

# Caspian Energy Transportation Routes

## Determining Main Export Pipeline

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### 要 旨

現在、世界を主に左右しているのはペルシャ湾のエネルギー供給であるが、この地方は常に不安定で、治安が悪い。ロシアの石油も、外資系企業に対するロシア政府の姿勢やその他の政治的・経済的問題のため、アクセスしにくい。したがって、安定したビジネスをするために、多くの石油会社はカスピ海に関心をもつようになった。また、このカスピ海はヨーロッパとアジアを結ぶところに位置し、中央アジアのエネルギー資源をヨーロッパに中継する場所としても重要である。

本論文では、カスピ海地域の経済発展に役立つ可能性をもつ輸出パイプラインの問題およびこの地域のいくつかの代替的なパイプラインに関する問題を論じた。すなわち、西向きルートとそれの建設や投資の問題である。さらに、カスピ海沿岸諸国の例としてロシアとイランが進めるパイプライン・プロジェクトの問題を検討した。

**Keywords:** Caspian Sea, oil and gas reserves, pipeline, interests

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## **Introduction**

As the Soviet Union collapsed in 1991, the Central Asian and Caucasian states have come forth to the world arena with their economic development problems, energy supplies and ethnic based conflicts. There are also conflicting interests of regional and global powers which heavily influence the Caspian Sea Basin's security environment over the vast oil and gas reserves.

The transport of Caspian oil and gas through the Caspian-Mediterranean or Northern (Russian) pipelines has for a long time been debated among the international oil companies as well as regional powers in the Caspian region. Western, namely US, EU and Turkish, preference has been on the side of the pipelines bypassing Russian territories because this would bring a balance of power between them and Russia in this region. Taking into consideration that today most of the Caspian resources are being transported to world markets via Russian built pipelines and territories, the Western countries have proposed to build new pipelines via Western routes for the full exploitation of the Caspian oil and gas. Despite the advantage that Russia has in this field, the Northern pipelines do not have the capacity to fully export Caspian oil and gas. Therefore, the Baku-Tbilisi-Ceyhan<sup>1</sup> major oil pipeline project has been agreed by the Caspian states and Western oil companies, which will bypass Russian territories to reach European markets.

This paper attempts to analyze the Caspian Sea export pipelines issue and debates around the alternative pipelines from the region, which could serve the quick economic development of the region. The Western routes, their construction and investment problems are the main focus of the paper. Furthermore, the Russian and Iranian preferred routes along with the pipeline projects suggested by Caspian countries will be emphasized.

## **Historical review**

Oil has been one of the strategic resources of Caspian and Central Asian region since the 19<sup>th</sup> century

when it first gained importance to shape the structure of interactions within the world community. Bordered by Iran, Azerbaijan, Russia, and the Central Asian states of Kazakhstan and Turkmenistan, the Caspian Sea has been one of the major oil producing areas since 1871.<sup>2</sup> Historical records evidence that the oil in the region has been extracted by primitive collection in springs and utilizing shallow pits even from ancient times. Oil was being used and transported through caravans mainly for cooking and medicinal purposes. This significant commerce kept going on in this way since early ages.<sup>3</sup>

It was after the arrival of Russians to the region that oil started to be drilled where petroleum traders for centuries were extracting the oil using primitive tools such as rags and buckets. The first drilled well was the huge Bibi-Eibat field, near Baku in 1871, which gave an enormous amount of oil to the Tsarist government to build its modern petroleum industry.<sup>4</sup>

At the end of the 19<sup>th</sup> century Western capital arrived in the region. Since the rich oil potential of the region was attracting important foreign companies by the late 1800s, two competing families came to dominate Baku's oil industry. Basically the Nobel brothers and the French branch of the Rothschild family were the first to arrive in the region and set up their presence. Following this, Russian empire became the world's largest oil-producing country in 1898 and continued so until 1902. It is worth to note that after these developments at the beginning of the 20<sup>th</sup> century, 50% of the world's oil was produced in the Caspian-Caucasian region.<sup>5</sup>

The region underwent a period of chaos when the Tsarist government in Russia was overthrown and seized by Bolsheviks. Western capital left the region and the energy reserves of the Caspian fell fully under Soviet rule. The Soviet government understood the importance of the energy resources of the Caspian for the newly established fragile state like the USSR. It assumed full responsibility for central planning, and determining the sites, the method of extraction and the amount of production, as well as modes of transport with the declaration of first Five year plan in 1928.<sup>6</sup>

The peak production of 1901 was surpassed by 1928, and the next year, output was increased considerably using seismic-refraction methods in the Grozny area of the North Caucasus. The oil industry stimulated Soviet growth during the 1<sup>st</sup> and 2<sup>nd</sup> Five Year Plans. Baku-Caucasus region had the biggest share in the total Soviet energy production. The region maintained its importance even during the World War II, since the Soviet war machine operated with Baku-Caucasus oil. Hitler's Germany was determined to capture the oil reserves of Baku, but the German army divisions were defeated in the snowy Caucasian mountains before reaching the target.<sup>7</sup>

North Caucasian and Volga-Ural region fields were significantly developed after the war, developments which resulted with major discoveries that later on reflected positively during the 4th, 5th, and 6th Five-Year Plans. Newly discovered areas in the Caspian accounted for most of the increase and by 1958, the region's output consisted of 28% of total Soviet production. The growth in oil production kept also its course in the following years and in 1974, Soviet oil production peaked to become the largest of any country by that time.<sup>8</sup>

After the collapse of Soviet Union oil production in the region declined drastically since the newly independent countries for the first time in their history assumed the management of oil fields and did not possess the necessary means to exploit the hydrocarbon reserves. So, control over these energy resources and export routes out of the Eurasian neighborhood became one of the vital issues in post-Cold War politics. Since the end of the Cold War, the Caucasus-Central Asian region emerged as a key geo-strategic area, in which the United States, Russia, Iran, Turkey, and many other outside countries are contending for influence and control.<sup>9</sup>

Mainly using their economic advantage the US, Japan and the EU could get involved in the region from the early years of independence of the regional countries. The US emerged as a hegemonic power after the Cold War and showed considerable interest in conflict points and their resolution, European Union countries with their respective NGO's were mostly emphasizing democratization and human rights issues in the region. However, regarding rich energy resources of the region all the above states have actively taken part in newly signed agreements of the early 90's, where US and EU companies had relatively more shares.<sup>10</sup>

Since the collapse of Soviet Union the newly independent Caspian countries, namely Azerbaijan, Kazakhstan and Turkmenistan, have been opening up their energy resources to world investment. This region and the regions adjoining is predicted in the coming century to become one of the biggest oil and gas suppliers to Europe and as well as Asia. Industry estimates have put Caspian oil reserves at up to 200 billion barrels, to be first with its potential after the Persian Gulf.<sup>11</sup> However, although there are still some uncertainties about the extent of proved and unproved energy resources, based on the current knowledge it is possible to claim that the Caspian is a world-class oil area, equivalent to North Sea reserves or according to some estimates even larger. Such reserves put the region on a par with Saudi Arabia, and it is expected that the Caspian will become the second most important source of oil for the West in the next century.<sup>12</sup> Anyway, this region will remain at the focus of big powers in the coming

future even if it turns out to have less potential reserves than predicted now.

As it is known, the Caspian Sea is landlocked and the littoral states around the Caspian Sea have to rely on the multiple transportation routes to export their rich oil resources to world markets. Since there are big powers interested in this region the transportation routes issue has become very politicized in the aftermath of the Soviet collapse. Western countries and Kremlin are trying to exert influence on the regional countries to ensure that the main exportation pipelines pass through their territories. Such pipelines would give them opportunity to strengthen their positions in one of the strategically important regions of the world. As such, the pipelines issue does not only involve economic considerations but also strategic and political priorities of the interested countries in the Caspian region.

The billion dollar agreements signed for the exploitation of the Caspian oil and gas fields did not solve the problem of getting those resources to world markets. According to the first agreements signed with littoral states of Azerbaijan and Kazakhstan the early oil was to be transported mainly through Russian territory. But the capacity of Russian pipelines were not enough to transport all of the tapped resources from the region. Also regional leaders of the littoral states did not want to export their wealth only via Russian territory since it was making them wholly dependent on the Kremlin. Western countries, especially the United States, were also pushing the Caucasian and Central Asian countries for the routes bypassing Russia. Hence, the determination of the main export pipelines from the region has become very complicated since there were involved not only littoral states but also regional and global powers as well as their future interests in the Caspian.

When international oil companies arrived in the region during the early 1990s the first challenge they faced here was the absence of infrastructure to export the oil and gas to world markets. The Caspian Basin or Baku oil fields, once used to provide half of the world's energy demand, were not developed by Soviet authorities after the World War II. The discovery of huge reserves in 1950s in western Siberia made the Caspian region the backwater of the Soviet industry. All the money and manpower were invested into the vast fields of western Siberia since it was cheaper and easier to tap Siberian oil. The Caspian region resources started to be used only for internal industry needs. The whole pipeline system of the Soviet Union was designed to channel Siberian oil to the refineries along the Volga River. From those refineries the oil was transported to European Russia and then to the markets in the West. The oil and gas from the Caspian republics of Azerbaijan Kazakhstan and Turkmenistan were put to local use and piped to Grozny refineries on the north in the Republic of

Chechnya and then distributed among the Soviet republics.<sup>13</sup>

Pipelines from the Caspian have always been a problem. The geographical location of the Sea is far away from world industrial centers. Even in 1895 when the Russian Empire opened Absheron peninsula for international oil companies the first challenge for foreign businessmen was how to get their products out of Baku to the oil markets in the West.<sup>14</sup>

The first pipeline in the region was built in 1906 and it ran from Baku to the Georgian Black Sea port of Batumi. The Nobel brothers used this pipeline to send Baku oil to Batumi and then with oil tankers to Europe through the Bosphorus. However, the operations were interrupted when the First World War and Russian revolution broke out. Later Baku-Batumi line was used in 1920s and 1930s after which fell out of use gradually. The Soviet leadership chose the Baku oil for internal use and small pipelines were built inside the country.<sup>15</sup>

### **Regional Struggle over the Pipelines**

For the newly independent Caspian governments of Azerbaijan, Kazakhstan and Turkmenistan, pipelines do not only bear economic but also political and strategic importance. The issue has the same significance for the international oil companies as well. Consequently, in this region after 1990s the pipelines issue has occupied top priority on their agendas resulting in struggle over the determination of main export routes. The international oil companies rushed to the region to get the oil contracts and the world powers have got involved in a zero-sum game over degrees of control dependency and influence in the region. This fight over the pipelines was also labeled as the 'New Great Game' similar to the one between Russian and British empires in the region during the 19<sup>th</sup> century.

The winning and losing sides of this 'New Great Game' would be decided once the main export pipelines are built and the Caspian basin energy resources are transported to world markets. Those who will ensure that the pipelines pass through their territories or along their preferred routes would probably be the influential powers in the Caspian region for the coming years. However, due to intermingled legal, political, economic and strategic concerns and issues it is very difficult to forecast who will get the biggest stake or advantage in this strategically important region of the world.

The determination of the pipeline routes is a very complicated one and depends on various factors indeed. The geographic status of major producers, geopolitical concerns of world powers, regional

security issues, financial estimates, and the existing infrastructure have slowed down the development of the Caspian oil and gas reserves.<sup>16</sup>

### The Criteria to Determine Pipelines

There are several significant criteria for the international investors and regional powers to decide on the main export pipelines. First of all for the Western countries, namely the United States, it is a priority to get energy from cheap, reliable and diversified sources with an uninterrupted flow. The world price of oil also bears importance because the international oil companies who invested billions of dollars in the Caspian oil fields want to make sure that at the end of the successful pipeline projects the cost of the pipeline projects does not exceed net returns. Because in the beginning of the pipeline projects several companies and especially, the Russian government and Russian oil companies have expressed their concerns on the high cost of the Caspian oil to be reached to Western markets through long western routes.<sup>17</sup>

The amount of oil to be carried through pipelines was another criterion for the main investors to decide on the pipelines. Especially in the Azerbaijani part of the Caspian Sea, the BP Company was very anxious that the offshore Azeri reserves were not enough to fill the main export pipeline to the Mediterranean port of Ceyhan. Though the oil contracts with Azerbaijan were signed in September 1994, the agreement on the main export pipeline could only be achieved at the end of the 90s. International investors had agreed to sign the contracts on the main export pipeline project (Baku-Tbilisi-Ceyhan) after Kazakh oil also decided to be put in this main export pipeline.<sup>18</sup>

Since the Caspian region is very vulnerable in terms of ethnic conflicts and clashes the concern over the security of the pipelines was another problematic issue for the foreign businessmen. Nowadays these conflicts have been frozen but not resolved, meaning the security of the pipelines and foreign investment is not guaranteed yet.

In order to prevent a possible energy crisis in the future the United States and other interested countries have given priority to multiple energy pipelines from the region. Such an option would guarantee an uninterrupted flow of hydrocarbon reserves from the Caspian if any of those frozen conflicts in the Caucasus erupts again. It has been Turkey's especial concern to minimize environmental hazards that might occur in the Bosphorus Straits through which oil tankers filled with Caspian oil pass.

Heavy oil tanker traffic has been a main Turkish concern which threatens Turkish Straits, where some Russian oil tankers have sunk.<sup>19</sup>

### **The Alternative Pipelines**

Initially there were many proposed oil pipeline options. However, nowadays the focus is mainly on the northern (Russia and Black Sea) and western (Caspian-Mediterranean) routes. While the southern options (Iranian route) were suspended due to political reasons and US concerns over Iranian regime, the problem facing the northern route is that oil tankers will carry the oil terminating at the Russian Black Sea ports and these must navigate the Turkish Straits. Therefore different proposals bypassing the Turkish Straits were suggested by Russian and other littoral governments. But they are still not desirable on the Turkish side and Western countries because proposed routes still pass through Russia leaving the Caspian countries under Russian influence. Hence all the proposed oil and natural gas pipelines (see the table) can be grouped as follows:<sup>20</sup>

- Baku - Novorossiysk (Russia); Tengiz (Kazakhstan) - Novorossiysk;
- Atyrau (Kazakhstan) - Samara (Russia); Baku (Azerbaijan) - Supsa (Georgia);
- Baku - Tbilisi (Georgia) - Ceyhan (Turkey); Baku - Neka (Iran);
- Neka - Rey (Iran), also oil swaps between Iran's north and south; Aktyubinsk (Kazakhstan) - Xingjiang ; Tengiz - Kharg Island (Iran); Kazakhstan - Turkmenistan - Afghanistan - Gwadar (Pakistan).

The second alternatives are:

- Burgas (Bulgaria) - Vlore (Albania);;
- Odessa (Ukraine) - Brodi (Ukraine) - Gdansk (Poland)
- Costanza (Romania) - Trieste (Italy);
- Burgas - Alexandropolis (Greece);
- Thrace - Saros Bay (Turkey);
- Black Sea shore - İzmit refinery (Turkey); or
- Samsun - Ceyhan (Turkey).



**Natural Gas Export Routes and Options in the Caspian Sea Region**

Name/Location	Route	Natural Gas Capacity	Length	Cost Estimate	Status
<b>Baku-Erzurum</b>	Baku (Azerbaijan) via Tbilisi (Georgia) to Erzurum (Turkey), linking with Turkish natural gas pipeline system	Planned 254 Bcf capacity	540 miles	\$1 billion (includes up to \$500 million to construct new Azeri section)	November 2000 inspection of existing Gazi pipeline deemed that extensive repairs were necessary, new pipeline will be necessary.
<b>"Centgas" (Central Asia Gas)</b>	Daulatabad (Turkmenistan) via Herat (Afghanistan) to Multan (Pakistan). Could extend to India.	700 Bcf/year	870 miles to Multan (additional 400 miles to India)	\$2 billion to Pakistan (additional \$500 million to India)	Memorandum of Understanding signed by Turkmenistan, Pakistan, Afghanistan, and Uzbekistan. Project stalled.
<b>Central Asia Center Pipeline</b>	Turkmenistan and Uzbekistan via Kazakhstan to Saratov (Russia), linking to Russian natural gas pipeline system	3.5 Tcf/year	Existing route	N/A	Operational. Turkmenistan is using this pipeline to export a total of 8.83 Tcf to Ukraine (via Russia) from 2002 to 2006, as well as smaller amounts to Russia.
<b>China Gas Pipeline</b>	Turkmenistan to Xinjiang (China). Could extend to Japan.	1 Tcf/year	4,161 miles; more if to Japan	\$10 billion to China; more if to Japan	Preliminary feasibility study done by ExxonMobil, Mitsubishi, and CNPC
<b>Trans-Caspian Gas Pipeline (TCGP)</b>	Turkmenbasy (Turkmenistan) via Baku and Tbilisi to Erzurum, linking with Turkish natural gas pipeline system	565 Bcf in first stage, eventually rising to 1.1 Tcf/year	1,020 miles	\$2 billion to \$3 billion	Project stalled; negotiations between Turkmenistan and Azerbaijan over pipeline volumes restarted in October 2001.
<b>Korpezhe-Kurt-Kui</b>	Korpezhe (Turkmenistan) to Kurt-Kui (Iran)	283-350 Bcf/year; expansion proposed to 459 Bcf/year by 2005	124 miles	\$190million; 2005 expansion: \$300 million to \$400 mill.	Operational since December 1997

For political reasons the southern and eastern pipeline options could not be developed significantly so far. The American administration strongly opposes the Iranian routes and the US companies' participation in southern routes is prohibited because of the Iran Libya Sanctions Act (ILSA) of 1996.

Of the eastern alternatives, the Chinese route is moving slowly because of the long distance pipeline and also the lack of a strong relationship between China and Kazakhstan. Eastward pipelines through Afghanistan to Pakistan have been obstructed due to political instability in war-torn Afghanistan. The second-tier alternatives require that the oil should be reloaded in the Black Sea ports of Bulgaria, Romania and Ukraine after a process of loading and unloading in Baku and Supsa. It is less attractive since the transportation of oil from these routes would be too costly, time-consuming and cumbersome.<sup>21</sup> Though there have been many pipeline proposals as seen above the main rivalry today is between the northern and western options. In this highly competitive environment not only are the benefits to the transit countries from the transit fees at stake but also future influence in Central Asia is the concern of world powers.

## **Determining the Main Export Pipeline**

### **I. Northern Routes**

The northern routes suit Russian interests best. Since they pass via Russia and their terminal is at Novorossiysk, a Russian seaport on the Black Sea, Russia has attempted to convince both Azerbaijan and Kazakhstan that their interests will be protected if their oil and gas pass through the northern routes. Mentioned routes are from Baku to Novorossiysk and from Tengiz oil field in western Kazakhstan to Novorossiysk. However, these routes have lost their significance due to political instability in the North Caucasus, especially Chechnya and to lesser extent Dagestan, which have threatened the security of the Baku-Dagestan-Chechnya- Novorossiysk pipeline routes. Almost 150 km of the pipeline was running through this unstable region of Dagestan and Chechnya before the second Chechen conflict erupted in the region. To strengthen her position Russia has added another pipeline bypassing Chechnya through Dagestan. But this move of Russia has not solved the security problem yet because of the penetration of the Chechen rebels into Dagestan from time to time.<sup>22</sup>

Moreover, both Baku and Astana still remain concerned about Russia's political dominance over them. Obviously, the Kremlin is trying to re-establish its pre-eminent position in the region by guaranteeing main oil and gas pipelines pass through its territory. On the other hand, the Caspian states are seeking to adjust this situation and establish good relations with the United States and other European countries. The newly independent countries of the region are concerned about their continued

excessive dependence on Russian pipeline routes because such pipelines would allow Russia to unilaterally increase transit fees and constrain exports or threaten these actions to gain economic or political concessions from them.<sup>23</sup>

However, due to its long presence in the region Russia so far is the sole power, who has achieved completion of the pipelines. That is, most of the Azeri, Kazakh or Turkmen oil and gas reserves that reach world markets today are being transported via Russian-backed pipelines. For instance, the Caspian Pipeline Consortium that has been established between the Kazakh government and international oil companies (mainly Chevron) transports its oil via Novorossiysk.<sup>24</sup>

Hydrocarbon resources are mainly centered around the huge Tengiz oil field in Kazakhstan. Formed in 1993, Tengiz is operated by TengizChevroil, a joint venture between the Kazakh government oil company and Chevron. The Tengiz field is considered as one of the largest oil fields in the world, with 6 to 9 billion barrels of reserves. It is producing 180,000 b/d (barrels a day) of oil, much of it exported through the Russian pipeline system to Novorossiysk and the rest to Baku through shipments, which then goes to Black Sea port of Supsa in Georgia. In the long term, exports from Tengiz are expected to increase to 1.3 million barrels per day by 2010. This volume was increased when the pipeline between Tengiz and Novorossiysk by the Caspian Pipeline Consortium (CPC) was completed in 2001, which also carries Turkmen oil to Novorossiysk.<sup>25</sup> The CPC line, however, due to Turkish environmental concerns, faces the problem of exiting through the Straits in Bosphorus. Because of this problem, Kazakh officials and international oil companies keep other options under consideration including exporting through the southern routes of Iran, either by pipeline or using swaps, which are already underway in smaller volumes. However, exports through Iran have been under strong US opposition which resulted in an alternative pipeline proposal. The US and Turkey have proposed to tie Tengiz oil to Baku-Tbilis-Ceyhan pipeline via the TCP (Trans-Caspian Pipeline), through an underwater route under the Caspian Sea. International oil companies operating in the region and also the Azeri and Kazakh side have agreed to this proposal since it would strengthen their position in relation to the Russian-backed CPC pipeline. Russia has gained an advantage by using the CPC as strategy to revive its influence in Kazakhstan and Turkmenistan making these countries to rely completely on Russia for the transportation of their reserves. Though it can carry only a small amount of Caspian oil (60 million tones each year), the CPC's Tengiz-Novorossiysk pipeline has been a significant gain for Russia in terms of transit fees and political leverage in Central Asia.<sup>26</sup>

The Baku-Supsa pipeline of the Azerbaijan International Operating Company (AIOC), the Baku-Novorossiysk pipeline and the recently completed Tengiz-Novorossiysk pipeline of the Caspian Pipeline Consortium (CPC) are the main routes that carry the oil to the north. On the whole, these pipelines carry approximately one million barrels a day of oil from the Caspian. However, recently there has been concern over the shortcomings of the northern alternatives. That is Russia's Black Sea port of Novorossiysk operates seasonally because of climatic conditions making shipment and unloading facilities here limited. Furthermore, the Caspian oil is not transported from Novorossiysk in its pure form but mixed with lower-quality Russian oil.<sup>27</sup>

Currently, the AIOC pipelines and the recently completed CPC pipeline carry Caspian oil to the Black Sea, and from there the oil reaches world markets through the Turkish Straits. However, Turkish officials have been saying that the Straits, particularly the Bosphorus portion of it, is already unable to handle the heavy flow of tanker traffic because of its geophysical restrictions and this traffic would increase as more Caspian oil comes on line.

## II. Western Routes

Northern routes have become downsized for the Caspian states when the strategically significant East-West corridor, i.e. the Caspian-Mediterranean Crude Oil Pipeline Project was suggested and backed by the United States and EU. The AIOC (Azerbaijan International Operating Consortium) has decided that this pipeline will be the main export pipeline and it starts from Sangachal, Baku, passes through Tbilisi and terminates in the Turkish Mediterranean port of Ceyhan.<sup>28</sup>

The United States' strategic interests overlap with those of Turkey concerning the Baku-Tbilisi-Ceyhan project. Washington began pursuing an active policy in the Caspian region from the mid-1990s. The Clinton Administration has made the East-West corridor a strategic priority for the US policy in the Caspian region. The American administration was the main initiator to the Baku-Tbilisi-Ceyhan project approved with the Ankara Agreement in 29 October 1998. This agreement was followed in November 1999, by the signing of the Istanbul Protocols on the sidelines of the Istanbul Summit of the Organization of Security and Co-operation in Europe (OSCE), in the presence of President Clinton. Transit countries of Azerbaijan, Georgia and Turkey for BTC project also signed the Istanbul Declaration for the construction of the Caspian-Mediterranean pipeline. However, that time all

signed agreements did not necessarily mean that the establishment of the Eurasian Energy Corridor will be achieved by the declared target of 2004. The passed time has shown that the construction of the BTC pipeline depends on the volume of oil, private sector financing and security guarantees for pipelines transiting the turbulent Caucasus region.<sup>29</sup>

The international oil firms that were supposed to finance BTC's construction became reluctant toward the project when it became clear that the Azeri oil would not be enough to fill the pipeline (providing the Guneshli oilfield is not developed further and no more oil comes from other Azeri oilfields that do not belong to the AIOC). This approach changed in summer 2000, when oil was discovered in the Kazakh sector of the Caspian Sea, in Kashagan, where the Offshore Kazakhstan International Oil Company (OKIOC) was conducting exploration. It was decided to tie this Kazakh oil to BTC, which will make the venture lucrative again. Hence, in November 2000, BP and other shareholders of the AIOC decided to provide support to the Baku-Tbilisi-Ceyhan project again and they started a six-month engineering study. It is planned that annually 45 million tons of oil will pass through this pipeline (25 million tons from Azerbaijan and 20 million tons from Kazakhstan).<sup>30</sup>

The construction cost of this project has been a serious matter of concern for some oil companies since it was estimated at \$2.6 billion by early AIOC reports. The 1,767 km pipeline (443 km in Azerbaijan, 248 km in Georgia and 1,076 km in Turkey) will carry the Kazakh oil, and Azeri oil from ACG (Azeri, Chirag, Guneshli) fields. Project participants are British Petroleum (30.1%), SOCAR (25%), Unocal (8.9%), Statoil (8.71%), TPAO, (6.53%), ENI (5%), Itochu (3.4%), ConocoPhillips, (2.5%), INPEX (2.5%), Total (5%) and Amerada Hess (2.36%). The BTC Company (Baku-Tbilisi-Ceyhan) was founded between the oil companies and pipeline's host countries of Azerbaijan, Georgia and Turkey on August 1, 2002 to take charge of the construction of the project. Construction of the pipeline started in April 2003 and would be completed in the second quarter of 2006. It also was agreed that the Azerbaijani part of the pipeline will be built by September 2004, the Georgian part by October 2004 and the Turkish part by the end of 2004. The beginning of the export of Azerbaijani oil from Ceyhan is scheduled for the second quarter of 2006.<sup>31</sup>

Finally, after long considerations and suspicions about the profitability of the Baku-Tbilisi-Ceyhan MEP (Main Export Pipeline), on February 3, 2004 governments behind this crude oil pipeline signed a \$2.6 billion deal in financing agreements with creditors. But total costs rose by 20 percent from initial estimates to \$3.6 billion due to interest and the expense of filling the line with oil. 30 percent of the

construction costs have been decided to be covered by the pipeline shareholders, which include the oil majors BP, ENI, Itochu, Unocal, Statoil, ConocoPhillips and Total. Shareholders and banks provide remaining loans for the pipeline, which is already half-built. BP, Statoil, Conoco and Total will lend a total of \$923 million, of which BP will put up \$566 million. Japanese JBIC will lend \$480 million, the European Bank for Reconstruction and Development and the International Financial Corporation will provide \$125 million each. A 15-member banking syndicate, led by Japan's Mizuho, Societe Generale of France, Dutch ABN Amro and U.S. Citicorp, will lend a total of \$936 million.<sup>32</sup>

In fact, a direct line from Baku to Ceyhan would be quite short via Armenia, however, the proposed line bypasses the hotspot of Nagorno-Karabakh over which Azerbaijan and Armenia have been involved in a conflict in early 1990s. This conflict between Azerbaijan and Armenia and the lack of diplomatic relations between Turkey and Armenia left Georgia as the only possible option to Western markets. As also mentioned earlier, the vulnerability of the pipelines has brought into discussion security issues related to Kurdish terrorist threat in Southeastern Turkey. However, Ankara has given a guarantee that it would cover any losses from an interruption in flow resulting from terrorist activities.<sup>33</sup>

In order to enhance and strengthen the East-West transit corridor for oil and gas from the Caspian Basin the United States also supports a Trans-Caspian Pipeline (TCP) to transport oil and gas from Turkmenistan and Kazakhstan. Such a pipeline was suggested after Turkmenistan and Turkey signed a gas supply agreement in May 1999 under which 16 billion cm<sup>3</sup>/y (cubic meters per year) of gas will be delivered to Ankara. The proposed route is planned to tie to the Baku- Erzurum gas pipeline project, which will carry Shahdeniz gas from Azerbaijan to Turkey. It will run under the Caspian and across the Caucasus to eventual terminals in Turkey.<sup>34</sup> However, economic considerations weigh heavy against the realization of the TCP under suspicion because the minimum cost for laying such a pipeline is estimated to be at least US \$2 billion. If realized, the TCP would seriously erode the Russian influence in the Caspian Basin and enhance the US position in this region.<sup>35</sup>

### **III. Eastern Routes**

China's growing energy demand has forced Beijing to look for alternative energy supply sources, too. For China, Central Asian country of Kazakhstan, which borders the Caspian Sea and possesses

huge energy resources, is an attractive source. First of all, it is comparatively easy for China to access Kazakhstan and secondly China shares a border with this country. The country also shares borders with other Central Asian countries of Kyrgyzstan and Tajikistan. In order to materialize its energy security, China signed a deal with Kazakhstan in September 1997 to build a 3,000-4,000 km long and extremely expensive pipeline (\$3.5 to 5.0 billion) from two fields in Kazakhstan, passing through Xinjiang province in Western China to the eastern coast of the country. This is said to be the largest project among the pipelines planned ever.<sup>36</sup>

Kazakhstan, which now exports 70 per cent of its oil from pipelines linked to Russia, wants to find more export markets. China, on the other hand, needs more oil to fuel its soaring economic growth and also diversify its oil imports. At present, more than 60 per cent of the China's imports come from the Middle East via the Malacca Strait. The country is also competing with Japan to persuade Russia to build a similar crude oil pipeline from East Siberia to Northeast China.<sup>37</sup>

Located in Western Kazakhstan the Tengiz and Aktyubinsk oil fields will be the main and potential suppliers to this proposed pipeline. "The two countries will first start to build a 1,200-kilometers section from Atasu in Kazakhstan, via the border town of Alashankou, to Dashanzi in China's Xinjiang Uygur Autonomous Region. The US\$3 billion pipeline will get to westwards joining the existing 450-kilometre Atyrau-Kenkiyak pipeline in Central Asian republic, once it is completed in two year's time. The three-section pipeline, with a total length of over 3,000 kilometers, would be able to deliver up to 20 million tons of Caspian Sea crude oil annually to western China. It is expected that this pipeline will meet not only the growing energy demand of China but also that of Japan, South Korea and other countries through the Chinese harbors located on the South China Sea."<sup>38</sup>

China can increase its influence in the Caspian region through this route. There is also another proposed pipeline, not started, of 6,700 km length from Turkmenistan to China that would pass through Uzbekistan, Kazakhstan and across China to the markets in the Far East. The main oil companies supporting this Turkmenistan-China pipeline are Exxon, Mitsubishi and China National Petroleum Company.<sup>39</sup>

It is also planned to build a free-trade area along the Kazakhstan border: yet another step to strengthen economic and political relations between Beijing and oil and gas-rich countries of Central Asia. "The zone will cover 200 (130 in China and 70 in Kazakhstan) hectares of land, located between the autonomous Prefecture of Yili Kazak (Xinjiang) and Alma-Ata (Kazakhstan). The free-trade zone

will have its own administration, there will be no customs charges and it will allow for the free flow of persons and goods. A railway project is also amongst the plans in order to ease the transportation here.<sup>40</sup>

The Chinese role in Central Asia can also be summarized in the words of Chinese academician Xiaojie Xu as:<sup>41</sup>

a. A front player in market penetration: China has unfolded its first phase of expansion strategy in Central Asia. Facing increasingly intensive competition, China stresses an integrated development in the pivotal region. E&P investment and pipelines are Beijing's priorities in the near future.

b. A major operator/co-operator: China would like to be major operator/co-operator in major projects (especially Exploration & Production activities, EOR projects, pipeline construction and technical services) as well as a major partner in other projects that fits its interests. By doing that, CNPC plans to be one of top 10 international oil companies in 2010. Meanwhile, strategic alliance (for example, Joint Venture between CNPC-Agip in the late 1997) is another strategy to enhance overseas penetration.

c. An important geopolitical force: When the Great Game for hegemony over the Inner Asia unfolded in the late 19th century, China was absent and weakened by internal decline as Mohan has put it once. With social-economic development in the past decades, China has transformed itself and grown as a major power in the world. As Central Asia has risen as a major area of strategic concern, it demonstrates enormous diplomatic agility in exploiting the nexuses between China and Central Asia.

#### **IV. Southeastern Route**

Pakistan, Afghanistan, Saudi Arabia Delta Oil, and the US UNOCAL Corporation favour the Southeastern route. They seek to transport oil and gas from Turkmenistan and Kazakhstan through Afghanistan to Pakistan and India. But this project was suspended in 1998 due to the unstable Taliban regime in Afghanistan. Moreover, the Al-Qaeda attack on the US embassy in Kenya resulted in the United States response by bombing terrorist camps located in Afghanistan. This forced the US UNOCAL Corporation to withdraw its \$2 billion project proposal.<sup>42</sup>



Today when the Taliban regime has already been liquidated, hopes once more emerged about the pipeline via Afghanistan to Pakistan's Arabian Sea ports and India. Such a pipeline would be very useful to both Pakistan and India for their growing energy demands. The proposed 1,400 km long pipeline route would bring growth and revive the war torn Afghan economy. According to an US Energy Department report, "Afghanistan's significance from an energy standpoint stems from its geographical position as a potential transit route for oil and natural gas exports from Central Asia to the Arabian Sea". Russia would lose its dominance over oil and gas exports from the Caspian region if Afghanistan becomes stable country and provides a better oil and gas transit route. However, after the US led war on terrorism in Afghanistan the volatile political situation in this country has not been eliminated yet. Therefore, such political atmosphere makes international investors unwilling to invest in this part of the world.<sup>43</sup>

## **V. Southern Route via Iranian territory**

The shortest, cheapest and also relatively safer route for the Caspian oil and gas is the Iranian route. Iran's geographical location, swap arrangements and low transit fees make this route very lucrative for the international oil companies and Caspian countries. Such a route also does not pose any serious environmental hazards compared to other proposed pipeline projects from the Caspian.

The factor attracting international investors to Iranian route is this country's geostrategic location. Iran is located among the Caspian region, Persian Gulf, Turkey, Afghanistan and Pakistan. So far, all the countries around Iran have been considered as potential transit countries for the Caspian oil and gas. In fact, Iranian route is much cheaper than any other routes via Iran's neighbors. Besides, Iran has offered to transport oil through swap arrangements from Turkmenistan, Kazakhstan and Azerbaijan to its northern markets. Taking into consideration that Iran has extensive export facilities in the Persian Gulf, the above Caspian countries have reacted positively to the Iranian proposal for swap arrangements. Kazakhstan and Turkmenistan have already signed and are transporting very limited amount of their hydrocarbon reserves via swap arrangements to Iranian markets.<sup>44</sup>

Furthermore, Iran has lowered the transit fees, from \$4 per barrel to \$2.40 per barrel in order to make the Iranian route attractive for international investors. However, Washington and various oil companies are opposing the Iranian route due to Iran's support for the proliferation of weapons of mass

destruction. This factor has downsized the importance of Iranian route even though alternative export routes via the Caucasus or Russia cost \$5-8 per barrel.<sup>45</sup>

Although the Iranian route is the best among the all proposed pipeline projects the US still does not endorse this route. Since the Islamic revolution in 1979 the US-Iran relations have been ruptured and its implications can be observed almost in all the fields as well as in the Caspian region. Washington does not want to see Iran as the main country transporting the Caspian oil and gas to world markets because such a route could increase Iran's strategic importance and influence here. Moreover the West and United States already depend on the unstable Persian Gulf for their energy demand and want to diversify their energy supply sources. One of the main reasons that the Western countries want to transport the Caspian oil and gas resources via Western routes is to reduce their over-dependence on the Persian Gulf.<sup>46</sup>

Therefore Washington has persistently supported East-West pipeline routes to preclude Iranian or Russian control of Caspian exports, a stance that provokes Iranian fears of encirclement and isolation. Though the US has ignored modest oil swaps between Central Asian republics and Iran it has never committed herself to the pipelines passing through Iranian territory. Despite the expectations that Washington's longstand policy against Iran will change after Khatemi and reformer politicians took the power in Iran, the US-Iran estrangement did not show any softening. Because there have not been any true reforms in this country yet due to strong clerical regime and control. The relations between the two could also have been established after Iran admitted in February 2003 that she was developing a nuclear program for the last 18 years in breach of the 1968 Nuclear Non-Proliferation Treaty. However, in the February 2004 parliamentary elections when hard-line conservatives regained the power in Iran, which means the rapprochement between the two countries does not seem to be realized in near future.<sup>47</sup>

## **Conclusion**

As discussed above, the struggle for Caspian oil, including the main export pipeline, has not yet been resolved. It would simply be unreasonable to think that Russia and its allies in the region can so easily give up their views in reaction to strategic rivalry between the opposing sides. Although the US and its allies have been successfully pursuing their policies in the Caspian region, a possibility of further policy changes in the geopolitical breakdown here is very difficult. The logic of these processes

suggests, however, that the Caspian oil pipelines issue have become very politicized and the Caspian region is on the threshold of vital historic changes.

The pipelines issue has become an intense source of competition among the Caspian Sea Basin states since the collapse of the USSR. The involvement of other regional powers such as Russia and Iran has further exacerbated the situation around the Caspian Sea. Also the growing US and European involvement in the region has limited the sphere of the influence of both Iran and Russia. The greatest interest of the US and Western countries in this Caspian lies in the free access opportunity to the strategic reserves of the region. These resources have been inaccessible for the western investors due to the Soviet rule here for long years. Though there is no USSR nowadays to obstruct western access to the Caspian, the Russian and Iranian opposition to Western countries has been considerable in getting a share of the oil contracts. Thus, the geopolitical competition, involvement of outside powers, regional instability and ethnic conflicts in the Caspian Basin have complicated the situation in the region and delayed the development of the hydrocarbon resources.

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