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Oil and Gas Potentials of Central Asian Republics and Relations with Pakistan

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Abstract

Purpose-The purpose of this paper is to explore the Oil and Gas potentials of Central Asian Republics and to look to wards new opportunities for Pakistan if relations with CARs are more developed.

Design/Methodology / Approach- Descriptive and analytical method is used based on secondary data from reports by EIA (U.S Energy Information Administration), B.P statistical review of world energy June 2013, academic papers, books and newspaper articles etc. A mathematical equation and graphic usage is carried out to illustrate the energy resources of CARs and options are considered for Pakistan to develop better ties with Central Asian Republics.

Findings-The paper provides the pen picture of energy richness of Central Asia's its future growth and prosperity which is directly linked with the development of inter-state and intra-state infrastructure like road and rail. This paper also focuses on the challenges at international and regional level and role of global powers that are creating hurdles for CARs to develop economic ties with Pakistan and other regional countries. The presence of US and NATO forces in the region and unrest in Afghanistan also has implications for trade.

Research Limitations-This article is related to an energy potential map of CARs with special emphasis on oil and natural gas resources. The factors those are affecting the Pakistan's relations with CARs are also discussed but analysis of U.S interests in Central Asia, great game and control over Eurasia, regional conflicts and political instability are not extensively discussed.

Originality/Value-This is the original work. The analysis provided in the paper is based on facts and information based on EIA and other secondary sources.

Keywords: Central Asia, Energy richness of CARs, Pakistan ties with Central Asia, Economic ties, Great Game.

Introduction

Central Asian Republics came into existence in 1991 after the disintegration of U.S.S.R. The Central Asia consists of Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan with a total population of over 64.7 million and

spread over an area of about four million square kilometers (Source: National Geographic concise Atlas of the world 2012). The centrality of this region is its role in ancient trans-Asian commerce via the Silk Road. Now it has again tendency to become transport hub or meeting place of East and West due to its adjoining borders with South Asia, West Asia, China and Russia. This region is of great geo-strategic and politico-economic importance, therefore attracting the attention of extra regional and global powers like China and U.S.A.

Central Asian Republics are endowed with tremendous hydrocarbons reserves and blessed with enormous bounties of nature. Energy richness of CARs has significant attraction for regional players like Russia, China, Iran, Afghanistan, Pakistan, India and Turkey and remote players USA and EU. The share of Central Asia in the world energy markets is substantial. Central Asia and the Caucasus are considered by many to be the next oil and gas frontiers. The region's sizable energy reserves, combined with its unique political status emerging from the break-up of the former Soviet Union, have catapulted these countries into the limelight of Western media and policy debate. Heightened awareness has spurred greater public and private Western involvement in the region's development.

Pakistan and Central Asia have fraternal and cordial relations due to common culture and religion. The geo strategic, geo political location of Pakistan and urge to provide the landlocked but energy rich Central Asia the shortest access route through Gwadar Port is significant. Since after the collapse of Soviet Union and emergence of CARs on world map have gained great importance in the foreign policy of Pakistan. Pakistan and Central Asia both have ambitious plan to embark on energy, trade, transportation and economic relations but progress has been hampered due to unrest in Afghanistan and ongoing war against terrorism and many external and internal challenges. Extremisms and poor law and order situation in tribal agencies, FATA, Karachi, and Baluchistan are major setbacks for trade and bringing of gas and oil pipelines from CARs to Pakistan.

Pakistani port Gwadar is located on Gulf of Oman very close to Persian Gulf on the East. It is near to Iran almost 75 km and from Karachi it is about 460 km away. Strait of Hormuz is very close to Gwadar and 13 million bb/d of oil trade daily is carried out through it. Gwadar is being developed by China which will connect Kasghar part of Western China to Indian Ocean. Gwadar port is strategically located between oil rich but landlocked Central Asia and oil rich Middle East. Almost world's 40% oil trade is daily carried out from this Gulf. Pakistan is a natural energy and trade route for Central Asia. With the development of Gwadar port and linkages of road and rail routes Pakistan can serve as the hub of energy and trade of the region. Presently, Pakistan is facing acute shortage of energy and according to United States Institute of Peace, this energy crisis cannot be resolved domestically bur greater regional cooperation is required at SAARC and ECO level to solve it.

Objectives

The objectives of this study are:

1. To investigate and analyze energy potential of Central Asian countries and examine their current ranking in oil production and gas production.
2. To highlight the insurmountable obstacles faced by Central Asian states regarding investment framework of international oil companies.
3. To enumerate the facts on the present relations of Central Asian states with Pakistan.
4. To identify the implications and hurdles for CARs relations with Pakistan.

Significance

1. Central Asian states are energy rich but land locked and they want to become a transit corridor for growing trade flow between Europe and China, South and South East Asia.
2. CARs need investment, development of long-term infrastructure extending loans and transit trade route to be prospering nations, despite irritants and challenges.
3. These irritants and challenges would be highlighted mapping and predicting the future of energy exploration of Central Asian States.
4. Pakistan and Central Asian relations would be explored in detail with likely benefits for both ends would be calculated.
5. In the changing paradigm of Pakistan's Foreign Policy towards China to link Kashghar and Gawadar with road and rail, the new options for Pakistan's linkage of Tajikistan (Central Asia) through wakhan corridor with the same trade route would be provided. Pakistan can be a shortest trade route for Central Asia and Gawadar port can be a future Hong Kong of Pakistan.

Hypothesis

The Central Asian states have endured economic hardships and social dislocation because they have been governed by autocratic regimes for a long time. The Central Asian prosperity is directly linked with peace and stability in the region, foreign direct investment in the hydrocarbons exploration and development of trade with its neighboring states especially with Pakistan and to have an access to sea port.

Literature Review

Talwani 1998 states that Kazakhstan is an inventor around the Central Asian nations in the measure of confirmed stores and the latent for new discoveries. It has 10 to 22 billion barrels of established crude stores and 53 to 83 trillion cubic feet of gas. Kazakhstan's region is the major around the Central Asia nations and

holds four varied geographical bowls. Those bowls remain to a great extent unexplored in spite of the fact that present investigation action is high. Turkmenistan has substantial gas saves (95 to 155 trillion Cubic feet of gas). An expansive region of Turkmenistan remains to be uncharted. It is truly believable that critical findings will made coastal and seaward in the part of the South Caspian bowl that has a place with Turkmenistan. Uzbekistan does not have a lot of oil however; it grips a lot of gas (70 to 105 trillion Cubic feet). It additionally has a significant region that has not been decently investigated for oil and gas. Pivotal Asian saves state to more or less 2.7% of the planet downright demonstrated oil holds and 7% of the planet gas reserves.

Siraj (2007) concluded in "Oil and Gas Pipeline Politics in Central Asia", it is advent that the great vicissitudes in geopolitical condition and appearance of the new self-governing states in Central Asia and in Caspian region have strong-minded new correlation of interests. A very important out-come of the fall of USSR was the start of a penetrating political and commercial competition for huge oil and gas assets of the newly independent states of Central Asia. These energy resources particularly oil and gas reserves now have become the bone of contention in the region. These energy policies closely connected with the struggle of regional and global powers to establish their supremacy.

Kavalski (2010) about Gwadar port importance says that Pakistan understands more menacing motives than simple intelligence gathering, reproachful the Indians through its legation in Kandahar and Jalalabad of fostering an insurgency inside Pakistan province Baluchistan. Pakistan takes it serious because the Chinese built port at Gwadar stands at the southern boundary of the province. The Port is vital to Pakistan's plans to create a new international route for sea traffic that could serve China, Afghanistan and Central Asia. Significant but under-appreciated element of China's policies in Central Asia has been its considerable assistance to local governments to build major rail, transportation, telecommunications and other forms of infrastructure throughout Central Asia and tie them to Chinese depots. The same holds true for major ports in the Indian Ocean such as Gwadar in Pakistan that can then tag along with these land based systems through equivalent investments in Pakistan.

Asian Development Bank (2010) expounds that Central Asian countries are vigorously developing its energy and export capabilities. Central Asian states have plentiful energy resources. The major challenge is getting them out and exports them. Central Asian oil and gas pipelines were mostly constructed before the breakdown of Soviet Union, but these were built only for regional use. Only Kazakhstan has the substructure to sell its oil internationally. Another reason is that oil can be sent anywhere in the world through pipelines, ship and truck. Oil is a true global product. Gas can only be carried via pipeline nets but has less value of export as compared to oil.

Asif (2011) asserts that lack of a common border with any Central Asian state is one of the main impairments to accessing the region. Tajikistan, which has

borders with Afghanistan and China, is the most strategically located country from Pakistan's position. Wakhan strip (sixteen kilometers narrow wide) an area in far north-eastern Afghanistan that connects Afghanistan and China, could be the most expedient land link between Pakistan and Tajikistan. However, the security situation in Afghanistan has been the main barrier in trade through this station as well as chase of economic interests between Pakistan and Central Asia. Pakistan has long depicted itself as a natural trade route for Central Asian Republics to reach world markets by availing transportation facilities and admittance to Pakistani seaports. Several agreements have been signed to develop the communication links, including road and rail links. However, lawlessness and unpredictability along all these routes have proven to be a major hurdle in realizing the potential for economic cooperation. Changes in the regional subtleties after the collapse of the Soviet Union, and specifically after 9/11, have permitted Pakistan to cultivate relations with the CARs. Pakistan's policy makers now have to formulate a comprehensive policy on the Central Asian Republics in order to turn constraints into chances. Pakistan must develop good diplomatic ties with these states as well as develop economic ties with them by easing them with regard to trade and pipeline routes. This can only be done if Pakistan improves its economic, security and political conditions.

Hussain (2012) states China is heavily reliant on oil from the Gulf to fuel its spending economy and production. At present, the oil it obtains passes through a very long route. It twitches in the Strait of Malacca from where it spreads China's east coast and is elated overland to western China. This transportation is very costly. Gwadar port delivers a cheaper and dumpier route. The development of the port is a cause of anxieties for many countries in the region, particularly India. The port and a naval base at such a significant strategic location augment the importance of Pakistan. India is already trying to outpouring its influence in the Arabian Sea and does not want any competitor. New Delhi is persistent hard to increase its influence in Afghanistan and the rest of Central Asia, but once the port is developed, all these states will be reliant on Pakistan and will no longer remain under Indian effect. The closer Pakistani-Chinese strategic company is already seen by India and the US as a danger to their interests in the region. The US is increasing its inspiration in the Asia-Pacific region, especially in the Strait of Malacca, and is authorizing India to stand against China. The giant has concluded many defense and strategic contracts with countries in the region. This is seen by defense forecasters as an attempt to contain China and block its mobility in the Southeast Asian region.

Research Questions

1. What is the current ranking and share of Central Asian states in world's oil and gas production?
2. What sort of insurmountable financial and technical obstacles Central Asian states are facing in terms of hydrocarbons exploration?

3. What is the present status of Pakistan's relations with Central Asian states?
4. Can improvement in Pakistan relations with Central Asian states have likely benefits for both?

Oil and Gas Potentials of Central Asian Republics

The Central Asia consists of Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan. These states are blessed with enormous bounties of nature but landlocked. The tremendous resources and energy richness of central Asia also attracts the attention of regional and global powers like China, Russia and USA. The limitations of this study are that focus will only be on the Central Asian states those have abundant oil and gas reserves, which are Kazakhstan Turkmenistan and Uzbekistan. The bifurcation of every state in separate cannot be carried due to lengthy scope of work.

As per estimation of the CIA world fact book 2013 the Kazakhstan proved crude oil reserves on 1st January 2013 were 30 billion bbl. and was ranked on 11 with the country comparison to the rest of the world. The crude oil production in 2012 was 1.606 million bbl./day with the country's standing on 18 as total production shared with comparison to the world. As far crude oil exports of Kazakhstan were concerned in 2012, these were 1.406 million bbl./day with world ranking on 12. Natural gas proved reserves on 1st January 2013 were 2.407 trillion cubic meters with 14th position in world. Natural gas production ceiling was 20.2 Billion cubic meters with ranking of 31 in comparison to the world. Natural gas exports in 2011 were estimated at 9.7 billion cubic meters and ranked on 25 with the rest of the world.

First oil well was found in Atyrau province of Kazakhstan in 1899. Formally Kazakhstan is producing oil since 1911 and was considered as second largest country in oil production among the former U.S.S.R after Russia. Oil export capacity of a country is measured in terms of its production growth. Although Kazakhstan is producing oil since 1911 but could not boost its production till pre soviet independence. After independence Kazakhstan significantly increased its oil production with the help of international oil companies. The biggest oil fields of Kazakhstan are Karachaganak Kashagan, Aktobe, Mangistau, Uzen and Gaint Tengiz which are located on west of Kazakhstan and are onshore oil fields. New technologies were emerged for the mining of petroleum industry by the new Ministry of oil and gas with collaboration of Ministry of industry in 2010. KMG is a Kazakhstan's national oil and gas Company which was established in 2002 and playing a significant role in the oil and gas development sector. Kaz Munay Gaz's oil company president elaborates major problem with the Kazakhstan export of oil is Russian control of pipeline network. The second hurdle in Kazakhstan's export of oil is limited export infrastructure. Kazakhstan would like CPC to expand its capacity of export. Geological surveys show that due to lack of modern technology and equipment, considerable oil and gas reserves of Kazakhstan remains to be

undeveloped for exploration. Economic and political factors are also bottlenecks for exploration process.

After the record production of 139.5 million barrels of oil in 2009, Kaz Munai Gas also joined the Karachaganak field venture in official capacity in 2012. For the development of phase three of Karachaganak the Government of Kazakhstan is struggling to revise the agreements with foreign energy enterprises to cope with the budgetary crisis. The project would be frozen if any agreement was not finalized said by the Kazakhstan oil and gas Minister Mr. Sauat Mynbayev. The Karachaganak field venture is utilizing the knowledge and expertise of BG group 29.25% shares, Kaz Munai Gas 10%, LUKOIL 13.5%, Eni 29.25% and Chevron 18%. At the end of 2012 the production of Karachaganak field was 139.5 million barrels of oil.

Figure 0.1 Karachaganak Oil Field

At present international oil companies like China National Petroleum Corporation. CNPC, Chevron, ExxonMobil, Shell, Total, Eni, Lukoil, Conoco Phillips, and Petro China are operating in the Kazakhstan oil and gas sector. Chevron Oil Company is operating in Kazakhstan for the last four decades and has huge investment. Export routes are very few as compared with the Kazakhstan's oil and gas reserves and production. Gas fields like Tengiz, Uritau and Zhanazhol have not even access to the sufficient capacity export pipelines. Kazakhstan produced much of the natural gas is consumed domestically. Due to the patchy system of energy infrastructure the southern Kazakhstan imports gas from Uzbekistan. Amangeldy gas is field located on southern part of Kazakhstan started its production in 2003. Further development of this field will help Kazakhstan to cease the import of gas from Uzbekistan.

Supergiant Tengiz field was also discovered in 1979. It is a largest source of oil and substantial source of gas production. Production started in 1993 with joint venture of Chevron Tengizchevroil (TCO) consortium and Tengizneftegaz production association. Tngiz oil field is located in Northwestern of Kazakhstan and is sixth largest oil field of the world. The size of the Tengiz reservoir is 21 km long and 19 km wide. The all transportation of Tengiz oil field is carried out through Atyrau situated in the North of Tengiz about 350 km away from Tengiz. For the production purposes from Tengiz oil field there is a 40 years joint venture agreement of Chevron having 50% of shares, Kazakhstan Petroleum with 20%, Exxon Mobil 25% and LUKOIL with 5% production shares working under the umbrella of Tengizchevroil Consortium. A 1505 km long CPC was constructed with US 2.7 billion investment and with maximum capacity of 1.5 million barrels per day oil exports from Tengiz oil field to the Novorossiysk Russian port of Black sea in 2001. The oil extracted from Tengiz oil field contains 17% of sulfur. In 2007 TCO was fined a sum of $ 609 million for the mishandling of sulfur as environmental violations. TCO started to produce 285,000 barrels of oil per day which has almost reached up to 5,00,000 barrels of oil per day at the end of 2013 after the major expansion work of Tengiz field.

Figure1.2 Tengiz oil field

Some smaller oil fields like Mangistau field which produced 121,000bbl/d and jointly operated by CNPC and KMG. Ozen oil field is operating since 1961 and owned by KMG, located on south western Kazakhstan. EIA estimation shows that in the first eight months of 2013 it produced 104,000bbl/d oil. Another largest oil field of Kazakhstan is Kashagan oil field which is considered as 5th largest oil field of the world and biggest oil field outside Middle East, located on northern part. 13 Billion barrels of oil are proved reserves of Kashagan oil field in 2012. This field is operated and developed by NCOC (North Caspian operating company consortium). This consortium contains ExxonMobil, Shell, Total, Eni and KMG having 16.8% of shares each. Kashagan area includes Kairan, Kalamkas,

Kashagan, Kashagan South west and Aktoty fields. Reservoirs of Kashagan oil field are located 13,000 feet below the Seabed with pressure level of 770 psi. Conventional production technologies cannot be used due to cold climate and shallow water.

Kashagan oil field was discovered in 2000, located on the Northern Caspian Sea region. It's an off shore oil field of Kazakhstan. Its estimated oil reserves are about 13 billion barrels. It is the world's largest oil field discovery during the last 30 years with the record investment and expensive energy project of the world with worth US $ 116 billion. The commercial production of oil from Kashagan oil field was started in 2013. Kashagan oil field project has become the most challenging project of the world due to territorial disputes, high levels of hydrogen sulfide and shallow water. The main oil companies indulge in the exploration work of the field are, Royal Dutch shell, Total, Eni, BP Statoil, Mobil, and BG group, working under Kazakhstan Caspishelf. In 2001 Eni became the operator of the Kashagan oil field project which was renamed as Agip KCO (Agip Kazakhstan North Caspian Operating Company NV). In 2007 the parliament of Kazakhstan approved a law making the Government empowered to cancel the contract of foreign oil companies if they violate the national interests of the country. Kaz Munay Gas state owned company authorities and Agip KCO with a joint venture under NCPSA (North Caspian Purchase and Sales Agreement) transferred into North Caspian Operating Company BV (NCOC). Oil production was started in 2013 and oil companies Conocophillips and Exxonmobil with the help of Kazakhstan Government estimates that the oil production in 2014 from Kashagan oil field would be 8 million tones.

Figure 0.3 Kashagan oil field

BP statistical review of world energy of June 2013 shows that Kazakhstan has 30 thousand million barrels of proved oil reserves which are almost 1.8 % of total world proved oil reserves. At the end of 2012 the oil production of Kazakhstan was 1728 bbl/d which was 2.0% share of the total world oil production. The proved reserves of natural gas of Kazakhstan were 45.7 trillion cubic feet with 0.7% of world proved natural gas reserves. The production of natural gas of

Kazakhstan was 19.7 billion cubic meters with the 0.6% share of world's total gas production. Kazakhstan exports of oil were 14million bbl/d. The infrastructure of exports is via Russia to the Black Sea, via Azerbaijan and Turkey to the Mediterranean, through rail to Batumi and by pipeline to China. Kazakhstan is reducing its dependency on Russian infrastructure of exports by building pipelines to China by utilizing Trans Caspian tankers and rail transportation. Kazakhstan and Iran are cooperating in oil swaps shipment through Persian Gulf and to the Iranian port of Neka. Kazakhstan's pipelines system is 3400 miles long which runs under Kaz Munay Gaz and Kaztrans oil. Kazakhstan's extensive rail network has the export capacity of 340,000 bbl/d. Tengizchevroil use the largest rail network for transportation. Kazakhstan's internal KCTS (Kazakhstan Caspian Transportation System) is being developed for exports of oil to international markets. Kazakhstan is developing Aktau, Kuryk and Bautino ports for the large cargoes shipment. Gazprom Company is interested to buy the shares of Kaz Trans Gaz and Kaz Munay Gaz state owned companies of Kazakhstan for the expansion and modernization of gas pipeline and oil pipeline systems.

Turkmenistan is an important country of CARs having enormous proved reserves which are almost 17.5 trillion cubic meters of natural gas. The country's oil reserves are substantially smaller, estimated to 0.6 thousand million barrels. The ranking of the country in reserves of the natural gas is 4th, behind Russia, Iran and Qatar. The CIA world fact book statistics shows that country's comparison with the rest of world was fourth in proved reserves of natural gas but, exports ranking to the world was 10th with estimation of 41.1 billion cubic meters, due to lack of sufficient pipeline infrastructure. Oil reserves on First January 2013 were 600 million bbl and was ranked on 46th position, while oil production was 244,100bbl/d with country comparison was 36 to the world. The crude oil exports were estimated 67,000bbl/d with 44 ranking. The country's landlocked nature is a major hurdle for the export of natural gas in the potential global market. Turkmenistan domestic oil pipeline network is very small in capacity. Turkmenneft is Oil Company and Turkmengaz is a gas company run under the state ownership.

CNPC China National Petroleum Corporations is considered as the most successful foreign investor in the hydrocarbons of Turkmenistan. Central Asia–China gas pipeline was started in 2009, which carry Turkmenistan and other Central Asian gas to Shanghai and Hong Kong. The cost of this project was $ 8 billion on initial stages which increased to $ 10 billion. China has direct access to major gas fields of Turkmenistan. Other foreign companies which are investing in the hydrocarbons sectors of Turkmenistan are PETRONAS of Malaysia, Dragon oil of Dubai and Eni of Italy. The onshore and offshore production of the country comes through Nebil Dag field, Dragon oil's offshore and Eni's onshore. Biggest oil refineries of the country are Turkmenbashi and Seidi with 237,000 bbl/d capacity. Most of gas fields are located in South Murgab basin and Amu Darya

basin. The largest fields of the country are Daultabad, Galkynysh and Malai, majority of the country's production comes through these fields.

As per BP Statistical Review of world energy issued in June 2013 shows that Turkmenistan became the leading exporter of gas from CARs and Caspian Sea region in 2012 was approximately 1.5 trillion cubic feet. The percentage of this exported gas was 5.2% to China, Iran 22%, and Russia 24% and 2% to other countries. Turkmenistan Government started a 10 year development plan in 1993 to explore hydrocarbons and to became the second Kuwait but failed due to restrictions for foreign companies regarding ownership shares.

Turkmenistan's most of the major gas pipelines infrastructure used for exports is through Russia, but two small gas pipelines are connected with Iran which are being used for swap deals. Most of the oil and gas fields are located in south Caspian basin. This is a disputed territory, therefore these fields are undeveloped. Garashyzlyk onshore is located on the western part of Kazakhstan. This area exports half of its production. Turkmenistan is considered as the second largest of the former Soviet states of gas export. The operating natural gas fields are located on the southeast of Kazakhstan. For the upstream of oil sector Turkmenistan is attracting the foreign investment with the collaboration of GK (Turkmennebit state oil company) with PSAs (Production sharing agreements). These PSAs have been signed with PETRONAS of Malaysia, Dragon oil of United Arab Emirates and Burren energy of Italy. Other oil companies engaged in Turkmenistan are ConocoPhillips of USA, Mitro International of Austria, Wintershall of Germany, Maersk oil of Denmark, ONGC (Oil and Natural Gas Corporation) of India, Zarit consortium of Russia, Lukoil of Russia, British Petroleum (BP) of UK, Chevron of USA and Buried Hill energy of Cyprus. With the involvement of afore mentioned oil companies the foreign direct investment in the hydrocarbons has significantly increased. President of Turkmenistan, Mr. Berdymuhammedov has signed agreement with CNPC of China for the development of Bagtyyarlyk. Russian Gazprom has announced to develop the transportation infrastructure for the gas fields development of the country.

Turkmenistan major energy source is gas not oil. Oil production is very low and has poor quality as well. Turkmenneft with the collaboration of Turkmennebitgazurlask has developed a program for the oil and gas industry of Turkmenistan planning the future prospectus of 2030. GK Turkmengaz reports shows that in the 1990s the most exports of natural gas of Turkmenistan went to Ukraine. Due to gas debt issue in 1994 exports were ceased and production was reduced. Now production of natural gas is again recovering. Turkmenistan has the tendency to export its natural gas to all direction: European Union to far west, in the South to Iran, in the east to china and Pakistan, in the southeast to India, in the northwest to Ukraine and Russia. Turkmenistan Government has developed another 2020 oil and gas industry development plan. By 2020 the estimation of gas production would be 240 billion cubic meters. Turkmenistan is also determined to increase its gas exports, from 30% to 50% by 2015.

CNPC, Lukoil and Gazpom are major companies with heavy investment in Uzbekistan's oil and gas sectors. There are three oil refineries in Uzbekistan located in Bukhara, Alty Arik and Fergana with 224,000 bbl./d capacity, but refineries are working below the capacity due to low oil production.

The CIA world fact book statistics shows that Uzbekistan has 594 million bbl of proved reserves of oil with the world ranking of 48. The oil production of Uzbekistan was 102,600bbl/day and country comparison to the rest of work was 49 on 2012. As far natural gas reserves of the country are concerned on 1st January 2013 estimation of 1.841 trillion cubic meter of gas and ranked on 20th position, while the estimation for natural gas production was 62.9 billion cubic meters and country comparison to the world was 14.

The Uzbekistan government has now realized the importance of energy sector for boosting the national economy. In 2005 Government increased taxes on oil and gas 12.3% to 32% and 18.5% to 64% respectively for the collection of revenue. This attempt of Government has damped the foreign investor interests. NKHK Uzbeneftegaz was established in 1998.

The eight firms were involved in it for various works like extraction, construction work, and distribution of oil products, pipeline operation, crude oil refinery, equipment, prospecting, Trade and services. In 2007 Uzbekneftegaz tried to raise the export volume of gas to13 billion cubic meters which would be 16 billion cubic meters till the end of 2014. Gazprom has invested in the newly developed gas field located in Ustyurt plateau, which will increase the export of natural gas potential to 17 billion cubic meters per year.

According to BP Statistical review of June 2013, 0.6 thousand million barrels are proved oil reserves of the country and 68 thousand barrels daily oil production. Natural gas reserves of the Uzbekistan are 1.1 Trillion cubic meters and production is 56.9 billion cubic meters with 1.7% share in the world gas production.

As per estimation issued by BP world energy 2013, the proved oil reserves of Central Asian Republic are 1.8% of the world. The CARs share in the total world oil production is 2.4 % at the end of 2012. The proved gas reserves of CARs were 10.6% of the world and their share in the total gas production at the start of 2013 was 4.2%. The detail is provided with the tables and graphs given below.

Table 0-1Central Asian Republics Proven Oil reserves

Country	At end 2002 Thousand million barrels	At end 2011 Thousand million barrels	At end 2012 Thousand million barrels
Kazakhstan	5.4	30	30
Turkmenistan	0.5	0.6	0.6
Uzbekistan	0.6	0.6	0.6
Total	6.5	31.2	31.2

Source: BP Statistical Review of World Energy June 2013

Table 1.1 is about proven oil reserves of Central Asian Republics from the year 2002 to year 2012. During the year 2002 the Statistics shows that Kazakhstan has 5.4 thousand million barrels/d of proved oil reserves, Turkmenistan 0.5 and Uzbekistan 0.6million barrels/d. There was significant increase in the proved oil reserves of Kazakhstan and reached on 30 thousand million barrels /d of oil, While Turkmenistan and Uzbekistan proven oil reserves remained almost same in the year 2002 and end of year 2012.

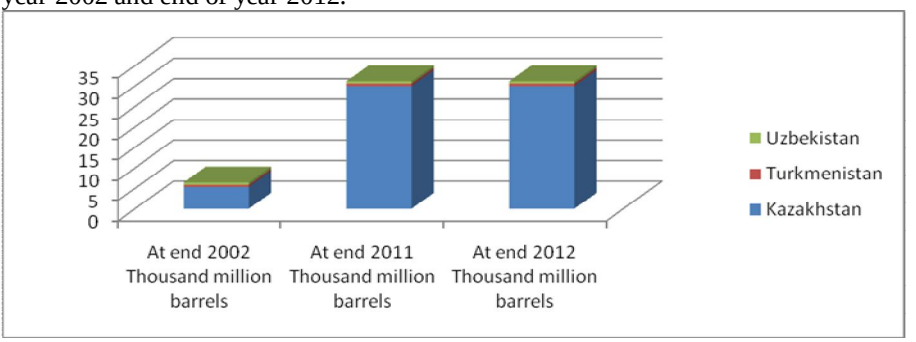

Figure 0.4 Central Asian Republics Proven Oil reserves

Figure 1.4 provides the graphic representation of proven oil reserves of Central Asian Republics from the year 2002 to end of 2012. These States includes Uzbekistan, Turkmenistan and Kazakhstan.

Table 0-2 Central Asian Republics Oil Production at end of 2012

Country	At end 2002 Thousand barrels Daily	At end 2007 Thousand barrels Daily	At end 2011 Thousand barrels Daily	At end 2012 Thousand barrels Daily
Kazakhstan	1021	1453	1758	1728
Turkmenistan	183	199	217	222
Uzbekistan	153	104	77	68
Total	1357	1756	2052	2018

Source: BP Statistical Review of World Energy June 2013

Table 1.2 provides the pen picture about the oil production of Central Asian Republics from the years 2002, 2007, 2011, 2012, which were 1357 thousand barrels daily, 1756 thousand barrels daily, 2052 thousand barrels daily and 2018 thousand barrels daily respectively. At the end of year 2012 Kazakhstan was the leader in oil production among Central Asian Republics with 1728 thousand barrels of daily production.

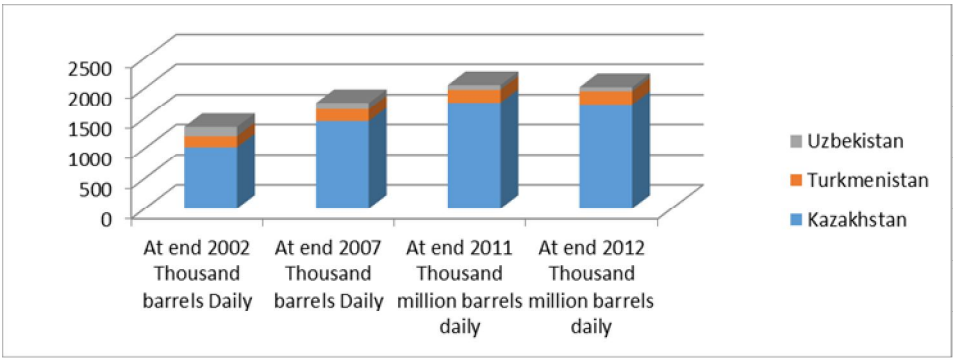

Figure 0.5 Central Asian Republics Oil Production at end of 2012

Figure 1.5 shows graphic representation of four various years of Central Asian Republics for oil production.

Table 0-3 Central Asian Republics Proven Gas Reserves

Country	At end 2002 Trillion Cubic meters	At end 2011 Trillion Cubic meters	At end 2012 Trillion Cubic meters
Kazakhstan	1.3	1.3	1.3
Turkmenistan	2.3	17.5	17.5
Uzbekistan	1.2	1.1	1.1
Total	4.8	19.9	19.9

Source: BP Statistical Review of World Energy June 2013

Table 1.3 provides information about the proven gas reserves of Central Asian republic from the year 2002 to the end of 2012. Turkmenistan is a leading country as far as gas proved reserves are concerned during all the years. The total proven reserves of gas of Central Asian Republics were 4.8 trillion cubic meters in the year 2002 and 19.9 trillion cubic meters at the end of 2012.

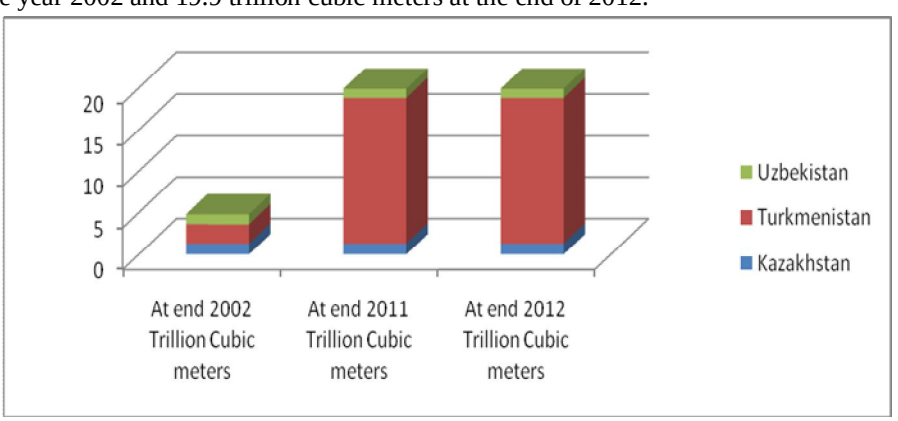

Figure 0.6 Central Asian Republics Proven Gas Reserves

Figure 1.6 shows the three different years representation of proven gas reserves of Central Asian Republics.

Table 0-4 Central Asian Republics Gas Production

Country	At end 2002 Billion Cubic meters	At end 2007 Billion Cubic meters	At end 2011 Billion Cubic meters	At end 2012 Billion Cubic meters
Kazakhstan	9.1	16.7	19.3	19.7
Turkmenistan	48.4	65.4	59.5	64.4
Uzbekistan	51.9	59.1	57	56.9
Total	109.4	141.2	135.8	141

Source: BP Statistical Review of World Energy June 2013

Table 1.4 is about the gas production of CARs for four different years. The total gas production of CARs was 109.4 trillion cubic meters in year 2002, 141.2 Trillion cubic meters in 2007, 135.8 trillion cubic meters in 2011 and 141 trillion cubic meters at the end of 2012. Turkmenistan's gas production was 64.4 trillion cubic meter and leading gas production country among CARs.

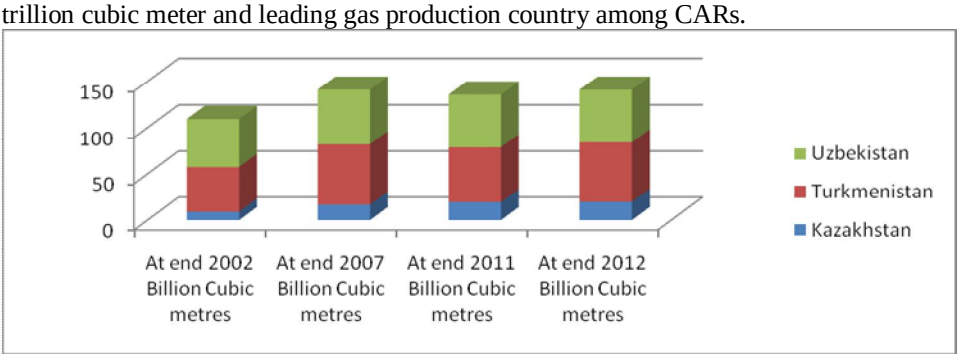

Figure 0.7 Central Asian Republics Gas Production at end of 2012

Figure 1.7 shows the gas production of CARs for the years 2002, 2007, 2011 and 2012.

The Central Asian State's oil and gas sectors have considerably influenced by price and investment factors. CARs need foreign investments and new technology from outside the region to develop the hydrocarbons endowments. China and Russia have significant influence on CARs oil and gas sector decisions. Kazakhstan, Turkmenistan and Uzbekistan's key oil and gas firms are Government controlled monopolies; they need to take the efficient decisions to improve the production and export situations of oil and gas of the region. Despite different national interests all the International companies engaged in the region and Government controlled companies should cooperate and work with joint venture to develop commercial relations for exploration and export infrastructure according to the entire oil and gas potential of the region.

Pakistan's Energy Relations with CARs

Presently the whole world is facing the energy crisis. The persistent demand for energy and lust for capturing the energy resources of world has put the human race

on the stake. All under development nations are acquiring energy to meet necessities and to boost their economies, while developed nations are getting energy to rule the world. This unseen hunger and thirst for energy has made the image of this universe clumsy one. There is no doubt about that an abundant energy is the life blood for economies of modern civilizations. No nation can prosper unless she has sufficient energy either in the shape of nuclear oil, coal, gas, and biomass and either in shape of hydroelectricity.

The central Asian region has enormous hydrocarbons resources while Pakistan is an energy deficit country. The geo strategic location of Pakistan enables it to not only exploit these natural resources but could also provide energy corridor for export of oil and gas. Western international oil company's consortium has also shifted their focus from Persian Gulf to Central Asian and Caspian region for oil and gas resources.

TAPI gas pipeline project also known as Trans Afghanistan Pakistan and India is a proposed gas pipeline project expected to be develop and funded by Asian Development Bank. The estimated cost of the project is $ 7.6 billion. The transportation of the gas from Turkmenistan would be carried out through Afghanistan to Pakistan and India. Afghanistan will receive the 8% revenue of the TAPI. Initial MOU was signed between Pakistan and Turkmenistan Government in 1995. The new deal was signed in 2002. In 2005 ADB submitted the final version of feasibility. US strongly supported this project because this project will export Central Asian Republics' energy without depending on the Russian routes. In 2008 all countries involved in the project have signed a framework agreement of TAPI. The proposed gas pipeline will be 1735 kilometers long, which will run from Herat to Kandahar and then from Kandahar to Quetta and Multan, from Multan to Fazilka of India. Afghanistan has not signed GSPA (Gas Sales and Purchase Agreement) so far because presently they want to buy 1.5 billion cubic meters of gas instead of 5.11 billion cubic meters of gas. Afghanistan seeks long term cooperation with Turkmenistan and has signed another separate MOU for cooperation with Turkmenistan in the natural gas import. During the visit of Turkmenistan's President to Islamabad in 2011, Chairman Turkmen Gas with MD ISGS jointly declared to sign GSPA with certain approvals from quarter's concern.

A MOU was signed in May 1997 among two oil companies Sandi Delta Oil and UNOCAL of Turkmenistan for the construction of a pipeline to carry oil from Turkmenistan to Pakistan through Afghanistan. This project consists of Central Asian oil Pipeline CAOP and Trans Afghan gas pipeline TAGP. This project could not be materialized due to unrest in Afghanistan and UNCOCAL finally withdrew from the project.

A MOU for CASA 1000 power export project has been signed in 2007 at Kabul and in 2008 at Islamabad, for the export of this surplus electricity power. Kyrgyzstan, Pakistan, Tajikistan and Afghanistan are involved in the project for electricity trade through CASAREM (Central Asia South Asia Regional Electricity Market). Under the agreement of CASA -1000 during the months of May to

September the surplus hydropower from Kyrgyzstan through Tajikistan to Afghanistan 300 MW and Pakistan 1000 MW transmission line for supply of electricity would be constructed in 56 months. The project is expected to complete at the end of 2017.

CASA - 1000 transmission line project is based on existing electricity capabilities of Kyrgyzstan and Tajikistan which will reach Peshawar through Afghanistan. Due to Rogun hydropower plant project of Tajikistan there is a confrontation between Uzbekistan and Tajikistan. The coast of the CASA 1000 power project is estimated to US $970 million. Afghanistan will share US $ 300, million, Tajikistan US $270, million, Pakistan and Kyrgyzstan will contribute US $200 each for the project. The construction detail of the CASA-1000 project will be as a 500 KV transmission line of 450 Km long will be constructed between Datka of Kyrgyzstan to Khodzhent of Tajikistan. Another 500 KV HVDC transmission line of 750 km long, 117 km in Tajikistan, 526km in Afghanistan and 71 km in Pakistan will be constructed from Sangtuda of Tajikistan through Kabul to Peshawar. World Bank and Islamic development bank both are agreed to finance the Pakistani share of US$ 200 million for the project. Russia is also interested to finance the project. The other interested financers of the project are, ADB, USAID and IFC.

The IGC inter-Governmental council has been established at Kabul. The fourth meeting of IGC was held at Islamabad on 16-17 September, 2013 on the agenda to accelerate the CASA - 1000 project ICB (International Competitive Bidding) was also signed by four countries of CASA - 1000 project during the IGC meeting.

Conclusions and Recommendations

The present study has clearly shown a fair picture of Energy potential of Central Asian Republics and their relations with Pakistan. The study consists of two parts, first part is about energy mapping of Central Asia and second part is about its all sort of relations with Pakistan including energy.

As far as oil and gas potential of CARs are concerned only Kazakhstan, Turkmenistan and Uzbekistan have abundant and significant amount of fossil fuels and gas resources, therefore scope of work is focused to only those states. The comparison of Central Asia with Iraq, Kuwait, Middle East and OPEC shows that potential of energy resources of Central Asia is much smaller even with the peak production. The production level of OPEC is expected to 45 million bbl/d of oil in 2015 and production level of Central Asia is expected to be 4million bbl/d. The proven oil reserves of Central Asia at the end of 2012 were 31.2 thousand million barrels whereas its production of oil was only 1357 thousand barrels daily. Kazakhstan was leader in oil production among the Central Asian Republics with 1728 thousand barrels of oil daily. The proven gas reserves of Central Asia at the end of 2012 were 19.9 trillion cubic meters and Turkmenistan was leading country with proven reserves. The production of gas of Central Asian Countries was 141

billion cubic meters at the end of 2012 and only Turkmenistan's gas production during this period was 64.4 billion cubic meters. About oil and gas conclusion of Central Asian countries it is stated that the whole region is producing 2.4% oil of the world while its proven capacity is 4% and gas production of the region is 4.2% and capacity of production of gas is about 10%.

The both oil, gas and electricity production of Central Asia is not equal to its potential capacity. Many hydrocarbons experts have believe that even potential capacity of both energy sources of CARs is not actually determined due to territorial disputes and climatic variations. The region has more potential than proven earlier. The insurmountable obstacles faced by the region for the exploration of hydrocarbons and electricity production are manifold in nature.

Firstly the region is landlocked and not easily accessible by energy exploration companies to the world energy markets. Due to its accessibility factor many investors are reluctant to invest in energy sector.

Second the continued Russian influence and control over the majority of oil wells and pipelines routes of Central Asian energy is a big question mark for western oil companies, EU companies and USA companies. Nevertheless China and India both have their huge investments in the hydrocarbons sector of Central Asia to cope with their own growing energy needs. The US and NATO forces presence in the region have many implications for regional players like Russia, China, Iran, Afghanistan, Pakistan, India and Turkey. The US interests in the region are for Security, Energy and Democracy of Central Asia. The lawmakers and policymakers of United States have suggested the think tanks dealing with Central Asia to further develop and expand security relation with Central Asia, to support, increase and diversify oil and gas transit route to lessen the Russian influence, to encourage legislations reforms, modern institutionalization, promotion of good governance, to adopt nuanced approach and set their national priorities for security threats, global war on terrorism and energy exploration and their exports.

Third, the major impediments for oil companies investments and less development of hydrocarbons and electricity production are territorial disputes among CIS states, non-cooperative and unfriendly investment environment, excessive government intervention, insufficient legislative framework for investment, corruption at government and court level, inactive property protection rights, lack of infrastructure for exports and trading of energy, M & R work of old infrastructure of oil, gas, and replacement of obsolete power transmission equipment and lines, weak corporate governance, water disputes of states, Government controlled monopolies on oil, gas and electricity sector, no incentive for private partnerships etc.

The possible solutions of energy exploration, investment in energy sector of CARs and increase in the capacity building are peace, stability, good governance, economic cooperation at ECO, SCO level, transparency, attractions and incentives for investors, legislative reforms for the protection of investor's interests,

resolution of the territorial disputes of states on water and transportation, development of infrastructure like road ,rail and pipelines and political will to remove the bottlenecks.

As for as the Pakistan relations with Central Asia are concerned there are several dimensions but the main emphasis remained on the current outlook of the CARs vis-a-vis Pakistan coupled with Pakistani initiatives and responses. It has also studied the opportunities; and obstacles faced by Pakistan in pursuance of her strategic, political and economic goals towards the CARs.

The major impediments in better relations of Pakistan and CARs are lack of common border for better accessibility of the region, unrest in Afghanistan and global war against terrorism. Wakhan corridor is a 16 km narrowest point on the North eastern side of Afghanistan which can connect Pakistan with Tajikistan of Central Asian region but the security situation of Afghanistan and tribal agencies of Pakistan is a principal barrier to pursuit trade relation as well as the energy relations between Central Asia and Pakistan. Due to the geo strategic and geo political importance of Pakistan, Central Asia cannot ignore Pakistan. Central Asia has acquired great importance in the eyes of international and regional players in the context of US led war on terrorism. The security situation of Afghanistan is of immense significance for Pakistan relations with CARs.

The role of China in the region is a sign of relief for Pakistan. Chinese are developing an economic belt along the ancient Silk Road with Central Asia. China is also developing Gwadar port of Pakistan. Present Pakistani government is developing a Pakistan-China economic corridor through Khanjrab pass from Kashgar to Gwadar via 2700 km of road and rail linkages. During a visit to China Prime Minister Nawaz Sharif has urged to develop the Gwadar port like Singapore and Dubai with the help of China. This economic corridor will not only connect China to Gwadar but also serve as the trade and energy corridor for Central Asia. Present Government is pursuing for 4Es; which are Energy, Economy, Education, and fighting extremism. Pakistani port Gwadar is located on Gulf of Oman very close to Persian Gulf on the East it is near to Iran almost 75 km and from Karachi it is about 460 km away. Strait of Hormuz is very close to Gwadar and 13 million bb/d of oil trade daily is carried out through it. Gwadar is being developed by China which will connect Kasghar part of Western China to Indian Ocean. Gwadar is strategically located between oil rich but landlocked Central Asia and oil rich Middle East. Almost world's 40% oil trade is daily carried out from Gulf. Pakistan is an energy and trade route for Central Asia. With the development of Gwadar and linkages of road and rail routes Pakistan can serve as the hub of energy and trade of the region.

The port of Chahbahar of Iran is being developed by India and it can be a possible secure route for CARs to reach the Indian Ocean. Central Asia now has two options Chah bhar and Gwadar. NATO forces are leaving Afghanistan till the end of 2016. The election process in Afghanistan has recently been completed and Ashraf Ghani has become the president of Afghanistan and in India Mr. Maudi has taken over as the Prime Minister of India. Pakistan is still busy with talks and

operation in tribal areas of Pakistan with Taliban groups. Pakistan must rethink its foreign policy and should play its cards very successfully after the withdrawal of USA from the region for the peace in the region to secure its trade and energy interests with Central Asia. Pakistan has always portrayed itself as natural trade route for Central Asia.

The coming 4 to 5 years are very much crucial for the South ,West and Central Asia if peace and stability in the region is maintained and Gwader Port is developed Pakistan can become a real trade and energy corridor for Central Asia and the rest of the region; if Central Asian states intends to access Middle East Countries the shortest route is through Pakistan; if India wants to access Central Asia the shortest route is through Pakistan; if Iran and Afghanistan wants to access India the shortest route is Pakistan; if China wants to trade with Middle Eastern countries the shortest route is through Pakistan. Thus the dreams of Prime Minister of Pakistan Mian Muhammad Nawaz Sharif can become true to serve as economic corridor for the region.

References

Books

Abazov, R. (2008). *The Palgrave concise historical Atlas of central Asia*. Hampshire: Palgrave Macmillan.

Bank, A. D. (2010). *Central Asia Atlas of natural resources*. Manila: Asian Development Bank Campbell, I. (2013). *India's role and interests in Central Asia*. London: Saferworld

Cohen, A. (2006). *Kazakhstan: Energy Cooperation with Russia - Oil,Gas and beyond*. London: GMB Publishing Ltd.

Dani, A. H. (1993). *New light on Central Asia*. Lahore: Sange-e- Meel Publications.

M., B. R., Kasting, N., & Cordesman, A. H. (2013). *US and Iranian Strategic Competition:The Impact of Afghanistan, Pakistan, India, and Central Asia*. Washington D.C: Anthony H. Cordesman Arleigh A. Burke Chair in Strategy.

Oliphant, C. (2013). *Russia's role and interests in Central Asia*. London: Saferworld.

Rashid, A. (2001). *Taliban, Islam, oil and the new great game in central Asia*. London: I.B Tauris Publishers.

Strokov, V. P. a. A. (2008). *Russian Oil and Gas Projects and Investments in Central Asia*. UK Defence Academy: Advanced Research and Assessment Group.

Talwani, M. (1998). *Unlocking the Assets: Energy and the future of central Asia and the Caucasus: Geology and Petroleum potentialof central Asia*. Houston: Rice University.

Valiyev, B. (2008). *Oil Flows and Export Capacity in the Caspian and Black Sea Regions*. Brussels: Energy Charter Secretariat.

Vucetic, V., & ., V. K. (2005). *Development of Electricity Trade in Central Asia – South Asia Region*. Washington, D.C: World Bank.

Conferences

Alty-Aryk Oil-Processing Works: A Centenary From the Date of Foundation. (2006). Paper presented at the 10th Anniversary International Oil & Gas Conference, Tashkent.

Cherdabaev. (2004). *Energy Information Administration(EIA), Kazakhstan*. Paper presented at the Caspian & Black Sea Oil & Gas Conference Kazakhstan.

Energy Sector Coordinating Committee Status Report. (2006). Paper presented at the Fifth Ministerial Conference on Central Asia Regional Economic Cooperation.

Kalyuzhny, V. (2004). Paper presented at the Caspian & Black Sea Oil & Gas Conference 2004 , Istanbul, 26-27 February 2004, Istanbul.

Kiinov, L. (2006). *The Main Development Direction of Oil Industry.* Paper presented at the 13th International Caspian Oil & Gas Conference, Baku.

Mynbayev, S. (2008). *Deepening Energy Cooperation with the Caspian and Black Sea Regions.* Paper presented at the Vilnius Energy Security Conference, Vilnius.

Nouraiz Shakoor Khan (Minister of Petroleum and Natural Resources, P. (2004). *Overview of Export Options from Central Asia and the Caspian Region to the Middle East and Asia.* Paper presented at the Caspian & Black Sea Oil & Gas Conference Istanbul.

Journal Articles

Abrams, M. A., & Narimanov, A. A. (1997). Geochemical evaluation of hydrocarbons and their potential sources in thewestern South Caspian depression,Republic of Azerbaijan. *Petrol. Geol*, *14*(March), 451-468.

Anwar, Z. (2011). Development of Infrastructural linkages between Pakistan and Central Asia. *Research journal of South Asian Studies, 26*(1), 103-115.

Asif, F. (2011). Pakistan's ties with central Asian States irritants and challenges. *PIPS Research Journal of Conflict and peace studies, 4*(1).

Babak, V. (2006). The Oil and Gas Sector in Kazakhstan. *Central Asia and the Caucasus, 40*, 41-55.

Fujimori, S. (2005). Ukrainian Gas Traders, Domestic Clans and Russian Factors: A Test Case for Meso-Mega Area Dynamics. *121*, 113-136.

Guseynov, R. (2004). Russian Energy Companies in Central Asia. *Asia and the Caucasus, 29*, 60-69.

Kenisarin, M. (2004). The Energy Sector of Uzbekistan: Present State and Problems. *Central Asia and the Caucasus 26*, 124-137.

Khan, A. H. (2002). Oil and Security in Central Asia and the Caspian region. *Central Asian Journal 50*, 17-19.

Niyazi, A. (2003). Tajikistan: Its Hydropower Resources and The Problems of Their Use. *Central Asia and the Caucasus 4*, 109-117.

Petrov, G. (2004). Tajikistan's Energy Projects: Past, Present, and Future. *Central Asia and the Caucasus, 5*, 93-103.

Preiger, D., Maliarchuk, I., & Grinkevich, a. T. (2004). Ukraine, Russia, and the Central Asian States: Cooperation Problems in the Gas Sector. *Central Asia and the Caucasus, 25* 101-110.

Rakhmatulina, G. (2007). Some Solutions to the Central Asian Region's Energy Cooperation Problems. *Central Asia and the Caucasus, 46*, 7-17.

Roy, M. S. (2012). Iran: India's Gateway to Central Asia. *Strategic Analysis, 36*(6), 957-975.

Sutcliffe, C. (2002). The Baku-Tbilisi-Ceyhan Project: Bringing Caspian Oil to the World's Markets. *BlackSea Trend Review 1*(1), 77-81.

Thesis

Javed, M. (2002). *The Emergence of Central Asian Republics and their impacts on South and West Asia (Turkey, Iran, Pakistan).* P.hD, University of Karachi, Karachi.

Marium, A. (2010). *The Gwadar Port: Challenges and opportunities* M.Phil, Islamic International University, Islamabad.

Rehman, M. S. u. (1999). *Pakistan and Central Asia Relations 1995-97.* M.Phil, Quaid-i-Azam university, Islamabad.

Siraj, U. (2010). *Oil ang Gas Pipelines Politics in Central Asia.* M.Phil, Islamic International University, Islamabad.

Websites

Aktsionernoye Obshchestvo Natsional'naya Kompaniya KazMunayGaz,i.e, National Stock Company KazMunayGaz. (2010) Retrieved 09.02.2014, from www.kmg.kz

Babak. (2008). Oil and Gas Sector, 50 Retrieved 10.12.2013, from www.kaztransgas.kz

B.P Statistical review of World Energy (2013), from www.bp.com

The Central Web Portal of the Shanghai Cooperation Organization, SCO University project. (2011) Retrieved 17.05.2014, from http://infoshos.ru/en/?idn=8338

CIA World Factbook. (2014) Retrieved 17.01.2014, from https://www.cia.gov/library/publications/the-world-factbook/

Energy Information Administration (EIA). (2014) Retrieved 12.03.2014, from www.eia.doe gov

Energy Information Administration (EIA), Kazakhstan. (2014), from www.eia.doe gov

Russia's National Security Strategy to 2020 (2009) Retrieved 25.05.2014, from www.css.ethz.ch/publications/pdfs/RAD-62.pdf

Saferworld interviews with regional and security analysts. (2013), from www.saferworld.org.uk/.../indias-role-and-interests-in-central-asia.pdf

University of Nebraska-Lincoln, Confucius Institutes Around the Globe. (2014) Retrieved 29.03.2014, from http://confuciusinstitute.unl.edu/institutes.shtml

Xinhua, X. (2013). Proposal of a 'new Silk Road' with Central Asia Retrieved 8.09.2013, from www.chinadaily.com.cn/sunday/2013-09/08/content_16952160.htm

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