

**CASPIAN BRIEF NO. 19, August 2001**

**THE PROSPECTS AND PERILS OF THE  
KAZAKHSTAN-CHINA PIPELINE ROUTE**

**LOLA GULOMOVA**

---

***Cornell Caspian Consulting***

STOCKHOLM ANKARA BAKU DUSHANBE ISLAMABAD LONDON  
TASHKENT TEHRAN TBILISI UFA WASHINGTON

Head Office: Topeliusv. 15  
SE-16761 Bromma  
Sweden

Tel. +46-70-7708182  
Fax. +46-8-266873  
Fax. +1-253-5504390

**<http://www.cornellcaspian.com>**



# Cornell Caspian Consulting

STOCKHOLM ANKARA BAKU DUSHANBE ISLAMABAD  
LONDON TASHKENT TBILISI TEHRAN UFA WASHINGTON

---



## THE PROSPECTS AND PERILS OF THE KAZAKHSTAN-CHINA PIPELINE ROUTE

**Lola Gulomova**

Since the collapse of the Soviet Union, Kazakhstan has sought to break its dependency on Russian-dominated oil and gas transport routes. Hence, it has sought to create several alternatives for Kazakh oil to be delivered to foreign markets, one of which is the Kazakhstan-China oil route. This pipeline route was initially proposed in 1997. Following the commitment of the governments of Kazakhstan and China to move ahead with the project, the governments

proposed to conduct an initial assessment of the project.

In September 1997, Kazakhstan and China (through the China National Petroleum Corporation, CNPC) entered into an agreement to construct 3,000 km (1,800 miles) of pipelines connecting Kazakhstan's Aktyubinsk and Uzen oil fields to China. This agreement contemplates investment commitments of approximately US \$9.5 billion by China as well an undertaking to commence operations within five years (subject to certain conditions). The

contract is structured in the following manner: (1) The rehabilitation of the Uzen oil fields is estimated at \$4.38 billion; (2) the rehabilitation of the Aktyubinsk oil fields, \$1.1 billion; and finally (3) the construction of the oil pipeline to China at \$3.5 billion. With China expected to double its oil import needs in near future, this project would enable Kazakhstan to diversify its customer base and its export outlets and to capture a share of the growing demand for oil in Asia. The government entered into this agreement following

the granting of a concession to CNPC to develop the Uzen oil field following the public tender. Commitment to the construction of two pipelines, including a 2,000-km pipeline from China to the Uzen field, and the Aktyubinsk oil pipeline from Aktyubinsk, Western Kazakhstan, to the Xinjiang region in China, was a precondition for the CNPC's participation in the Uzen joint venture.

## OIL ROUTE

The feasibility study was initiated in June 1998 and completed in September 1999. It was financed by the CNPC and was conducted by the Kazakh national oil pipeline company KazTransOil. Despite public enthusiasm for such an oil corridor, both Chinese and Kazakh officials have privately questioned whether the pipeline would be commercially viable. A feasibility study of the project for the oil pipeline stipulates that no less than 25 million tons of oil per year must be transported through the pipeline.<sup>1</sup>

With expected oil deliveries to China and world oil prices at relatively high levels, the annual economic revenues could be substantial for Kazakhstan. Nevertheless, in addition to current costs, it is imperative that future extraction and exploration costs be included in the calculation of the economic benefits. With the rather high

interest rates in Kazakhstan, the economic net benefits are high. However, given the high interest rates, the net benefits from future extraction become substantially lower. It is economically profitable to increase current extraction to maximize net benefits to economy and simultaneously carry out the exploration of new reserves. Yet, by extracting more today, the oil reserves will be exhausted sooner.

In spite of abundant and untapped natural resources, Kazakhstan lacks the infrastructure to achieve its goals of independence and financial success in the energy market. Due to heavy demand, Kazakhstan is facing the possibility of domestic energy shortage in the next decade. Russia will play an increasingly important role as Kazakhstan attempts to define its future policies and economic goals.

Kazakhstan currently solely depends upon the Russian pipeline system for its oil exports and is locked into an economy dependent on Russian gas and electricity imports, as well as Russian industrial goods. In the near future, Kazakhstan will be tied to Russia, as Russian pipelines form the only means of import and export of oil and gas. Under current circumstances, Kazakhstan will be forced to accept Russian demands or face a potential of domestic instability. Energy shortages mean additional reliance on Russian imports and increasing debt. The lack of regional alternatives may further push Kazakhstan into the Russian sphere of influence.

## *China*

China, being a new importer of oil, has long sought to insert itself into Central Asian energy politics in a bid to diversify its own petroleum supplies. The Chinese economy requires 4.3 million barrels of oil per day. Although Kazakhstan is currently transferring 95,000 barrels per day to the Chinese border by rail, it is much more economic for China to construct a pipeline between Kazakhstan and China, which could potentially carry as much as 25 million tons annually. For Kazakhstan, this could provide a large dependable income not vulnerable to Russian manipulation.

The Kazakhstan-China oil pipeline would help China to carry out its energy strategy of developing oil in its western parts, while in the meantime exploring and utilizing oil resources in foreign countries. The international section of the pipeline will extend 3,000 km from Karamay in the north-west of China's Xinjiang-Uyghur Autonomous Region (UAR) to Kazakhstan. When completed in eight years, the pipeline is expected to transport the needed 25 million tons of oil from Kazakhstan to China annually. The pipeline's domestic section starts from Korla, north of the Tarim Desert. After arriving at Lanzhou, a major petrochemical industrial center in north-western China's Gansu province, the pipeline will go east to central China's Henan province in one direction and to south-west China's Sichuan province in another.

<sup>1</sup> According to Yaowen Wu, Vice President of CNPC, 2000 Press Conference in Astana, Kazakhstan

### Tarim Basin

China's north-west provinces of Shanxi, Gansu, Qinghai and the autonomous regions of Ningxia and Xinjiang together possess one third of the country's total oil reserves. The region is expected to produce one fifth of China's total oil output within three years<sup>2</sup>.

The Tarim basin, located in the south-central part of the remote Xinjiang UAR, is the largest onshore basin in the world, covering 560,000 km<sup>2</sup>. A significant discovery in the Tarim basin was made in November 1988, when in Luntai county, 223 miles southwest of Urumqi, a flow of 4,290 barrels a day of crude oil was tested. Subsequently, in October 1989, the Tazhong 1 anticline structure in the heart of the Taklaman desert was discovered. The Tarim Petroleum Exploration and Development Bureau (TPEDB) was established by CNPC in April 1989. Chinese geologists estimated of Tarim's potential is three times as large as the Daqi producing area, the Daqi oilfield is China's largest and the world's eighth largest oilfield.

However, the disappointing results from exploration of the Tarim basin during the past seven years have sent an alarm signal to Chinese energy planners. The following issues related to Tarim basin include:

- CNPC's comprehensive exploration in the Tarim basin between 1989 and 1995 has led to identification of 26 oil and gas bearing structures. Chinese geologists are beginning to think that the Tarim reserves consist of many medium and small scale oil reservoirs rather than the super giant fields. This represents an unexpected indication that Tarim's future oil and gas production may not satisfy CNPC's previous high expectations, and thus China's oil and gas supply shortage will not be resolved if exploration of Tarim fails to provide a big breakthrough in the coming years.
- CNPC is facing mounting problems in tackling exploration and development of the Tarim basin. In addition to exploration costs, the TPEDB is spending about 2 million yuan per year, of which 450 million yuan comes from CNPC, and the remainder of \$1.2 billion is a loan by the Bank of China. The exploration budget was slashed to \$0.3 billion for 1991-1992, down from \$0.6 billion allocated in 1989-1990. Even though CNPC's budget balance has improved in recent years, it seems unlikely that the CNPC alone will be able to sustain massive investment in the Tarim's exploration and development in coming years. This confirms that China's future oil and gas supply shortage problem is now recognized by the Beijing energy authorities, and therefore CNPC is allowed to allocate its limited capital to secure overseas oil and gas supply sources.
- In addition to severe natural conditions and geological features, the

lack of a comprehensive transportation infrastructure is a major obstacle to accelerating Tarim's exploration and development. In July 1995, CNPC began the construction of the 310 km long Tazhong 4-Lunnan oil and gas pipeline, with delivery capacity of 3 million tons/year of oil and 0.7 BCM/year of gas. There is also a 90 km crude pipeline with a delivery capacity of 4 million tons/year between Lunnan and Korla. However, there is no pipeline between Korla and Shanshan. Thus, currently Tarim crude oil is delivered by truck from Korla to Shanshan on the Lanzhou-Xinjiang railway. Since the beginning of 1994, Tarim has twice been forced to close down wells because of inadequate storage and transportation facilities.

- The scale of the Tarim basin's infrastructure development will be greatly affected by the size and number of oil and gas fields discovered during the second half of the 1990s. It will also be indirectly affected by Xinjiang province's two other oil-producing basins, Junggar and Turpan-Hami. The combined oil production from the Tarim, Junggar and Turpan-Hami basins could reach 20 million tons/year, which is slightly over 11% of China's total oil production. It would make only a limited contribution to boosting the province's economy and easing the oil shortage problem in adjacent provinces.
- CNPC's original idea was to pipe Tarim's oil to Luoyang in Henan province in central China, where the pipeline was to be connected with an existing one leading to the port

<sup>2</sup> May 20, 1999, [www.vitrade.com](http://www.vitrade.com), Volume 4, issue #12, "China speeding up construction of oil pipeline to Kazakhstan"

Lianyungang, a city in eastern China. Tarim oil was to be exported to earn foreign currency. Because of China's galloping oil consumption, the proposed crude oil pipeline from Tarim to Luoyang has to be re-routed via Baoji in Shannxi province on its way to southwest Sichuan. The re-routing confirms that China is giving top priority to satisfying its central region's oil demand through Tarim oil supply.

So far, the limited access in exploration cannot convince the State Planning Commission (SPC) to approve CNPC's long distance-pipeline development plan. Thus, CNPC's approach to secure Central Asian and East Siberian oil and gas resources can be readily understood.<sup>3</sup>

### *Kazakhstan*

The new oil reserves make Kazakhstan a very attractive target for investment. If the projections about the oil reserves is accurate, which is subject to a detailed research, Kazakhstan may face the dilemma of having production capabilities that far outstrip its ability to get its oil to the market. Kazakhstan is heavily dependent on primary commodity exports for generating foreign exchange and producing government revenue. Oil, among other export products, amounts to nearly 72%

of Kazakhstan's exports and perhaps as much as 50% of government revenues.<sup>4</sup>

According to official announcements of the Ministry of Economy, Kazakhstan's oil and gas production is expected to double in the coming five years. With the expected production increases in existing fields alone, oil pipeline capacities will soon be exhausted. In the short-run, though, with the current high oil prices, Kazakhstan will be able to increase its exports.

#### **Kazakhstan Oil Reserves**

Proven reserves	10-17,000 bb.
Oil Production	528,000 bpd
Oil Consumption	220,000 bpd

The table shows the production and consumption of oil in Kazakhstan in 2000. Consumption is less than half of production, which creates ample room for export possibilities<sup>5</sup>. As mentioned above, while Kazakhstan will be able to increase its exports in the short run, the oil production in the long run is deemed to be insufficient to meet not only the foreign demand but also the predicted domestic energy shortages in the future.

### *Kazakhstan and China*

Given economic growth and present population growth, China needs to import energy at an unprecedented scale in the future even though it has large energy reserves. China has realized its dependency on energy imports, especially of oil and gas, and thus its plans for energy development include also strategies for foreign and overseas involvement in addition to domestic development strategies. In 1997, CNPC invested \$4.3 billion for a 60% stake in Kazakhstan's Aktyubinsk oil company. In addition to China's aim to invest \$3.5 billion in the Kazakhstan-China pipeline, CNPC has won the exclusive right to negotiate with the Kazakh government for a contract to revitalize production of 2.7-7 million tons at the Uzensk oilfield, which is located in western Kazakhstan and is the country's second largest oil reserve after Tengiz. This decision has profound implications for China's long-distance oil pipeline development.

Kazakhstan's oil is an ideal alternative that could help implement CNPC's long-distance oil pipeline project despite Tarim's currently limited proven oil reserves. Considering the TPEDB's Tarim oil and gas production targets, a substantial oil flow from outside Tarim would be required to justify developing the long-distance pipeline. Thus, Kazakhstan' oil supply is a timely choice for CNPC to convince the SPC of the viability of its project. This oil pipeline development between Kazakhstan and Xinjiang seems also to have rekindled the CNPC's interest in importing gas through Turkmenistan.

<sup>3</sup> 1997, Keun-Wook Paik, "Tarim Basin Energy Development: Implications for Russian and Central Asian Oil and Gas Exports to China"

<sup>4</sup> 2000, Gregory Gleason, "Kazakhstan Seeks to Break Eurasian Transport Logjam"

<sup>5</sup> 2000, Stratfor.com, "A Tale of Two Republics"

For Kazakhstan, the pipeline to China will successfully accomplish the ongoing efforts to diversify its petroleum export routes and will lay the groundwork for an eventual additional large scale export pipelines. Kazakhstan has long sought to diversify its oil export routes, seeking routes north to Russia, west to Turkey, south to Iran and east to China. Despite the fact that the bulk of its exports flow north into the Russian oil pipeline network, Kazakhstan still manages to export 50,000 barrels per day to China by rail. Diversification of oil export is vital for a landlocked Kazakh economy to balance off economic dependency of Kazakhstan on Russia. If successfully implemented, the Kazakhstan-China oil route will serve as a model for future projects that will deliver Kazakh oil to western markets via other routes and countries, and thus for the diversification of Kazakhstan's petroleum export routes.

## ENVIRONMENT: WATER

The pipeline project is under doubt due to several reasons. The most important of them is that the construction of the pipeline from Aktyubinsk to Urumqi in China will result in complex problems related to the sharing of trans-border water resources between Kazakhstan and China.

### *Irtys River*

Urumqi is a city, through which the projected pipeline will be extended to Xinjiang. The pipeline will attract population to Urumqi due to newly

opened job opportunities, and thus increase the usage of water from Irtys river that flows into Kazakhstan and is used for irrigation and consumption by population in Western Kazakhstan. The demand for water will increase as the pipeline will increase the population in the Chinese region due to labor movement. It is expected that as many as 1.2 million people will settle in the region. In order to meet the water demand of newly settled population, China decided to build a dam on the Irtys river.

In addition, China proposes to build a canal on the upper part of the Irtys (called "Ertis He" in China) to bring some of the river's water to developing oil fields in the area once called Eastern or Chinese Turkestan but now known as Xinjiang UAR.

The Irtys begins in the Chinese Altay mountain range. Flowing west, it becomes the Kara-Irtys River once it crosses into Kazakhstan. Exiting Lake Zaysan it becomes simply the Irtys and travels to the northwest passing near Ust-Kamenogorsk, Semipalatinsk, and Pavlodar. Not long after, it crosses into Russia, going through the large city of Omsk on the way to join the Ob River. There are hydro-power stations near Ust-Kamenogorsk and at the northern end of Lake Zaysan. A canal built from the Irtys to the city of Karaganda in 1960s also brings water to central areas of Kazakhstan making agriculture possible there.

Beijing's oil development plans for Xinjiang stem from the fact that fields in

China's northeast are producing less oil and it is becoming more expensive to extract what there is. But the fields in the Tarim Basin in Xinjiang are virtually untouched. The Turpan field, one of three large fields, is estimated to have huge resources of oil. But the fields are in the desert and inhabited areas are few and distant. To develop the fields, people and equipment need to be brought in, and they will need water.

China actually proposes to tap two rivers, which flow into Kazakhstan --the Ili and the Irtys -- but the Ili is of much lesser consequence to Kazakhstan. China's plan is to build a 22-meter wide, 300-kilometer long canal to reroute water from the Irtys to the Tarim Basin. The Russian newspaper "Ekonomicheskii Soyuz" wrote last month that according to the plan, "in the first stage 485 million m<sup>3</sup>/year from an average volume of 9 billion m<sup>3</sup>/year in the river" will be diverted.<sup>6</sup> That is the first stage, but by the time the canal is fully operational, estimated by 2020, it will take 1.5 billion m<sup>3</sup>/year of water, or more than 10 percent of the total flow.

These developments come as Kazakhstan also plans to use more of the Irtys's water for development in its north. The country's new capital, Astana, receives some of its water from the Ishim River. Additional water once came to Astana from the Nura River via

---

<sup>6</sup> May 1999, Radio Free Europe/Radio Liberty; Bruce Pannier and Edige Magauin, "Kazakhstan: China Discusses Future Of Irtys River"

Nura-Ishim canal but that canal is so polluted by mercury that it had to be closed. A plan is being studied to take water from the Irtysh-Karaganda canal and bring it to Astana. The biggest cities near to Astana - Karaganda to the southeast and Semipalatinsk and Pavlodar to the east - get most or all their water from the Irtysh River. The large power plants and factories of this region are in the areas around those three cities. According to the government's plans, the population in this part of Kazakhstan should increase as capital is built up. Kazakh and Chinese officials met in Beijing in early May to discuss issues surrounding use of the river, but few details of the talks were made public.

Despite the "productive" Kazakh-Chinese talks on importance of the Irtysh River to Kazakhstan during the conference in Prague in May 1999 organized by the Organization for Security and Cooperation in Europe (OSCE), the Chinese had not changed their development plans. Moreover, the Kazakh side was hopeful Russia would send a delegation. Kazakh officials mentioned publicly several times that the negotiations also concerned Moscow as Russian cities such as Omsk, will also be affected. However, Russia did not send anyone to the talks.

The Chinese government is committed to accelerate the development of the economically backward region and it hopes the increasing economic development in this region will significantly improve the living standards of the local population.

Nevertheless, China's decision to use more water from the Irtysh River that flows to Kazakhstan can strongly affect the country's ecology and economics,<sup>7</sup> and thus negatively affect living conditions of the Kazakh population in western Kazakhstan.

Consequently, the problem of trans-border water sharing from the Irtysh river has become very acute for Kazakhstan. Currently, the Chinese are rapidly finishing the construction of a canal from Kara Irtysh to Karamai, which will take part of the water from the upper Irtysh and bring it to an oil field area near Urumqi. The transfer of Irtysh waters aims to provide water resources to this rapidly developing economic area with a growing oil industry and population. Increasing water consumption is also connected with the plans to extend grain and cotton production in Xinjiang.

After completion of the canal, China plans to take 485 million m<sup>3</sup>/year from the Irtysh, possibly increasing to 1.5 billion m<sup>3</sup>/year in the future. Given that the total water resources of Irtysh are nearly 9 billion m<sup>3</sup>/year, the planned water intake by China would lead to serious consequences for the economies and ecologies of not only Kazakhstan but Russia as well, since the Irtysh is the largest tributary of Russia's Ob river. In addition, the growing use of Irtysh water by China can break the ecological

balance of Zaisan Lake in Eastern Kazakhstan.

The issue of trans-border rivers is of vital importance for Kazakhstan since its solutions would determine not only Kazakhstan's authority in the international arena, but also its security. Water usage and management are highly inefficient in Central Asia, which led to the environmental catastrophe of the Aral Sea. The dependence of Kazakhstan on water resources flowing into its territory from neighboring countries is high, and thus the risk of a water crisis. The Central Asian region was hit by the worst drought in many years in the Summer of 2000. The water shortage resulted in crops failure, and yet weather specialists' forecast of another dry summer this year have come true. This shows how vulnerable Kazakhstan becomes in issues related to water resources despite the bilateral energy swap agreements it has signed with the states of Central Asia.

Central Asia has become immersed in water politics. While the states continuously squabble over water rights, their economies suffer. The decreased water flow threatens the economies and peace in the region.

The costs Kazakhstan faces annually to provide water resources for irrigation and consumption are \$36 million under the energy swap agreements with Central Asian countries, which is ten times higher than the cost of building the pipeline. Yet, the swap agreements proved to be failures, making the annual water flow into Kazakhstan inconsistent.

---

<sup>7</sup> 2000, Temirbolat Bakhytshan, "China's Decision to Use More Water from the Irtysh and Ile Rivers"

In addition to this, if the construction of the pipeline is completed, Kazakhstan will face a difficult task of providing water to its population.

Since the agricultural economy of Kazakhstan is largely dependent on irrigation, it is advisable that the Kazakh government should take into account this important factor related to the possible decrease of Irtysh river water flow, which economically and ecologically represent losses to Kazakhstan. It is hard to calculate economic losses related to the water losses, however the losses can be demonstrated as:

- Economic; agricultural fields in Kazakhstan will suffer. In addition, Kazakhstan's plans for development of the areas close to the capital Astana will be difficult to implement;
- Ecological; as the water will be used upstream, its quality will worsen once it reaches the downstream territory of Kazakhstan; and
- Security; issues related to water sharing in the region need to be resolved on a multilateral basis with the participation of international institutions and parties involved. Since Kazakhstan has not joined the international convention on trans-border rivers and lakes, it is difficult to attract third countries and international organizations to solve the problem of the Irtysh river.

Unlike oil, water is a depletable renewable resource. However, due to scarcity and shortage of this resource,

and if the sustainable usage of water is not developed, the price of the water will rise over time, as will the marginal costs. Allocation of a renewable water supply among competing users should be carried out so that 1) the allocation must strike a balance among a host of competing users, and 2) the allocation must supply as acceptable means of handling the year-to-year variability in surface water flow. With respect to the first problem, the marginal net benefit is equalized for all users. In our example, it is not only China and Kazakhstan, but also other states of Central Asia. If marginal net benefits are not equalized, it is always possible to increase net benefits by transferring water from those users with low marginal benefits to those with higher net marginal benefits. As regards the second problem - fluctuations in supply - as long as the supply level can be anticipated, the equal marginal net benefit rule still applies, but different supply levels may imply very different allocations among users. This is an important attribute, which is the problem with increased consumption of water by China, because the simple allocation rules, such as each user receiving a proportion of the available flow or high-priority users receiving a guaranteed amount (China), are not likely to be efficient.

Having no groundwater resources, Kazakhstan will have difficulties satisfying the water demands, such as irrigation and consumption, with only surface water. With high population growth that hampers already meeting

the water needs in Kazakhstan, it can be fatal for the country's economy despite the current net benefits received from the current extraction of oil to sell it to China.

## CONCLUSION

This study involves two important aspects: first, the current economic benefits from oil extraction and delivery via a Kazakhstan-China pipeline, and second, the negative effect on Kazakhstan's environment, i.e. decreased water availability. As regards the economic benefits, there are both benefits and costs related to the pipeline construction. Yet, as far as the water problem is concerned, there are only costs of additional allocation of water resources as a result of the project. More precisely, the pipeline construction, having one benefit stream, has two costs to be considered: firstly, the cost of construction of the pipeline and extracting oil, and secondly, the allocation of scarce water resources to western Kazakhstan. Given the information above, it is in the interests of Kazakhstan to reconsider the pipeline project and enter into negotiations on new terms. There might be two possible forms of negotiations:

1. Renegotiation of the entire pipeline project, where Kazakhstan will ask for compensation of losses related to building dams and canals on Irtysh river by China. In this case, Kazakhstan may impose higher oil prices for China or through investment by China into

development regions facing shortage of water;

2. The most efficient way for Kazakhstan would be to refuse to hold talks on water sharing with China on bilateral basis, which are very convenient for China and switch to talks with the participation of the international community and parties, especially Russia, which are particularly interested in the Irtysh's fate. In this case, Kazakhstan has to join the international convention on trans-border rivers to be able to involve third party countries and the international community in negotiations.

The negative effects of the pipeline project make the project rather unattractive and subject to deeper analysis over the long term costs and benefits. While it is easy to find a new export market today for oil to replace China, it has been a hard task lately for Kazakhstan to allocate enough water

resources for agricultural use and consumption. Even if Kazakhstan receives high enough revenues to buy the water today, being able to provide enough water resources in the long-run is hampered by availability of water resources regionally. Moreover, the future net benefits from oil extraction are subject to oil availability in the reserve and the costs related to extraction in the future. In addition to rising future extraction costs the price of water will be increasing as well. Hence, the revenues are unpredictable given the costs of oil sale to China and the allocation of sufficient water resources. This task is especially difficult for Kazakhstan that has no streams of water and all the rivers flow from other states. There are two ways Kazakhstan can move ahead with the implementation of the oil project with China: by allocation of sufficient water resources for meeting internal needs; or by reforming the agricultural sector, extremely wasteful throughout Central Asia, to ensure efficient water management and usage. Both strategies are difficult to pursue

due to the fact that even water-abundant states in Central Asia face shortages of water; and that agricultural reform needs to be implemented by all states of Central Asia, which is unlikely given that cotton producing agriculture provides foreign reserves to the economies of these states. In addition, Kazakhstan will need to join the international convention on trans-border rivers and lakes to be able to complete either of these goals.

\*

---

*AUTHOR BIO:*

*Lola Gulomova received her Master's degree in International Public Policy from the School of Advanced International Studies of the Johns Hopkins University, and is an associate of Cornell Caspian Consulting.*

For continuous updates and information including policy briefs, speeches, and interviews please log on to Cornell Caspian Consulting online at <http://www.cornellcaspian.com>

**Recent Caspian Briefs include:**

- No. 18, July 2001: **The Changing Faces of Terrorism within the Russian Federation**  
Tamara Makarenko
- No. 17, June 2001: **Conversations with a Mür'it: On the Creed of the Bektashi Order**  
Erik Cornell
- No. 16, May 2001: **New Directions in Caspian Politics**  
Tamara Makarenko
- No. 15, May 2001: **Iran and the Caspian Region: Domestic and international Determinants of Iranian Policy**  
Svante E. Cornell
- No. 14, April 2001: **Putin's Perestroika and the Future of Federalism in Russia: Dilemmas of State Formation**  
Ildus G. Ilishev
- No. 13, March 2001: **The Fissile Material Cut Off Treaty: A Futuristic Appraisal**  
Maria Sultan
- No. 12, February 2001: **Globalisation, Media and the Kashmir Dispute**  
Maria Sultan
- No. 11, February 2001: **Youth Values in Europe and Uzbekistan: A Comparative Analysis**  
Qodir Djuraev
- No. 10, January 2001: **The Caucasus under Renewed Russian Pressure: Realities on the Ground and Geopolitical Imperatives**  
Svante E. Cornell
- No. 9, December 2000: **The Asian Connection: The New Geopolitics of Central Eurasia**  
Svante E. Cornell and Maria Sultan
- No. 8, November 2000: **The Caucasian Conundrum and the Geopolitics of Conflict**  
Svante E. Cornell
- No. 7, October 2000: **Nuclear Neighbors Together and Apart**  
Maria Sultan

