han Chinese possession. In many cases compensation, if made available, has been inadequate and reports describe how Uyghurs opposed to the land grabs have been punished by China's criminal-justice system. The state intimidation of Uyghur farmers to relinquish land and the lack of an independent system to address grievances has created increased tensions, in particular to the threat they pose to Uyghur livelihoods. RFA has also documented a number of cases where farmers subjected to land grabs are warned against speaking to the overseas media.²⁴⁶



Highway slogans in Qapqal Xibe Autonomous County, Ili prefecture encourage people to be profitoriented. Photo courtesy of a villager via RFA

According to a review of the reports, the land grabs have occurred across East Turkestan, but are more prevalent in the south:

• In 2008, Ghojimemet Abdujappar complained about inadequate compensation after his house and farm were appropriated for the construction of government offices in Hotan prefecture. After his petition was vetoed at the local level, Abdujappar took his case to Beijing; however, he was returned to East Turkestan and imprisoned for three years on charges of "illegal petitioning." In a January 20, 2015 article, Abdujappar described the physical abuse he received from Chinese guards in prison because of his inability to speak Mandarin fluently.²⁴⁷



Ghojimemet Abdujappar petitions in Beijing, May 2014. Photo courtesy of RFA

- A 2009 report detailed how authorities in Turpanyuz Village in Ghulja County planned to force local Uyghur farmers to sell land set aside for orchards. The land had been leased to the farmers for fifty years, but officials were insisting on a return with over twenty years remaining on the contracts. Uyghur farmers alleged the compensation offered far short of the real value. Local authorities told RFA reporters they planned to sell the land to Chinese businessmen from outside of East Turkestan.²⁴⁸
- In 2012, 40 Uyghurs from Gholbiyi village, Toksun county, Turpan prefecture demonstrated outside government buildings in Urumchi asking for the return of land seized from 84 families in 2008 and handed to Han Chinese businesspersons as part of a development initiative to expand the regional capital. The Uyghurs had previously

traveled to Beijing to present their case; however, one of the leaders of the group was detained upon his return to East Turkestan. Police in Turpan prefecture blocked one Uyghur farmer from participating in the 2012 protest.²⁴⁹



Families saying government officials appropriated their land in Toksun county. Photo courtesy of RFA

- In 2013, RFA published an article on the plight of a Uyghur farmer, Semi Niyaz, in Suntagh township in Atush city. According to residents, Niyaz's land was seized as part of an 82-acre land grab instigated by the Zhongkun Company with the assistance of local authorities in 2006. Over the course of seven years Niyaz and other Uyghur farmers had petitioned Urumchi and Beijing. While Niyaz received compensation for the land on which his house stood, he was not paid for farmland taken in the land appropriation. In 2010, Zhongkun sold the land on which his house stood to a Jiangsu based company for a housing development. Niyaz protested the sale and was jailed for ten days. During Niyaz's detention his house was bulldozed. After his release local authorities warned him about speaking to the overseas media regarding the case.²⁵⁰
- An April 12, 2013 article described the arrest of three Uyghurs in Aktash village in Hotan prefecture for resisting police deployed to seize communally owned land. Local authorities had earmarked the land for commercial use and construction. According to the residents of Aktash, state officials had not notified them of the land appropriation. Villagers added police used violence against women and minors after some had voiced opposition to the heavy-handed measures employed to seize the land. One of the farmers told RFA reporters: "We don't know what to do. If we act against them, they arrest us. If we don't do anything, they will take over our land...Now we have no land. What are these 80 families going to eat?"²⁵¹
- In a June 3, 2013 article, villagers from Baykol in Ghulja prefecture told RFA reporters that they had been offered compensation one-tenth the value of land confiscated by a local official for Han Chinese owned business projects. According to local residents: "Baykol village chief Kaiser..[has been]...instrumental in the seizure of land, allocated

to developers allegedly in return for bribes." The article also revealed that the projects were primarily housing for Han Chinese migrants and that land seizures in the village had been occurring for approximately ten years.²⁵²



Uyghur man points to his farmland in Baykol village that has been seized and leveled by the authorities. Photo courtesy of RFA

• In 2014, three Uyghur farmers from Qaziriq village, part of Kashgar's Nezerbagh township, were detained after protesting land confiscations on the Baghdax Internet forum. The grievances outlined by the farmers dated as far back as the 1980s and cited a number of land seizures for development and transportation projects. The three were taken by township police to Hotan in an effort to prevent their meeting with "high-level" officials on resolving local land issues. The farmers' complaints included diminished livelihoods due to the repeated land grabs by the government.²⁵³



Petition signed by Qaziriq residents over their land complaints, March 2014. Photo courtesy of RFA

- An April 1, 2014 article details Uyghurs in Qaraqash county in Hotan prefecture complaints over government failure to grant land to Uyghur families "for years" and how 66 acres had been taken from local Uyghur farmers and redistributed to developers for Han Chinese to farm. The article states: "Han Chinese, especially those who have the technical skills to work on large-scale projects, usually get the best land and jobs in the region, fueling resentment among Uyghurs." The farmers spoke of increasing difficulty in feeding families without new land grants.²⁵⁴
- On April 9, 2014, a report disclosed how village and township officials in Yengi-Bagh village near Turpan city had pressured Uyghur farmers into selling land at below market rates. Officials had denied one family business licenses causing a loss in income in an attempt to force a sale of land to cover the shortfall. According to one Uyghur interviewed for the report, officials had forced 18 other Uyghur families to sell land cheaply for resale at a profit to Chinese developers. According to the informant, compensation for Han Chinese whose land had been targeted for developers was more than that offered Uyghurs.²⁵⁵
- A May 7, 2014 article reported on the arrests and beatings of Uyghur farmers in Kunes county's Toqay village in Ghulja prefecture who had petitioned the local government about land grabs over the previous three years. According to the article, Uyghurs were forced to sell land to a Han Chinese village party chief at cut-price rates. Those who refused to do so were subjected to punishment. The land was then sold to county

authorities at up to five times the amount of the original price. The county then sold confiscated land to Han Chinese developers at vastly improved rates. Recalling the physical abuse suffered by local Uyghurs, one farmer told RFA: "It didn't matter if they were men, women, children, or seniors...For example, police beat a woman in her 50s named Rizwangul from my village and broke her arm."²⁵⁶

• In 2015, a farmer from the 12th village in Yengi'eriq township of Kashgar Yéngi-sheher county related his problems with CCP officials confiscating greenhouses from Uyghurs and handing them over to newly arrived Han Chinese migrants. According to the farmer, one official had seized nine of his greenhouses and given them to Han Chinese acquainted with the officer. The confiscations of greenhouses began in 2011 with the appointment of Han Chinese party secretaries "who favored Han Chinese migrants who resettled there, by taking away resources from the Uyghurs and giving them to the newcomers." According to the farmer, "If migrant Han Chinese do greenhouse farming here, they enjoy a lot of privileges, such as tax concessions and interest-free loans, but we do not have such rights…Instead, we are forced to leave our land and go broke."²⁵⁷

The above reports detail a variety of methods employed by local officials to enact land grabs in East Turkestan. Further reporting from RFA also reveals that methods such as forced farming programs and placing Uyghurs on "suspect lists" are used to displace Uyghurs from their land. In the latter case, Uyghurs are compelled to surrender to local police for alleged crimes; if they do not comply property belonging to the individual and their family faces appropriation by the state.²⁵⁸

Han Chinese migration to East Turkestan has not only enacted grabs of Uyghur land in order to accommodate settlers, but also led to ethnically charged clashes over state allocation of capital for land reclamation work. In a November 3, 2013 article, RFA reported Uyghurs were complaining of exclusion from the subsidies migrants received to convert unused land for cultivation. The article cites two Uyghur farmers from Aksu prefecture who describe how the state has disproportionately distributed land and subsidies in favor of Han Chinese migrants.²⁵⁹

In 2011 reports emerged that the Chinese government had acquired land in Tajikistan in two separate deals. The land (approximately 277 thousand hectares in area) was set aside for agricultural use and demonstrates the Chinese government's eagerness to obtain cultivatable land even beyond its borders. According to researchers from Leiden University in the Netherlands "China lost 8.2 million hectares of arable land between 1997 and 2010, due to urbanization and environmental degradation."²⁶⁰ The researchers, who found Chinese overseas land acquisitions across the globe, in particular in Southeast Asia, Africa and South America, concluded: "we know very little about the range of Chinese investors involved, the motives behind their investments, and importantly the actual impact of Chinese land acquisitions at the grassroots."²⁶¹

Legal Instruments

International

Public participation in environmental affairs is an internationally acknowledged right. Participation in the decision making process is understood to be a contributing factor to equitable environmental policies and recognizes the integral role of grassroots communities in solving environmental problems. Public participation provides a means with which individuals and civil society groups hold the state and private enterprise accountable for obligations in regard to sustainable development and ensures transparency in environmental governance. Accurate and complete information is essential to effective and meaningful public participation in environmental affairs. Therefore, respect for the principle of access to and freedom of information is necessary for the public to evaluate environmental policy and to seek forms of redress. Public participation allows for the development of a democratic form of governance that places individuals and communities as key stakeholders in environmental matters thus forming a broad legitimacy for policy formation.

The right to participation in public affairs is guaranteed in Article 25 of the International Covenant on Civil and Political Rights (ICCPR). Popular participation is also defined in Article 8.2 of the Declaration on the Right to Development adopted by the United Nations General Assembly in 1986.²⁶² Legal instruments establishing international standards in public participation in environmental affairs specifically are outlined in two key documents described below.

Nations attending the United Nations Conference on Environment and Development (also known as The Earth Summit) held in 1992 in Rio de Janeiro agreed on a set of principles guiding the future of sustainable development. The PRC was among the 172 nations that attended the Earth Summit and approved the principles outlined in the Rio Declaration.²⁶³

Principle 10 of the Rio Declaration frameworks the right to public participation in environmental affairs, especially the three key aspects of participation in decision-making, access to information and due process in seeking justice:

Environmental issues are best handled with participation of all concerned citizens, at the relevant level. At the national level, each individual shall have appropriate access to information concerning the environment that is held by public authorities, including information on hazardous materials and activities in their communities, and the opportunity to participate in decision-making processes. States shall facilitate and encourage public awareness and participation by making information widely available. Effective access to judicial and administrative proceedings, including redress and remedy, shall be provided.²⁶⁴

The principle of public participation in environmental affairs was upheld by the attendees of the World Summit on Sustainable Development held in South Africa in 2002 (also known as Rio+10) in Article 26 of the Johannesburg Declaration on Sustainable Development.²⁶⁵ States at the United Nations Conference on Sustainable Development held in Rio de Janeiro in 2012 (also known as Rio+20) once more reaffirmed the right. The conference outcome document *The Future We Want* explicitly outlined the three principles of public participation in environmental affairs (access to decision making, information and redress) in articles 43, 44 and 99.²⁶⁶ The PRC was in attendance at the 2002 and 2012 meetings.

Also established at the 1992 Earth Summit was Agenda 21 a broad based and as with the Rio Declaration a non-binding document. Amid a wide variety of principles guiding economic development along environmental considerations, Agenda 21 set out to define the role of collective stakeholders in environmental affairs and state responsibility to achieve their participation. These groups, including non-governmental organizations (NGOs) and farmers, were described as integral to the achievement of sustainable development practices.²⁶⁷

Article 27.10(a) of Agenda 21 explains necessary government actions in respect to NGO integration into the environmental decision-making and monitoring process:

Establish or enhance an existing dialogue with non-governmental organizations and their **self-organized networks** [UHRP bold] representing various sectors, which could serve to: (i) consider the rights and responsibilities of these organizations; (ii) efficiently channel integrated non-governmental inputs to the governmental policy development process; and (iii) facilitate non-governmental coordination in implementing national policies at the programme level;²⁶⁸

Article 32.6(f) of Agenda 21 characterizes state responsibility in mainstreaming farmers, men and women, into the "design and implementation" of environmental policy.²⁶⁹ To further this objective, Agenda 21 delineates the following principles in 32.7(c), (d) and (e):

Involve farmers and their representative organizations in the formulation of policy;

Protect, recognize and formalize women's access to tenure and use of land, as well as rights to land, access to credit, technology, inputs and training;

Support the formation of farmers' organizations by providing adequate legal and social conditions.²⁷⁰

According to a United Nations administered website, the webpage monitoring China's implementation of institutional aspects of Agenda 21 records a high number of entries specifying "no information is available" on the decision making procedures available to NGOs and farmers.²⁷¹

Domestic

The PRC has extensive environmental protection laws. A government website lists 23 laws governing the environment that includes safeguards against pollution of atmosphere, water

and soil.²⁷² The principal legal instrument regarding the environment in China is the Environmental Protection Law. The law was first enacted in its final form in December 1989 following draft measures passed in 1979. The legislation presents the framework for subsequent legal provisions on the various environmental challenges facing China.²⁷³

The 1989 Environmental Protection Law establishes "a system for environmental management, monitoring, liability and enforcement... and grants the right to report or file charges against any offender."²⁷⁴ However, according to a 2007 article published by the director of Beijing-based non-profit the Institute of Public and Environmental Affairs, Ma Jun: "China's greatest failing in its environmental and resources management is its lack of public involvement."²⁷⁵ Ma adds that despite these shortcomings a 2003 environmental impact assessment law specifically included provisions on public participation.²⁷⁶

In 2014, the Environmental Protection Law was revised as China sought to control increasingly intractable environmental concerns and to balance the rapid growth of the economy with environmental protection.²⁷⁷ In particular, the updated law sought harsher punitive measures against polluters by replacing a previous system of one-off fines to one that penalized violators daily and in increasing amounts until resolution of the problem.²⁷⁸ Furthermore, the revised law required central and regional governments to conduct environmental impact assessments not only for development projects, but also at the economic policy level.²⁷⁹

The revised Environmental Protection Law also contained articles regarding the rights of individuals and groups to participation in environmental affairs. Articles 53 and 57 offer a framework that is partially consistent with international law on public participation. Although the rights to information and redress are covered, provisions are weak on the direct participation of the public in environmental policy decision-making.

Article 53. Citizens, legal persons and other organizations shall have the right to obtain environmental information, participate and supervise the activities of environment protection in accordance with the law. The competent environmental protection administrations of the people's governments at various levels and other departments with environmental supervision responsibilities shall disclose environmental information pursuant to the law, improve public participation procedures, and facilitate citizens, legal persons and other organizations to participate in, and supervise, environmental protection work.

Article 57. Citizens, legal persons and other organizations shall be entitled to report and complain environmental pollution and ecological damage activities of any units and individuals to competent environmental protection administrations or other departments with environmental supervision responsibilities. In the event the local people's government and its environmental protection administrations or any other relevant departments fail to fulfill their responsibilities in accordance with the law, any citizen, legal person or other organizations have the right to report it to the competent higher level governments or the supervisory department according to law. The authorities receiving the report shall keep confidential the relevant information of the informant, and protect the legitimate rights and interests of the informant. $^{\rm 280}$

Although the new legislation offers civil society a mechanism with which to hold polluters to account, experts have questioned the limits the Chinese government has placed on initiating environmental litigation. An article published on the China Dialogue website on April 25, 2014 describes that: "Since only organisations registered above the city-level will be able to launch lawsuits, many others will not be eligible for litigation." The article also details how organizations with "no record of illegal activity" are permitted to litigate, which in the opinion of the author would give state officials "unlimited discretion to keep unloved organisations away from litigation."²⁸¹ According to Chinese media sources cited by an April 25, 2015 Voice of America report approximately 300 hundred organizations can sue on behalf of others under the new law, a provision most likely initiated to prevent a dramatic increase in environmental cases.²⁸² Therefore the revised law does not permit individuals the right to litigate in Chinese courts in respect to environmental cases.

The limits placed on civil society by the 2014 Environmental Protection Law are consistent with the control the state exerts over NGOs in general. In some cases, NGOs firmly under the purview of the Chinese government are described as GONGOs or government-organized nongovernmental organizations.²⁸³ Other organizations are subjected to a lengthy registration process that prohibits any activity before the state has completed its approval to conduct operations.²⁸⁴ Environmental NGOs in China also rely on overseas funding, as access to domestic funding sources is unavailable without legal registration. With the enactment of a 2015 law overseeing foreign NGOs, this support "will rapidly dry up."²⁸⁵ According to one scholar such heavy scrutiny of NGOs results in self-censorship in a bid to escape on going problems with the government.²⁸⁶

Given Chinese state interference in NGOs, another scholar assesses that in terms of environmental affairs: "even though environmental NGOs may be relatively safe from scrutiny (being less politically sensitive than human rights NGOs, for example), they are not completely free to act.²⁸⁷ This view was echoed by an extensive Wilson Center report into public participation in China in environmental legal advocacy:

... significant legal, institutional, and political obstacles continue to pose a challenge to full and satisfactory development of public participation in China, obstacles that may not, due to a lack of political will and anxieties about public disorder, be resolved unless legal advocates are able to develop their role, without fear of reprisal, to help affected parties lay claim to their participation rights under law.²⁸⁸

The regional government enacted environmental protection regulations in 1996 that were revised in 2005 and 2011. Article 10 of outlines the right to redress in all iterations of the regulations; however, while the 2011 version specifies individuals have "the right to complain and to report pollution, environmental destruction," it does not include provisions on rights to prosecute (控告) contained in the 1996 and 2005 versions. Nevertheless, the 2011 version adds to Article 10 the obligation that: "People's governments above the

county level environmental protection administrative department shall establish a system for reporting complaints of environmental violations." Article 8 of the 2011 update also contains requirements concerning the availability of environmental information insofar as the burden is placed on county-level governments to issue "bulletins" and "community announcements." Public-initiated access to information is not legislated.²⁸⁹

A scholarly article published in 2013 on ecological legislation in East Turkestan concludes that legal protections in the region are weak. The authors write: "The courts in Xinjiang may have little interest in protecting the environment, because they may not have any such relevant provisions or regulations, and there is no specific environmental justice (protection) agencies, and no judges has made any specific judicial interpretation for the environmental protection in Xinjiang." The article adds that while grassroots civil trials are unlikely in East Turkestan, administrative departments governing environmental protections are more productive in seeking redress.²⁹⁰ However, the writers of the Wilson Center report found that rural branches of the Environmental Protection Bureau, including in East Turkestan, lacked the "scientific technical capacity to measure environmental impact and formulate environmental protection policy."²⁹¹

The Xinjiang regulations are consistent with national laws in that curtailed protections exist on public participation in redress and access to information There is also uniformity with national law in that there is no mention of public participation in decision making. As such, the authors of the 2013 article cited above determine from their research that factors beyond including specific legislation on decision-making are also relevant in East Turkestan:

Public participation to the formulation of legislation is weak, public also do not attach importance to the development of civil society and the role of environmental organizations. Public is also wary of the government control, public participation, establishing the social checks and balances and developing a combination of law enforcement mechanisms for environmental protection.

Recommendations

For the Chinese Government

- Guarantee the fundamental right of the Uyghur people to participation and consultation in the decision making process regarding environmental impacts of development and agricultural planning as outlined in international and domestic legal instruments.
- Open public forums for genuine and meaningful debate on environmental issues. This includes the freedoms to seek, receive and impart information online. Uyghurs should be free to conduct research into the causes of environment degradation in East Turkestan and to access government information on the environment.
- Respect the fundamental rights to freedom of assembly and association. International human rights standards assert the right for individuals to form non-governmental organizations to monitor the state's compliance with environmental benchmarks.
- Mainstream Uyghur knowledge of the environment into decision-making on development and agricultural planning. The government should pursue a balanced approach to development planning that considers the interests of small-scale Uyghur farmers.
- Enforce the 2014 Environmental Protection Law equally across China in order to curtail the outsourcing of polluting industries from east China to East Turkestan. Officials found to have not properly enforced the law and/or engaged in corrupt practices to permit polluting industries in East Turkestan should be disciplined.
- Implement all regional legislation and regulations guaranteeing public participation and a complaints process in regard to environmental issues.
- Permit unfettered research into the potentially harmful effects to the environment of government policies in East Turkestan, particularly in regard to desertification and the role of the Xinjiang Production and Construction Corps.
- Reform the governance of the Xinjiang Production and Construction Corps to incorporate greater Uyghur participation.
- Conduct a thorough and independent investigation into civilian complaints of health problems caused by nuclear fallout from weapons testing and make all discoveries available to the public. Ensure those individuals with health issues receive proper medical care and compensation.
- Ratify The Comprehensive Nuclear-Test-Ban Treaty (CTBT).
- > End all or any subcritical, biological and missile testing in East Turkestan with immediate effect, ensuring the future of the region is nuclear free and demilitarized.
- Halt the flow of Han Chinese migrants into East Turkestan, in particular the south of the region, in order to stem concerns over air pollution, land availability and water resources caused through over populating a fragile environment.
- Stop new projects involving coal, coal to gas conversion, hydraulic fracking and other extractive industries that require high amounts of water that is in short supply in arid regions and develop a comprehensive plan for water management.
- Remove policies encouraging unsustainable agricultural policies such as the subsidization of long grain cotton production to the exclusion of traditional practices of crop rotation.

- Monitor the air and water supply and strictly enforce anti-pollution regulations, particularly for companies with a background of pollution in eastern China.
- Cease immediately all demolitions of Uyghur neighborhoods across East Turkestan until a transparent process of genuine consultation has been undertaken with residents.
- Monitor sales of land to developers to guarantee that the original Uyghur landowners have received fair payment. Any resale of land appropriated from Uyghurs by local officials and the Xinjiang Production and Construction Corps must be subject to an independent review process to certify the transaction was conducted without pressure. If the process deems the transaction predatory, measures for proper restitution should be in place.
- Ensure the powers of local officials are enforced fairly and appropriately and that the criminal-justice system is not abused to force Uyghurs off their land. Any local official found extending their powers should be appropriately punished.
- Release all Uyghurs detained for protesting land grabs in their communities. All convictions related to peaceful opposition to land grabs conducted by local officials should be overturned and the individuals compensated accordingly.
- Establish an independent mechanism to which Uyghurs can bring complaints against local officials and enterprises over environmental concerns. The mechanism should guarantee freedom from state reprisal if a complaint is lodged.

For Concerned Governments

- Raise concerns at bilateral human rights dialogues with the People's Republic of China over limitations placed on Uyghurs to genuinely participate in development and agricultural planning decision-making.
- Urge domestic companies with major investments or development projects in East Turkestan, such as the U.S. companies Peabody and Halliburton, to consult with Uyghurs on any projects that affect their interests, and develop plans for sustainable implementation of development in consultation with local communities.
- Call upon the Chinese government to ensure Uyghurs the right to seek, receive and impart information on environmental conditions in East Turkestan and urge Chinese officials to permit independent research into the environment that includes a genuine assessment on the effect of government policies.
- Urge Chinese counterparts to abide by agreed international obligations to the fundamental rights to freedom of assembly and association. Insist Chinese officials permit the establishment of independent non-governmental organizations that advocate for state adherence to environmental standards.
- Press the Chinese leadership to ratify The Comprehensive Nuclear-Test-Ban Treaty (CTBT).
- Open consulates in the East Turkestan regional capital of Urumchi that will permit a closer observation of environmental conditions in the region, as exemplified in the United States Embassy monitoring of air pollution levels in Beijing.
- Establish a "Special Coordinator for Uyghur Affairs" in national foreign ministries.
- Pass a "Uyghur Policy Act" that incorporates protection of Uyghur freedom to seek, receive and impart information on the environment, as well as mandates to investigate

curbs placed on the Uyghurs' fundamental right to assembly and association over environmental issues.

For the International Community

- Tighten enforcement mechanisms of international instruments covering the environment in the United Nations system.
- The UN High Commissioner for Human Rights should publicly express concern over the condition of association and assembly among Uyghurs in East Turkestan and urge China to afford Uyghurs their fundamental right to information access and participation in environmental affairs.
- Send observers, particularly the Special Rapporteurs on Human Rights and the Environment; Freedom of Opinion and Expression; Minority Issues; and the rights to freedom of peaceful assembly and of association, to East Turkestan with unfettered access to Uyghur communities to impartially conduct an assessment of China's compliance to its international obligations to protect the human rights of the Uyghur people.
- Ensure human rights obligations, especially in regard to displacement, and environmental standards are fully met by the Chinese government before multilateral assistance and projects, through agencies such as the World Bank and Asian Development Bank, are approved.

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UHRP

UYGHUR HUMAN RIGHTS PROJECT

The Uyghur Human Rights Project (UHRP) was founded by the Uyghur American Association (UAA) in 2004 with a supporting grant from the National Endowment for Democracy (NED). UHRP's mission is to promote human rights and democracy for the Uyghur people. In 2016, UHRP became an independent 501(c)(3) nonprofit, tax-exempt organization.

UHRP works to raise the profile of the Uyghur people by:

Researching, writing and publishing commentary and reports in English and Chinese covering a broad range human rights issues involving civil and political rights, through to social cultural and economic rights;

Preparing briefings – either written or in person – for journalists, academics, diplomats and legislators on the human rights situation faced by the Uyghur people.

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