GEOPOLITICS OF ENERGY IN CASPIAN SEA REGION, 1994-2014

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SHWETA KUMARI

CENTRE FOR RUSSIAN AND CENTRAL ASIAN STUDIES

SCHOOL OF INTERNATIONAL STUDIES

JAWAHARLAL NEHRU UNIVERSITY

NEW DELHI -110067

2019

JAWAHARLAL NEHRU UNIVERSITY

Centre for Russian and Central Asian Studies
School of International Studies
New Delhi-110067

Tel.: (O) +91-11-2670 4365
Fax: (+91) -11-2674 1586, 2586
Email: crcasjnu@gmail.com

Date: 22-07-19

DECLARATION

I declare that the thesis entitled "**Geopolitics of Energy in Caspian Sea Region, 1994-2014**" submitted by me for the award of the degree of **Doctor of Philosophy** of Jawaharlal Nehru University is my own work. The thesis has not been submitted for any other degree of this University or any other university.

Shweta Kumari

Shweta Kumari

CERTIFICATE

We recommend that the Thesis be placed before the examiners for evaluation

Prof. Phool Badan 22/07/19

Chairperson, CRCAS

अध्यक्ष/Chairperson
रूसी और मध्य एशियाई अध्ययन केन्द्र
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अंतर्राष्ट्रीय अध्ययन संस्थान
School of International Studies
जवाहरलाल नेहरू विश्वविद्यालय
Jawaharlal Nehru University
नई दिल्ली/New Delhi - 110 067

Prof. Phool Badan 22/07/19

Supervisor

PROFESSOR
Centre for Russian & Central Asian Studies
School of International Studies
Jawaharlal Nehru University
New Delhi - 110 067

Dedicated

to

my loving Ammaji

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Contents

LIST OF GRAPH

LIST OF MAPS

LIST OF PIE-CHART

LIST OF TABLE

ABBREVIATIONS

ACG	:	Azeri Chirag Guneshli Oil Field
AGCF	:	Astrakhansky Gas Condensate Field
Agip KCO	:	Agip Kazakhstan North Caspian Operating Company
ASSR	:	Azerbaijan Soviet Socialist Republic
Bcm	:	Billion Cubic Meters (gas)
BP	:	British Petroleum
Bpd	:	Barrels Per Day (oil)
BRI	:	Belt and Road Initiative
BTC	:	Baku–Tbilisi–Ceyhan Oil Pipeline
BTE	:	Baku–Tbilisi–Erzurum Gas Pipeline
CAC	:	Central Asia-Centre Gas Pipeline
CIS	:	Commonwealth of Independent States
CNG	:	Compressed Natural Gas
CNOOC	:	China National Offshore Oil Corporation
CNPC	:	Chinese National Petroleum Company
CPC	:	Caspian Pipeline Consortium
CS	:	Compressor Station
EIA	:	Energy Information Administration
ENI	:	Ente Nazionale Idrocarburi
EU	:	European Union
FDI	:	Foreign Direct Investment
GDP	:	Gross Domestic Product
ICJ	:	International Court of Justice
IEA	:	International Energy Agency
IOC	:	International Oil Company
JSC	:	Joint Stock Company
KCTS	:	Kazakhstan–Caspian Transportation System
KEPCO	:	Khazae Exploration and Production Company
Km	:	Kilometre

KMG	:	KazMunai Gas
KPO	:	Karachaganak Petroleum Operating
M^3	:	Metre Cubic
M^2	:	Metre square
MCM	:	Thousand Cubic Metres
MEP	:	Main Export Pipeline
NCOC	:	North Caspian Operating Company
NIOC	:	National Iranian Oil Company
NIS	:	Newly Independent State
NOC	:	National Oil Company
OKIOC	:	Offshore Kazakhstan International Operating Company
PSA	:	Production Sharing Agreement
RSFSR	:	Russian Socialist Federal Soviet Republic
SCO	:	Shanghai Co-operation Organization
SCP	:	South Caucasus Pipeline
SCPX	:	South Caucasus Pipeline Extension
SCR	:	State Committee on Resources
TANAP	:	Trans Anatolia Pipeline
TAP	:	Trans Adriatic Pipeline
TAPI	:	Turkmenistan-Afghanistan-Pakistan-India
TCF	:	Trillion Cubic Feet
TCGP	:	Trans-Caspian Gas Pipeline
TCM	:	Trillion Cubic Meters (Gas)
TCO	:	Tengizchevroil
TCOP	:	Trans-Caspian Oil Transport System
TPA	:	Total Petroleum Hydrocarbons
USGS	:	United States Geological Survey
USSR	:	Union of the Soviet Socialist Republics
USTDA	:	United State Trade and Development Agency
WREP	:	Western Route Export Pipeline

CHAPTER 1

INTRODUCTION: THEORITICAL FRAMEWORK AND REVIEW OF LITERATURE

The word Geopolitics was coined by the Swedish political scientist Rudolf J. Kjellen in 1899. Geopolitics is the branch of political geography that has gained ample attention worldwide because of its ambiguous nature. Geopolitics as a subject has gained a great deal of appreciation and extensive studies are done by the academicians and scholars. But geopolitics has far more broader implication than just treating it as a subject. Because of its contentious nature of geopolitics it has gained worldwide recognition from the foreign policy makers and diplomats. Friedrich Ratzel, Halford John Mackinder, Nicholas John Spykman had given their theories on geopolitics. Halford Mackinder presented the theory of "Heartland" in which he described the importance of land and Sea power. He explained that the Eurasia is rich in resources and referred it to as pivot area and then after several years he expanded the pivot to the southern part of the Eurasian continent which he termed as heartland. The heartland term itself symbolizes the significance of the Eurasian region. The region has always acquired a great role in the world geopolitics. American political scientist Nicholas John Spykman gave Rimland theory to depict the maritime fringe of a country or continent and it's significant to have control over the Sea and maritime power.

Cahnman (1943) argues that the perception and the concept of geopolitics are different from each other. But the main components in the study of geopolitics are the study of the geography, history and politics of the region. Geopolitics can be described as the amalgamation of both history and geography. This combination influence that geographic environment exerts over the actions of humankind is thought to represent a natural rather than a historic relationship and hence will not cease to operate at some moment of expected historic redemption, yet, it expresses itself more cautiously because it takes geographic environment only as a framework and not as a determinant. Historic forces operating within a geographic framework are supposed to condition political action which, in turn, is to determine the course of economic development. According to Saul Cohen "geopolitics is the interaction between geographical settings and perspectives, and political processes. The settings

are composed of geographic features and patterns and multi layered regions that they form. The political processes include forces that operate at the international level and those on the domestic scene that influence international behavior"

The concept of Geopolitics is changing from century to century. New terms in the field of geopolitics is evolving like "Critical Geopolitics", "Metageopolitics", and "Geostrategy". Another great contribution was made by German geographer Friedrich Ratzel. He used the term Lebensraum with respect to the organic state. He was influenced by the works of Charles Robert Darwin and Ernest Heinrich Philipp August Haeckel. He draws upon the works of Herbert Spencer and Albert Schaffle to define his own use of the organismic analogy in his monumental book named "Politische Geographie" in 1897. This book is consider as the first book on modern political geography" Because of his contribution in the field of political geography he is known as founder of political geography and the "father of modern political geography" (Adhikari 1997: 57). The contribution of Ratzel is immense in the development of geopolitics and geography.

Another contribution in the field of geopolitics is made by Johan Rudolf Kjellen. He was a Swedish political scientist. He was the first to coin the term geopolitics. Kjellen was immensely influenced by Friedrich Ratzel, Karl Ritter, Alexander von Humboldt and Friedrich Ratzel. He combined the Ratzelian concept of the Organic State with the moral, intellectual capacities and the will of the state and its people. He has tried to study the cultural-political aspect of a region. He considers "The State as a Living Form", published in 1917 and foundations for a system of Politics in 1920. The term, geopolitics, is used to describe the matters which are related to territory of the state, its form and shape and physical and natural resources (Hagan 1942: 479-480).

One of the great contributions to the global strategic model and geopolitics is from Alfred Thayar Mahan. He hailed from United States. He was Navy flag Officer, historian and geostrategist. He influenced the geostrategic policies of America. Mahan is considered pioneer American strategist of the nineteenth century. In his book "The Influence of Sea Power upon History", 1660–1783 (1890) he elaborated that the states with greater naval power will have greater geopolitical importance and will lead to the supremacy of that respective state. He has also authored some book namely, "The Influence of Sea Power upon the French Revolution and Europe", 1793-1832 (1892),

"The Life of Nelson" (1897), "The Interest of America in Sea Power; and The Problem of Asia (1900)". Mahan emphasized on the importance of Sea trade. He states how The Great Britain, as a great Sea power has overpowered its neighbors and other European Countries. He further states that United States can also follow the footsteps of Great Britain and expand its naval power and trade. He emphasizes on the Sea power through which a state could expand its financial horizon and expands its market to the other imperial countries (Adhikari 1997: 58).

Heartland Theory

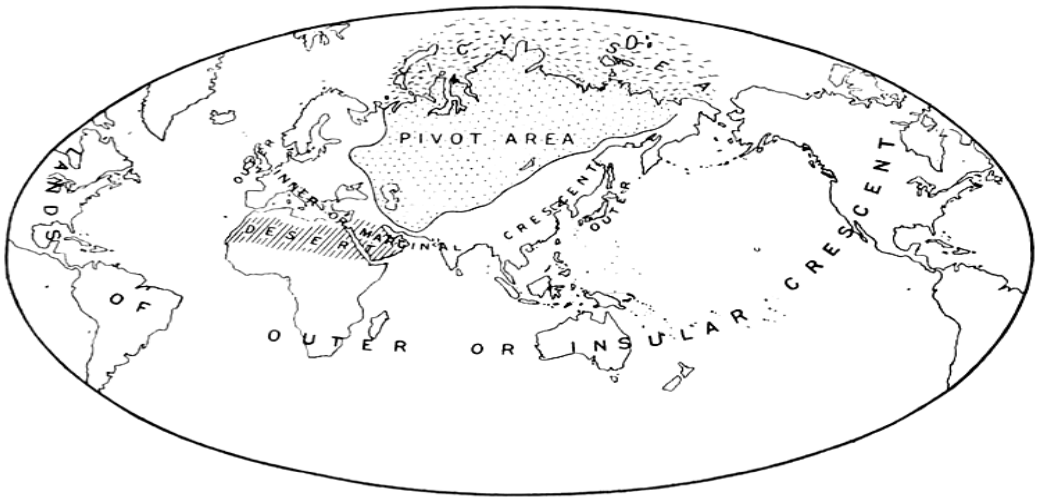
There are several thinkers who have contributed to the field of geopolitics. One of the main contributors to the field of geopolitics is Halford John Mackinder. His immense contribution led the development of geopolitics and his work influenced several scholars, academicians and diplomats. He was an English geographer, academician and geostrategist. In his article "The geographical pivot of History" Mackinder has described how the advancing of 20th century leads to the new discoveries, conquest and exploration. In this article he describes that how the physical features of the world becomes lucrative for the empire, state or country. He tries to give emphasis on the general physical control and especially geographical. Mackinder presented his paper "The Geographical Pivot of History" and in this paper he explained the 'geographical causation in world history' in which he stated "that man and nature both are very important and initiates, but nature controls in large measure". He also looks onto the vegetation, forest cover, climate and Rainfall. Mackinder also emphasizes the ease of travelling on the land as compared to sea route which involves several procedures. He divided the world into three parts namely the pivot area which is totally covered by landmass and is continental, Outer crescent that is covered fully by Oceans, and Inner Crescent which consists of both landmass that is continents and Oceans. The pivot area consists of Euro-Asia and mainly the state of Russia is the pivot area. He further insisted that it does not have a Sea connection and is safe like a fort. The pivot area has mountains surrounding on the three sides and the northern side is covered by the ice of Arctic (Mackinder 1904: 432-433).

The pivot area is endangered by the land forces which can come from the south western direction, through East Europe mainly between Ural Mountains and the Caspian Sea that is covered by steppe grasslands. The outer crescent consists of the

countries like The Great Britain, Australia, South Africa, Canada, Japan and United States of America. Mackinder calls the region "as ring of outer and insular bases for Sea-power and commerce". He stated that it is inaccessible to the land power of Euro-Asia. The inner crescent is comprised of the countries like Germany, Australia, Turkey, India and China. He has described that Western Europe has now conquering the Oceanic areas of Asia and Russia at the same time is emerging and the new century has shown the seeds of expansion of Europe and Russia. Mackinder also states that United States of America have become a power of west and it is indirectly balancing the power of pivot area in the east. He demarcated the Atlantic Ocean and stated that it acts as a divide (Mackinder 1942: 201).

The power that could control and manage the heartland is bound to emerge as the strongest state in the inner or marginal crescent. Hence, it follows logically that "any political power that could effectively occupy and control heartland could by definition achieve a dominant world position" (Adhikari 1997: 102). "According to Mackinder, the plane-tary surface should be regarded as divided into islands. Asia, Africa, and Europe are named as the World Island and the other continents are assumed as islands and satellites of this great land mass and within the World Island is the Heartland" (Hagan 1942: 480).

Map 1.1: Pivot Area



Source: Megoran, N. and Sharapova, S. (2005), "Mackinder's Heartland": A Help or Hindrance in Understanding Central Asia's International Relations?" [Online: web] Accessed 10 January 2017, URL: http://www.ca-c-org/journal/2005/journal-eng/cac-04/02.megeng.shtml.

According to map 1.1, the natural Seats of power in which the world has been divided into the Pivot Area, Inner or marginal Crescent and land of Outer or Insular Crescent. Mackinder has divided the world into three parts in which importance is given to the Pivot area and many Eurasian Countries come under the pivot area. Inner or marginal Crescent has surrounded the pivot area including some countries of Asia, Europe and Africa. The third is the Outer or Insular Crescent which consists of some southern countries of Asia, North America, South America, Antarctica etc.

"In 1919 Mackinder published a small book entitled "Democratic Ideals and Reality" with newer ideas. In this book he replaces the word pivot with heartland and extends the area of the heartland. Mackinder glorifies the strategic situation of the heartland relation to the contemporary power potentials. It holds the key to world supremacy. Mackinder includes the Caspian sea region, Baltic Sea, Brandenburg-Prussia, Armenia, navigable Middle and Lower Danube Persia, Asia Minor, Tibet, Mongolia, Russia and Austria-Hungry and Africa in the World Island. He extendes the map from 1904 to 1919 and give importance to the Heartland (Mackinder 1904 and 1942).

Map 1.2: Heartland Theory of Mackinder

Source: Megoran, N. and Sharapova, S. (2005), "Mackinder's Heartland": A Help or Hindrance in Understanding Central Asia's International Relations?" (online:web) Accessed 10 January 2017, URL: http://www.ca-c-org/journal/2005/journal-eng/cac-04/02.megeng.shtml.

In map 1.2 has shown the Pivot area and extended the Pivot area and named it into Heartland. The First World War led to the change in the mind of Mackinder and then he extended the region. Mackinder perceived this region as safe, like a fortress and

always gave it importance in the world politics and geopolitics. He gave a connotation of:-

"Who rules East Europe commands the Heartland
Who rules the Heartland commands the World-Island
Who rules the World-Island commands the world".

It is clear from the above lines that Mackinder has given very lucrative position to Heartland in the world geopolitics. But after 1920 many events took place in the world. Because of these events he brings change in his concept and gives a term "Midland Basin". In 1943 this paper was entitled as, "The Round World and the Winning of the Peace" appeared in the Foreign Affairs. "In this paper he mentions that the eastern and western sides of the North Atlantic Sea that is the U.S.A and western Europe will play a major role in counter balance the heartland because both the region are connected by Sea and air communications and bounded by the North Atlantic Sea and given the name Midland basin to this geostrategic region. He describes this geostrategic area comprising the North Atlantic Ocean, the Eastern United States, and Western Europe, as the 'Midland Basin'. "He regarded the area as an effective offset to the rising political power potential of the Eurasian Heartland" (Hussian 2007: 104). "Mackinder cut short the size of the heartland, and separates it from that part of the Soviet Union which lay east of the Yensei River, "a rugged country of mountains, plateaus and valleys, covered from end to end with coniferous forests". This part calls 'lenaland' without any political significance" (Adhikari 1997: 107). Mackinder' revision is more comprehensive and understanding in 1943. He tries to put the world geopolitics in his own way and his own theory of Heartland, Midland Basin and Lenaland.

Rimland Theory

Nicholas John Spykman was also one of the great scholars who have contributed immensely in the field of geopolitics. He was a Dutch-American geostrategist and political scientist. He is also known as the "godfather of containment". He propounded the Rimland theory and published it in his book entitled "The Geography of Peace" in 1944. The concept of Rimland is very similar to the "debated and debatable zone" of Mahan rather than to inner or marginal crescent of Mackinder. The

importance of Rimland is because of its high demography, natural resources, and industrial development. This factor will help Rimland to contain the Heartland. As opposed to the land-based power with a traditional geopolitical structure across Euro-Asia. Spykman comes out with the following statement: "The fundamental fact which is responsible for the conditions of World politics is the development of ocean navigation and the discovery of Sea routes to India and America" (Adhikari 1997: 107). He gives too much importance to the Sea power, topography, terrain and climate as important determinants in the foreign policy because of its emphasis on spatial variations. He defines Rimland as "Beyond the mountain barrier, the coast land region, which Mackinder calls the inner crescent may more effectively be referred to as Rimland, a name which defines its character accurately.

According to Spykman, the characteristics of Rimland are inner crescent of amphibian states. It means the states which has both marine and land power. These are the European coast land, the West-Asian Arabic desert, and the Asiatic monsoon land. He is also of the view that national power is the final determinant of the security of a state, while lasting peace is possible only through a collective security arrangement of either an armed league of nations or an international balance of power arrangement. Spykman saw the USA surrounded by Eurasia and Africa. Japan and England were seen as centers of military and economic power and separated by the Pacific and the Atlantic Oceans. According to him, The US strategy in case of war should be avoiding unification of the Old World powers against it. He saw the Soviet Union as the strongest world power and a unified Rimland as a menace to both Russia and USA" (Hussian 2007: 145). According to him Sea power is the key factor in global strategy and gave a slogan for global power politics that is:

"Who controls the rimland rules Eurasia;

Who rules Eurasia controls the destinies of the world".

Spykman is of the opinion that Britian, Russia, and U.S. can play important roles in controlling the world geopolitics. According to him, allied powers should construct their future policies to prevent consolidation of the enemy and the Rimland. The notion of Spykman became the basis for the policy makers of America, to contain Communism when Russia emerged as the sole power in the heartland and defeated

Germany. The geopolitics and geostrategic importance of the Rimland is very important to get control over the Rimland. The United States had consistently tried to build a tier of defense against the Soviet Union. The North Atlantic Treaty Organization (NATO), Baghdad Pact known as the Central Territorial Organization (CENTO) and the South-East Asian Territorial Organization were made by USA to keep an eye on the defense of the Rimland and to prevent the Soviet influence in the warm waters of the Rimland. Thus, for Spykman Rimland is very vital in the world of geopolitics and geostrategy. Spykman has given the map of the Rimland which is similar to the Heartland and pivot region of Mackinder.

Map 1.3: The map showing the Rimland of Spykman and Heartland of Mackinder.

Source: Oldenburger, G.E. and Gildersleeve, C., "The Cold War. The Geography of Containment", [online web] Accessed 10 January 2014, URL: http://www/oldenburger.us/gary/doc/Thecold war.html

The map 1.3 shows the expansion of the land and Sea power of the two great scholars Mackinder and Spykman. The inner crescent of Mackinder was stated as Rimland by Spykman and he emphasized its significance in world geopolitics.

So, these are some theories which are very important when we study geopolitics. In today's era there are some other factors which further accentuated the concept of geopolitics theoretically and practically. The factors may be oil discoveries in developing and under developed countries, technological advancement, terrorism, type of economy, geography, Population etc. Sidaway (2001) defined the term

geopolitics as “Geopolitics is very wide topic and leads to ambiguity among the geographers, scholars and diplomats and the meaning of word geopolitics has been evolving from era to era”. Another attempt to define the term “geopolitics” critically was done by Tuathail and Toal (1994) as “Geopolitics is not an immanently meaningful term but a historically ambiguous and unstable concept”. The term geopolitics has been coined by Rudolf Kjellen in 1899 and the term it was widely used by Henry Kissinger in 1979 in his book “The White House Years”. Geopolitics is basically defined how geography of a place, country, nation, state determine the internal and external political decisions of the particular space that is in the national and internal politics.

“Geography can be described as the mother of strategy, in that the geographical configuration of land and Sea, with respect to a state’s strategic policy” (Geoffrey and Colin: 2008). Geopolitics has its origin in the geography itself because the location shape and size is very crucial as it determines the geopolitics of a region. The location of a state is very important which means that its proximity to other countries, it location on the globe.

Geopolitics is a branch of political geography that deals with the correlation of history and geography and how it impacts the international and national political decision of a country. The whole conception of heartland has emerged from history and geography (Mackinder 1942: 77). The geopolitics word has been used recently but the concept is very old. The geography of a place is one of the main factors that drive the internal and external decision of the country. Apart from geography energy is also a major factor that drives the policies of a country. At present the world economy is dependent upon energy resources for their development.

Desai (2008) argues that the hydrocarbon resource plays an important role in the energy market. The supply and demand of oil is major force in determining the geo-political issue of energy policy. The hydrocarbon resources are spread unevenly on the earth’s surface. Some regions are endowed with hydrocarbon resources and Caspian is one of the regions which have abundant oil and natural gas reserves. The geostrategic positioning of the Caspian Sea is very significant as it is located in the vicinity of European Union, China, South Asia and West Asia. The Caspian Sea region comes under the pivot and heartland area of Mackinder. The hydrocarbons

abundance in the region combined with multiple global and regional players makes the region further important. The hydrocarbon resources play an important role in the economy of the Caspian littoral countries. The presence of oil and natural gas makes the Caspian littoral countries significant in the world geopolitics. The region is the main playground for the global players as they want to exploit the oil and natural gas of the region. The landlocked position creates challenges in the construction of the pipeline. The landlocked position of the Caspian littoral countries with the presence of the U.S, EU, Russia, China, Turkey, Georgia, Afghanistan, Pakistan and India which vies and compete with each other to take the energy resources of the Caspian Sea region further gives a complex geopolitics to the region.

Review of Literature

A literature review is an evaluative report of information found in the literature related to our selected area of study. The review of literature exercises to analyse the area of research and brings out the issues clearly to be resolved. The review of literature begins with the analysis of the readings on the evolution of Geopolitics of Energy in the Caspian Sea region from 1994 to 2014. This specific time period is taken into consideration because in 1994 the "Contract of the Century" transpired and wave of foreign investment materialized in the Caspian Sea Region. The landmark contract boosted and helped the Newly Independent states of Caspian to develop the oil and natural gas resources by collaborating with multinational companies and other states. The availability of the energy resources was the main factor for active participation of global and regional powers in the Caspian Sea region. Various published literature on the area are reviewed here to develop a thematic view of this study and to find out the existing gap which is to be filled.

Definition and Theories of Geopolitics

'Geopolitics' as a term has been used to refer to the studies of the politics of geographical representation and the rhetoric and practices supporting it in a global context. "The term is now used explicitly to explain the incident of international boundary disputes, the structure of global finance and geographical patterns of election results. One expropriation of the term ascribed to it a more specific meaning examination of the geographical assumptions, designations and understanding that

enter into the making of world politics" (Agnew 2003). The internal and foreign policy of a state is determined by the geographical environment also. The States is not confined into a particular and restricted geographical environment and thus the geography or geographical configurations cater great opportunities for policy makers and politicians. Geopolitics is the branch of political geography which deals with the geographical location of a space or a country and discusses that how the geography influences its internal and external decision.

The concept of geopolitics has been evolving and changing from century to century and from space to space. The word "geopolitics" was first coined by Swedish political scientist, Rudolf J. Kjellen in 1899. He was follower of Friedrich Ratzel. According to them the state is like living organism and it grows and has expanding traits. Ratzel and many others were trying to transfer the principles of Darwinism from the biological to the social arena. Ratzel saw the state as species, nourished by the ecological niche that is occupied. This view of state necessarily treated the people of various states as fundamentally different and therefore utilized biological notions of race and ethnicity that have subsequently been rejected. These scholars were relating the concept of states and its expansion with human beings and their developments.

According to Ratzel State is the core of political geography. He explained that "the state is a fragment of humanity on a piece of soil. The fragment of humanity is organized and is bound to its soil by ties which take on the character of an organism". He further stated that the political community actions are similar to a human being. The organic theory of the state and its peculiar quality rests in the relation to territory or space (*Raum*). The state cannot exist without its territory or space (Hagan 1942). Mackinder presented his paper "The Geographical Pivot of History" in order to elucidate his formula of 'geographical causation in world history'. "Man and Nature initiates, but nature in large measure controls" (Mackinder 1904). Mackinder termed the geographically important location of the Eurasian region as "Heartland" and the use of the term "Heart" symbolizes the importance of the region as well as humanification of a region and he also talked about the land and sea power.

Mahan argues that sea power was the determining factor in the fate of nations. Mahan's survey of 120 years of European history identified several characteristics of a state that helped determine whether it was a sea power. Some of these were

explicitly geographical including the location of the country (is it an island? how many coastlines does it have?) its environment (what kind of climate does it have? how good are the soils?) and its territory (does it have good harbours? what is the ratio of coastline to people?). Mahan laid social parameters such as type of government, the industriousness of the people and the nature of their economy and these elements will lead to more powerful navy. In the period of World War, the geopolitics mainly evolved around the imperialism and colonialism and the countries of Europe were able to spear their control over the other countries of world. Today geopolitics also includes the control of the resources of a region by the big players. The concept of "Geopolitics has changed in different historical and geographical contexts" (Sidaway 2001). According to Dittmer and Sharp (2014), geopolitics can be described as the theory and practice of international politics which focuses on the geography that both shape and result from that politics. It has broader study area than political science and international relation. Basically, it can be described as implication of geography into the international politics.

Energy Profile of Caspian Sea Region

Caspian Sea region has emerged as a substantial renewable energy producer after the Soviet disintegration. The five Caspian littoral countries are rich in hydrocarbon resources. Turkmenistan is rich in natural gas and Kazakhstan is rich in oil resources. Russia and Azerbaijan is rich in oil resources but also has substantial reserves of natural gas. Iran also has some oil amount of oil reserves in Caspian. The Caspian Sea region hydrocarbon resources were untapped until the disintegration of the Soviet Union. Before the disintegration the Caspian Sea energy resources were in control of USSR. However, the newly independent countries can independently exploit hydrocarbon resources of the Caspian Sea region. The Caspian littoral states exploit resources with the help of western firm which are equipped with advanced technology. Individual country has different approaches to develop the energy resources of the region. Apart from divergent approaches there are several problems among the littoral states that are lack of regional cooperation and limited export routes which affect the development of Caspian energy resources (U.S Energy Information Administration 2013). According to Bahgat (2003), several prominent international oil and gas companies have shown interest in exploiting the hydrocarbon resources of

the Caspian Sea. Kazakhstan and Azerbaijan officials had claimed the huge hydrocarbon deposits in the region and termed it to be another Middle East, another Saudi Arabia and another Kuwait. The euphoria around the availability of the hydrocarbon resources has raised question regarding the hydrocarbon deposits. "The Caspian region has one of the major unexploited oil reserves of the world. The possible and proven reserves are estimated to be around 200 billion barrels of oil. The Caspian Sea region is rich in natural gas deposits and estimated to hold 7.89 trillion cubic meters of proven and possible reserves". The disintegration of the Soviet Union gave opportunity to the Newly Independent States (NIS) to develop their economy by exporting energy resources. Soon, after independence all the NIS were fiercely competing to control the pipeline route for exporting their oil and natural gas (Din 2000).

According to Bahgat (2003), the energy consuming states such as US is interested in the hydrocarbon resources of the Caspian Sea region. The region can be conducive to energy consuming world. Moreover, it can diversify supply destination of the global hydrocarbon resources and lessen the over-reliance on West Asia. It is budding as a potential contributor to improve the global energy security. Baku among the Caspian Sea region has greatest potential for hydrocarbon development. By 1990, it was able to produce half of the world's total crude oil. The Oil and Natural Gas firms, geologist and the respective governments are of the consensus on the availability of vast reservoirs of hydrocarbon in the Caspian Sea Region. It has 2 to 4 percent of the world hydrocarbon reserves. Among Caspian littoral states and in terms of oil reserves, Azerbaijan with proven 7 bbl[1] of oil and Kazakhstan with proven 9-40 bbl oil are the richest. Though Iran's (0.1 bbl) and Russia's (0.3 bbl) oil deposits are said to be negligible, one cannot comment on their Caspian Sea deposits with confidence as their parts of the sea have not been fully studied and explored. Till recent gas discovery in Azerbaijan's Shah Deniz field, Turkmenistan with proven 2.0 and possible 4.49 Tcm[2] gas reserves was considered a leading gas country, a status which it still preserves. Inspite of all the speculation and scepticism, Caspian Sea Region have energy resources which can be lucrative for the development of mankind.

[1]Bbl is billion oil barrel (abbreviated as bbl).One barrel is a unit of volume whose definition has not been universally standardized. In the United States, an oil barrel is defined as 42 US gallons, which is about 159 litres or 35 imperial gallons.

[2]Trillion cubic metres.

Geopolitics of Caspian Sea Region

Caspian Sea is the largest enclosed inland water body and drained by Volga, Ural, Kura, Terek rivers. The northwest border is formed by Russia, Azerbaijan bounds the western side, Iran borders the southern side, Turkmenistan borders the southeast part and northeast side is bounded by Kazakhstan. According to Dekmejian and Simonian (2001) the region has been confluence zone of conflicting ethnic, national and international interests after the disintegration Soviet Union.

The legal status of the Caspian Sea is also a contentious issue among the littoral states. The Caspian was a 'lake' when it was under the control of a single power and state was free to access navigation and trade in the Caspian region. On the other hand, when geopolitical void prevailed and power was divided among the states it was considered as a 'sea'. The status of the Caspian Sea as a lake or as a sea is ambiguous. It is considered as a lake and sea by different countries to get the profit from the water body because it is rich in oil, natural gas, hydrocarbon and other valuable resources. Concerning the status of the Caspian Sea, Soviet Union and Iran had signed agreements on 26 February 1921 and 25 March 1940. These treaties deal the navigation and fishing but don't incorporate the division of seabed and its resources. In 1970, the Ministry of oil industry of the former USSR determined the sectorial division of the Caspian Sea. Azerbaijan developed its Caspian Sector according to this treaty. After the Soviet disintegration, the littoral states started to discuss the status of the Caspian Sea. Azerbaijan was the single country advocating the sectorial division of the Caspian (Ilgar 2010). Russia and Iran believe it to be a lake, but, at the same time, Azerbaijan, Kazakhstan and Turkmenistan considered it to be a sea.

According to the Article 122 of the 1982 UN convention on the Law of the Sea (UNCLOS) each littoral state has a right to use the resources in its own area, which are considered equidistant between states. Caspian Sea is landlocked and it qualifies most of the criteria to consider being a sea by the UN convention on the law of the sea. But Iran and Soviet Union treated Caspian Sea as a lake. If the Caspian Sea is considered as a sea it would be divided into five territorial zones with each bordered country allowed to control over their own sectors as per the 1982 law of the sea convention. "If the Caspian sea is considered as a lake then all the five states

bordering the Caspian sea will have equal rights of navigation and exploitation of its natural resources" (Asopa 2002).

Throughout history, the region has had a high degree of tribal, religious and ethnic heterogeneity. After the Arab conquest, Persian Zoroastrianism was displaced by Islam and in the sixteenth century the southern reaches of the Caspian were contested by the Shiite Persian and Sunni Ottoman empires (Dekmejian and Simonian 2001). The availability of energy resources in the Caspian Sea region has made the whole region vulnerable to regional and global conflict. Due the energy demand all over the world the region has become geopolitically very important. U.S.A, Russia, China, India, EU and many other regional powers are interested in the region. According to Ilgar (2010), the abundance of hydrocarbon resources in the Caspian Sea region attracted external actors and provided opportunity to the regional players to cooperate and develop hydrocarbon resources. The region has great strategic location and it sits in the centre of the Eurasian. It connects Asia and Europe. The region had several trade routes and one of them was the Great Silk Road which connected East Asian and south Asian countries to the European States. The geographical proximity of the region to the Middle East and South Asia especially Iraq and Afghanistan has made the region watchful of the terrorist activities and has given security concern to the newly independent states along with Russia.

The present geopolitics of energy in the Caspian Sea revived the memories of the "Great Game" which was played between the Russian Empire and British Empire in the 19th century. The new great game again emphasised the geopolitical importance of the region (Ibid). In terms of its rich biodiversity of animal and plant life and overall oceanographic characteristics, the Caspian Sea is more of a sea than a lake. Since the dissolution of the USSR, the five riparian states have been engaged in ongoing controversies on the status of the Caspian Sea under international law, concerning their respective control of the resources of the seabed, as well as sovereignty over the sea's surface and the waters below it. According to Nourzhanov (2006), the Caspian Sea basin has been inflicted by the regional arms race and rapid escalation of military activity. All Caspian littoral states are building naval forces. In this race even Turkmenistan is also active who was neutral earlier. The ambiguous legal status of the Caspian Sea and unclear division over the seabed has raised disputes among the

littoral states. The offshore hydrocarbon deposits are contested between Azerbaijan and Iran and between Azerbaijan and Turkmenistan. The disputes and conflicts can be escalated and can turn out to be a great security treat in the region. It can drag several regional and global players including Russia and US. They have to participate reluctantly in the conflict to resolve the matter among the littoral states but can turned into a possible war.

The signing of the international contract in 1994 between Azerbaijan and international consortium for the development of the Azeri and Chirag deposits, created dispute with Turkmenistan which also claimed the hydrocarbons deposits. Another dispute between the countries is regarding the Kyapaz deposit which is called Serdar by Turkmenistan. Turkmenistan is taking measures to fortify its Caspian border with the help of several countries. Iran and Pakistan has helped it to strengthen its Caspian coastal defences. It has purchased swift patrol boats and on training naval forces. In 2000 Azerbaijan sent a training patrol boat to Caspian Sea which was acquired from Turkey. The United States is expected to donate three swifter coast guard vessels (Cherniavskii 2002). Iran launched a new Jamaran-2 destroyer in the Caspian Sea on 17 March 2013. Israel sold arms worth of $1.5 billion and Gabriel-5 anti-ship missiles to Azerbaijan. According to experts Azerbaijan militarization is measures that are taken to counter Militarization of Iran in the Caspian Sea. The strengthening of naval fleet has compelled other Caspian littoral countries to build up their naval fleets too. The Russian Ministry of Defense on 30 January 2013 ordered the construction of three new Buyan-class corvettes which was to be used in the Caspian (EDM, 2 April 2013).

Energy Policies of Caspian Littoral States

The abundance of hydrocarbon resources and geopolitical importance of the region drew lot of attention from several global players and multinational oil and natural gas firms. The energy hungry countries wanted to utilize the valuable hydrocarbon resources of the Caspian Sea. The newly independent states were ready to export the energy resources but had weak governments and economies. Russia and Iran at the same time wants to have maximum control over the energy resources and reluctant to accept outside influence in the region. The strategic importance and rich energy resources of the Caspian Sea got the US attention. Washington was quick to realize

the independence of Caspian littoral states and wanted to establish its own style of democracy and economic culture. This intense rivalry between global powers and regional powers has led to the new power game. The energy policy of Kazakhstan is to strengthen global energy security. It believes in keeping a dialogue between energy producer and consumer countries. Further it has developed predictable policies and cooperated with multinational oil and natural gas firms to reduce energy instability in the region. The energy policy of Kazakhstan is influenced by the multi-vector foreign policy which gives opportunity to all the global and regional countries. Kazakhstan aims at diversifying energy transportation and pipeline routes and at the same time it works to enhance the business and investment sector (Ministry of Energy and Mineral Resources of the Republic of Kazakhstan 2006).

Turkmenistan energy policies are driven by national interest. It maintains neutral approach to its energy partners and seeks to reduce it's over reliance on Russia. Turkmenistan is thoughtful to explore other pipeline options rather than only depending upon Russia to export its natural gas (Berdikeeva 2007). Azerbaijan after the Soviet disintegration was more inclined toward west and demonstrated integration to Europe as a top foreign policy priority. It started developing its energy resources to cater the needs of west and tried to explore and construct pipelines that are directed toward west. After the soviet disintegration Azerbaijan, Kazakhstan and Turkmenistan have acquired a important stage in global markets. They are successful in pulling huge foreign investment to hydrocarbon sectors (Baghat 2003).

Russia's policy towards Caspian Sea region is not only confined to energy resources but it has security concern also. Since long, Russia has considered these countries as its buffer. The security of the region is very important to Russia as it can hamper the stability of Russia itself. Iran's geopolitical location makes it significant. The oil swaps from Iran on behalf of Caspian landlocked countries can be a better option for oil transportation. The pipeline route can also be feasible as it has proximity to neighbouring countries through sea and land route (Amirahmadi 2000). The policies of the Caspian littoral States are interdependent. Though they have bilateral and multilateral agreements to resolve an issue and to implement laws, the Caspian littoral states have different policies toward energy resources of the sea.

Pipeline Politics and its challenges

The Caspian Sea region has again emerged as a prominent region. The present rivalry in the region has emphasised on the geopolitical significance of the region. In nineteenth century the region has witnessed the great game between the British and Russian Empire. Again the intense rivalry is leading toward the new great game. The present rivalry over the Caspian resources is far more complex in determinants and implications than great game (Dekmejian and Simonian 2001). According to Amineh and Houweling (2007), the huge hydrocarbon resources have led to interstate rivalry, enterprise competition, and regional state and non-state actors. The multinational gas and oil firms are engaged in energy extraction. The newly independent countries are trying to get niche in the region by developing its economy through exporting energy resources.

Iran geopolitical location and its two thousand miles of coastline on the Persian Gulf make it a strong contender for pipeline route. It can offer the Caspian littoral landlocked states access to global markets. From Iranian view point, a pipeline through the country connecting the Caspian littoral to the Persian Gulf or Gulf of Oman is the shortest and practical route. This connection will offer the nearest route from the Caspian to the oil markets of Far East, particularly Japan, where demand for energy is projected at an ever-increasing rate for the foreseeable future (Amirahmadi 2000).

The government of Azerbaijan initiated discussions for the transnational oil pipeline on 20 September 1994 at the time when SOCAR that is State Oil Company of Azerbaijan Republic and a consortium of western oil companies signed a Production Sharing Agreement for the development of the Azeri, Chirag, and Guneshi oil fields. The agreement was named by the government as the "Contract of the Century" (Sovacool 2012). Iran and Russia challenged Azerbaijan under the pretext of the ambiguous status of the Caspian Sea as a Sea or a lake. Iran is against America's involvement in the Caspian Sea region. It fears that US involvement could bolster the independence 30 million Azerbaijani residing in Iran (Ilgar 2010). The ethnic conflict in the Trans Caucasus leads to further entanglement of the pipeline politics in the region.

Russia has benefitted in the pipeline politics. The Soviet era oil and gas pipeline system is lucrative to the country as it control the major transit routes of Central Asian hydrocarbon. Kremlin is able to set terms for transiting energy resources (Olcott 2010). There are various factors that have to take into considerations and that includes cost of transporting oil and gas to market, also the degree of confidence in the factors affecting that cost, from ownership structures and the acquisition of financing, to the line-up of rights of way, financial incentives, tax holdings, dispute mechanisms, and security. Three newly independent Caspian littoral states are landlocked and have to depend on neighbouring countries for transiting its hydrocarbon resources. Because of this, the possible routes by which pipelines could export hydrocarbon are important. The soviet era pipelines are more oriented to cater the needs of Russia and not adequate for the newly independent states. Occasionally Russia has used its pipelines as a tool to serve its own needs. It has shut down and restricted the hydrocarbon flow according to its own convenience. It demands tariffs and special taxes from other regional and international actors that wanted to use the network, just to get stake in various enterprises. Another problem with Russian pipeline is that they are old and in bad shape. This pipeline creates environmental problems and not cheap for the newly independent countries.

According to Kuniholm (2000), US don't favour the Iranian route because of political and security reasons. It supports the Baku-Supsa route as an alternate route and not as a main route because of environment and security reasons. Another player in the Caspian Sea region is China. Over the decade China has expanded its influence in the Caspian Sea region. Today several Chinese companies are actively participating and investing in the Kazakhstan's onshore projects. Beijing's has played a great role in developing gas sector of Turkmenistan. The presence of China in the Caspian energy sector started in 1997 with Kazakhstan when Chinese national oil company, CNPC, bought a 60.3 percent share of AktobeMunaiGas and in the same year it gained development rights to the oil field at Uzen. Again in 2003, it increased its stake in AktobeMunaiGas to 85.42 percent. These projects were mainly designed to supply a jointly owned 2900 km oil pipeline from Atyrau to Alashankou on the Kazakhstan Chinese border (Olcott 2010). Another active regional player is Turkey. Historical ties entwined with economic interests are the sole reason for presence of Turkey in the Caspian Sea region. The region had cultural Turkic and Persian heritage and after the

Soviet disintegration it is interested to have energy partnership also (Bahgat 2003). So, the regional and global players are playing their cards for pipeline construction and to get the benefits from the energy resources.

There are plenty of literatures on the geopolitics of the Caspian Sea Region but none of the literature so far clearly suggests the solution for the complexity of geopolitics of energy in the region. The existing literature deals with the energy resources, geopolitics of the Caspian Sea Region, Great Game, New Great Game and pipeline politics. The study has dealt about the complexity of geopolitics of energy in Caspian Sea region. It has also dealt with the role of regional and global players in the geopolitics of the region. The study has emphasised the solution for the energy geopolitics of the Caspian Sea Region, geopolitical complexities and the measures to attain regional stability.

Definition, Rationale and Scope of the Study

To understand the geopolitics of the Caspian Sea Region, it is essential to understand the geography of the region which has immense impact on the regional and global geopolitics. The Caspian Sea energy resources are one of the pioneer reasons for escalated geopolitics in the region. The research addresses the questions like how the geostrategic location of the Caspian Sea Region determines the geopolitics of the region. The research analyses the importance of energy in the Geopolitics of Caspian Sea. It also deals with the factors which drive the energy policies of the Caspian littoral states. The study has emphasised the significance of Caspian Sea region as it is situated in the crossroads of different civilizations. The study has focused on the complex geopolitics of the region and the factors which influence the region and its development.

The study has examined the energy resources of the Caspian Sea Region. It has focused on the geopolitical theories given by Mackinder and Spykman. The research has emphasised that how the scholars and their theories have given importance to the region for its geopolitical location and energy resources. The study has made an attempt to figure out the reasons for the hurdle in determining the legal status of Caspian Sea. What are the factors and hurdles on the way of determining the legal status of Caspian as a sea or a lake? What are the energy policies of the Caspian

littoral States? How has the energy resources led to the "New Great Game" in the region? The study has dealt that how the status of the Caspian, as a sea or lake, is a matter of dispute and because of that militarization is happening in the region. The study has focused on how regional power and global power are influencing the pipeline politics of the region. The literature reviews indicate how the region has been influenced by the energy resources on the one hand and has been undermining the development of the region, on the other.

The research has taken into consideration a time period of 1994-2014 as there were series of development in this particular span. In 1994, the "Contract of the Century" was signed which was a production sharing agreement between Consortium of western oil companies and SOCAR for development of Azeri, Chirag and Guneshi oil fields. The contract led to the opening of western world to the Caspian Sea Region. All the other states also wanted to get foreign investment through selling and supplying their energy resources. After the contract the regional and global power took notice of the geostrategic location and energy resources of the countries.

The year 1994 has been taken because the Azerbaijani government started discussions for a transnational oil pipeline on September 20, 1994, when a consortium of western oil companies and SOCAR (State Oil Company of Azerbaijan Republic) signed a Production Sharing Agreement (PSA) for the development of the Azeri, Chirag, and Guneshi oil fields, an agreement later approved by the government as the "Contract of the Century". This agreement opened the door for the west and investors to trade with Caspian littoral states. After that the series of investment and events happened in the region. The year 2014 has been taken because of the IVth Caspian Summit held in Astrakhan in 2014 led to many developments in the Caspian Sea region. The summit has tried to address many issues such as no outside military intervention in the Caspian Sea Region, creating a rail road ring around the Caspian Sea, North-South corridor that will make possible to link Western and North Western Europe with South Asian Countries via Russia, the Caspian basin and Iran. The Emergency Ministers of the five littoral states signed an emergency prevention and response agreement. Besides, the time period has many striking changes in the economy, polity, social and cultural fabric of these nations.

The Vth Convention on the legal status of the Caspian Sea which held in Aktau, Kazakhstan in 2018 has been studied. The Aktau agreement between the littoral countries debarred the foreign military presence in the Caspian Sea and only the littoral countries can have naval fleet in the Caspian Sea. The agreement delimited the surface water of Caspian as a Sea but the seabed was not delimited.

Objectives

Following are the objectives of the proposed research:

- To study the definition and theories of geopolitics.
- To examine the energy profile of Caspian Sea Region.
- To study the geopolitics and militarization of the Caspian Sea region.
- To study the hurdles in determining the status of Caspian as a Sea or Lake?
- To study and analyse energy policies of the Caspian littoral States.
- To study the pipeline politics and influence of regional and global powers in the geopolitics of Caspian Sea Region.

Research Questions

Following research questions has been addressed:

- How does the geostrategic location of the Caspian Sea Region determine the geopolitics of the region?
- Why the status of Caspian as a Sea or lake is not clear?
- What are the factors which drive the energy policies of the Caspian littoral States?
- What are the reasons for the militarization of the Caspian Sea Region and what are their aftermaths?

- How do the regional and global powers determine the pipeline politics of the region?

- What are the issues and challenges in the construction of pipeline?

Hypotheses

- The ambiguity on the legal status of Caspian Sea has led to dispute among Caspian littoral states.

- The internal division and conflict among the Caspian littoral states has led to the militarization of the region.

Research Methodology

The study has utilised the historical, analytical and descriptive methods of research. The research is exploratory in nature. This analysis has been carried out by using relevant Geopolitical theories and Political Geography theories. The study has used both primary and secondary sources. The primary source materials are the government documents, Treaties, interviews of the area expert, agreements, declaration, speeches of the government dignitaries, UN Convention on Sea, Energy policies and strategies etc. The secondary source materials are books, articles, academic journals, working papers, project reports, seminars and symposia. Resources available on the website of various think tanks, foundations and articles are also referred.

The time period of the research is 1994-2014. The study has taken primary and secondary sources. The study has done by taking interviews, questionnaires, etc. The study has been completed by going to the field trip to Russian and Kazakhstan and taking the view from the area expert. Articles, documents, agreements, books are taken from the libraries of the Moscow State University, Lenin Library and L.N Gumilyov Eurasian national University during the field visit.

Chapterisation Scheme

Chapter 1: Introduction

The first chapter has described the definition and theories of geopolitics. The chapter have discussed the pivot area and heartland theory of Mackinder. It has also dealt with the Rimland theory of Spykman. It has dealt with the literature review, aims and objectives, scope, rationale and research methodology and design.

Chapter 2: Energy Profile of Caspian Sea Region

This chapter has thrown light on energy profile of the Caspian Sea region. It has dealt with the hydrocarbon fields of the Caspian littoral countries.

Chapter 3: Geopolitics of the Caspian Sea Region

The third chapter has focused on how the geographical and geostrategic location has helped and influenced the geopolitics of the Caspian Sea region. It has dealt with the geographical diversities of the region. In this chapter, an attempt has been made to study the legal status of the Caspian Sea and the militarization of the Caspian Sea Region is also addressed.

Chapter 4: Energy Policies of Caspian Littoral Countries

The chapter has analysed the energy policies of the Caspian littoral states namely Russia, Kazakhstan, Turkmenistan, Iran and Azerbaijan. The bilateral and multilateral relations, trade, agreements etc. are also discussed.

Chapter 5: Pipeline Politics and Challenges

This chapter has discussed that how the geographical location, topography neighbourhood, bilateral and multilateral relation of the Caspian States with other regional and global states has influenced the construction of the pipeline in the region. The chapter has focused on the hurdles in the path of construction of the pipeline such as ethnic conflict, separatist movement and terrorism. It has dealt how the regional and global players are effectively combating the issues and ensuring constant energy flow.

Chapter 6: Conclusion

The concluding chapter has summarized the thesis. Findings are highlighted, besides examining the validation of hypotheses that is set in the beginning of the study. Space has been devoted to the scope of further research, and also the overall strength and limitations of the present study.

CHAPTER II

ENERGY PROFILE OF CASPIAN SEA REGION

The Caspian Sea region is the oldest oil producing area in the world. The inscriptions on a stone unearthed in a Baku oil pit showed that the first oilmen in Baku used to dig oil from the land with shovels and bare hands, as the oil was just beneath the surface. The inscriptions state that the oil history dates back to 1595, in which the land was leased or bought to exploit oil (LeVine 2007: 5). During the Soviet period and after the disintegration of the Union, the Caspian region has been proving itself as an important source of global energy production. The northern part of the Caspian Sea is rich in oil resources while the Southern part of the Caspian Sea is rich in natural gas. The sea within 100 miles has 35 percent of the oil that is 16.6 billion bbl and 45 percent of the gas i.e., 130 Tcf. The remaining 12 billion bbl of oil and 56 Tcf of natural gas are available in the farther onshore in the large Caspian Sea basins of Azerbaijan, Turkmenistan, and Kazakhstan. The U.S. Geological Survey (USGS) has estimated technically recoverable undiscovered oil around 20 billion barrels and 243 Tcf of natural gas (U.S. Energy Information Administration 2013: 10).

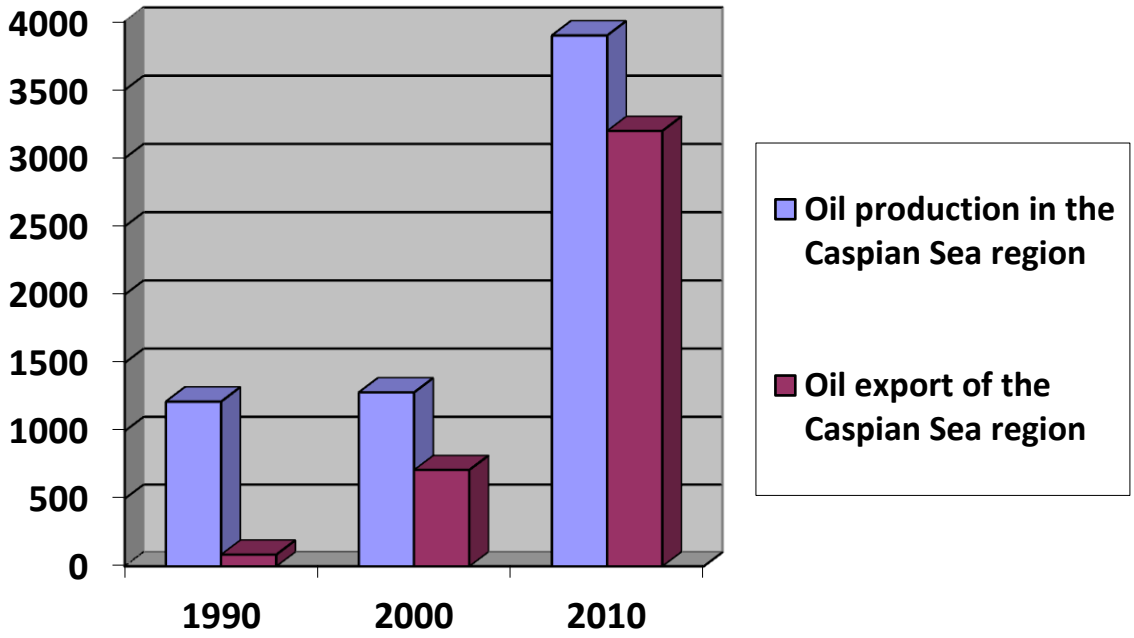
Table 2.1 Possible and Proven oil and gas reserves of the Caspian Sea region

Estimate Source:	**U.S Energy Information Administration**			**International Energy Agency**		
Commodity	Proven reserves	Possible reserves	Total	Proven reserves	Possible reserves	Total
Oil (in billions of barrels)	18-34	235	253-269	15-40	70-150	85-190
Gas (in trillion cubic feet)	243-248	328	571-576	237-325	283	520-608

Source: Cohen, A. (2002), "Iran's Claims over Caspian Sea Resources threaten Energy Security", *The Heritage Foundation,* September 4 (1582).

Table 2.1 shows the proven reserves of oil and gas by the U.S Energy Information Administration and International Energy Agency. There are not many variations in the estimates made by the two energy agency which proves that Caspian Sea region holds ample amount of oil and gas reserves.

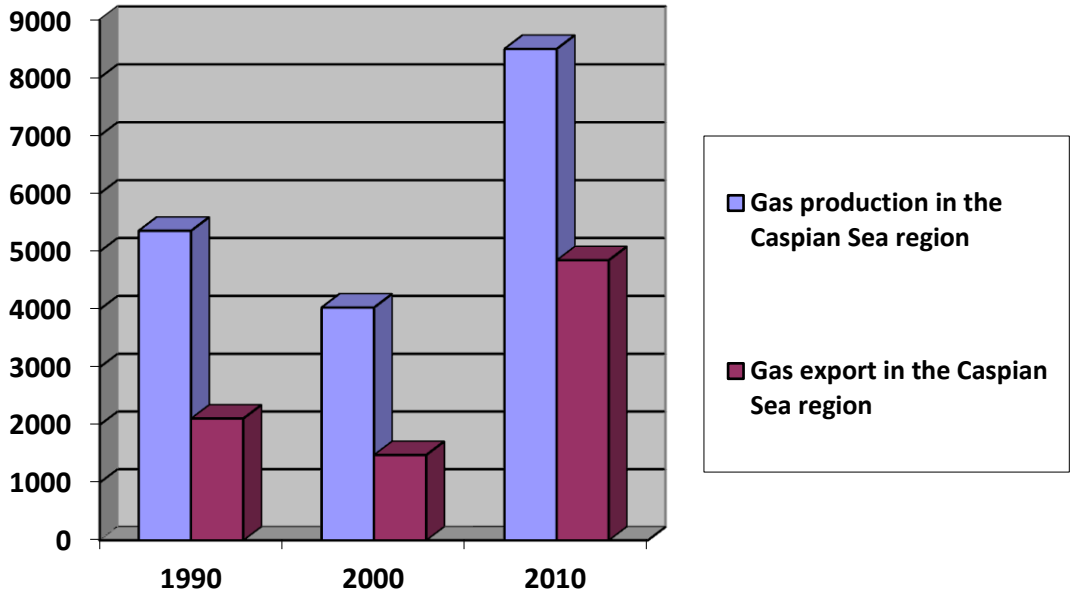
Graph 2.1: Shows the Oil Production in the year of 1990, 2000 and 2010 in the Caspian Sea region.



Source: Cohen, A. (2002), "Iran's Claims over Caspian Sea Resources threaten Energy Security", *The Heritage Foundation*, September 4 (1582).

The diagram shows the increase in the oil production of the Caspian Sea region from 1990 to 2010. The oil production in 1990 was 1216.0 thousand barrel per day. In 2000 the production was 1284 thousand barrel per day. In 2010 the oil production increased to 3900 thousand barrel per day. The diagram explains that the production of oil in the Caspian Sea has boomed in 2010. The outpour of the International Oil Companies (IOCs) in the Caspian Sea region has multiplied the oil production. The oil production also leads to oil export during 2000 and 2010. The establishment of the Baku-Tbilisi-Ceyhan (BTC) pipeline and Caspian pipeline consortium also increased the export of the oil as the year 1990 has very less export even the amount of production is sufficient for export.

Graph 2.2: Shows the Gas Production in the year of 1990, 2000 and 2010 in the Caspian Sea region



Source: Cohen, A. (2002), "Iran's Claims over Caspian Sea Resources threaten Energy Security", *The Heritage Foundation*, September 4 (1582).

The diagram shows the gas production in the Caspian Sea region from 1990 to 2010. In 1990 the gas production was 5358 billion cubic feet per year. In 2000 the gas production was 4032 billion cubic feet per year. In 2010 the gas production increased to 8500 billion cubic feet per year. The diagram explains that the production of gas was considerable in 1990 and 2000. But the 2010 lead to more gas production in the Caspian Sea. The gas exploration and export in the Caspian Sea region has increased the gas production. The difference in the production and export of gas in the Caspian Sea region signifies insufficient pipeline infrastructure for the trade of the gas. As most of the gas pipeline of the region was commenced after 2005. The year 2010 shows good export and gas production in the Caspian Sea region.

Caspian Sea: Geography and Geology

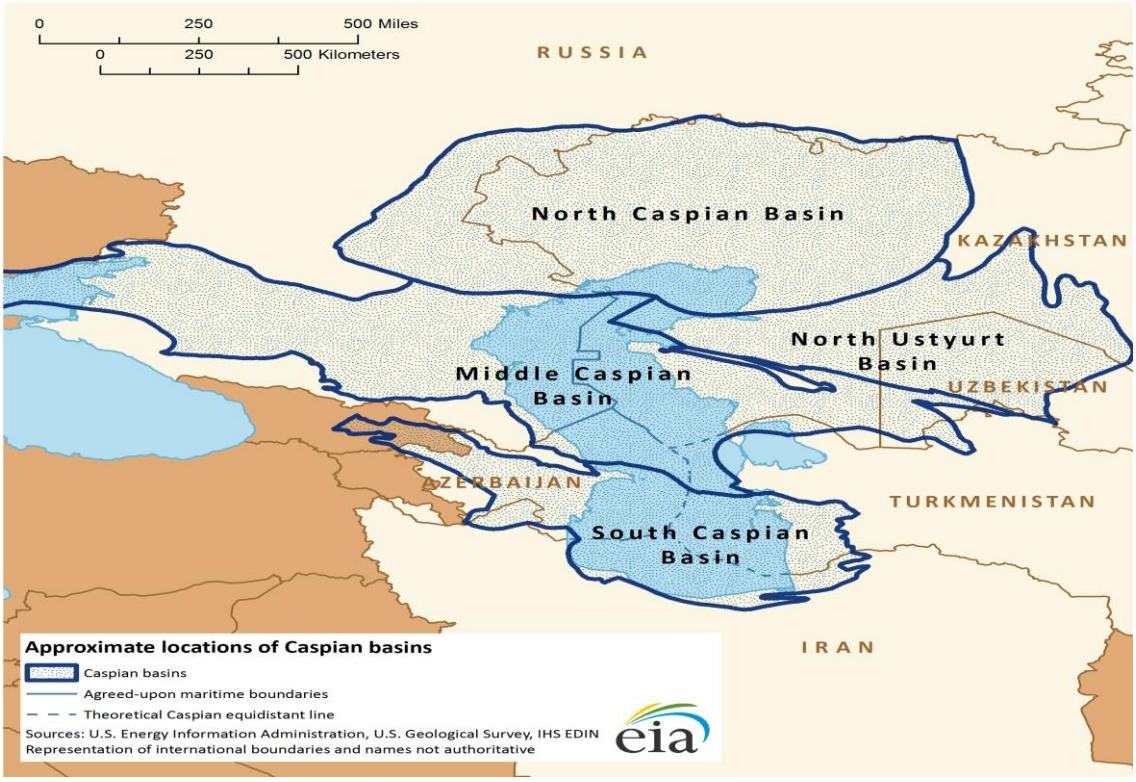
The Caspian Sea is the largest enclosed inland body of water on the Earth. It is an endorheic basin[3] and has no outflow. The rivers like the Volga, Ural, Kura, and Terek flow into the Caspian Sea. Russia forms the northwest border of the Caspian Sea, the western side is bounded by Azerbaijan, Iran borders the southern side, and Turkmenistan borders the southeast direction and Kazakhstan bounds from the northeast direction. Caspian Sea is spread over 3,626,000 km. The water body is a remaining part of the Paratethys Sea[4] and was landlocked because of the tectonic upliftment. The Caspian Sea has never dried up because of the steady inflow of fresh water from rivers. The northern portion has freshwater because of the influx of freshwater from the Volga River but the southern portion of the sea is saline because of the less inflow of water through smaller rivers (U.S Energy Information Administration 2013: 3).

The Caspian Sea has four geological basins namely, "the North Caspian Basin, the North Ustyurt Basin, the Middle Caspian Basin and the South Caspian Basin. The North Caspian Basin is shallow in depth and covers a quarter of the surface area of the sea. The thick ice cover in winter makes it tough to drill and explore oil in the basin. The Mangyshlack Shelf separates the northern basin from the middle basin. This basin makes up about 38 percent of the surface area. The Apsheron Shelf, which is a continuation of the Caucasus Mountains, separates the middle and southern basin. The water depth and volume are greater in the southern portion of the sea which is 3,363 feet in depth and contains two-thirds of the total water respectively" (U.S. Energy Information Administration 2013: 3).

[3] "An endorheic basin is a limited drainage basin that normally retains water and allows no outflow to other external bodies of water, such as rivers or oceans, but converges instead into lakes or swamps, permanent or seasonal that equilibrates through evaporation".

[4] "Paratethys Sea was a large shallow inland sea that stretched from the region north of the Alps mountain range in the central Europe to Aral Sea in Central Asia".

Map 2.1 The divisions of the Caspian Sea Basin



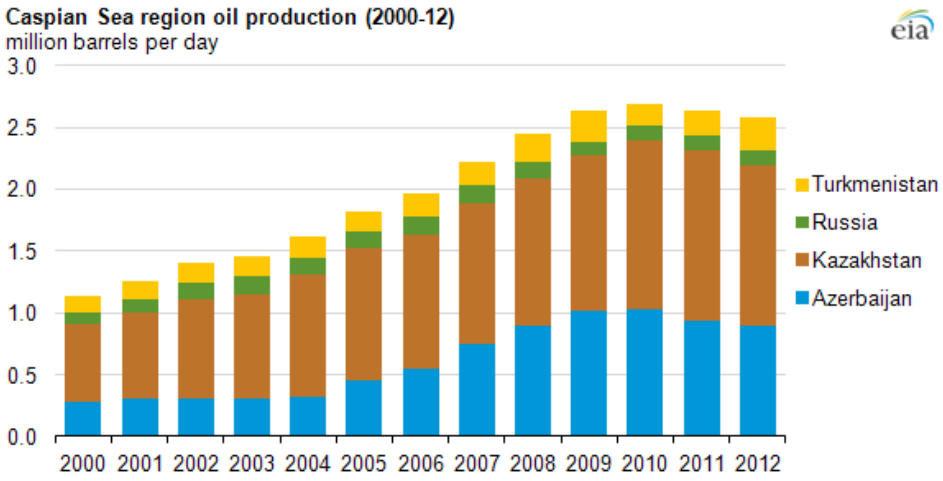
Source:- Eia, US Energy Information Administration (2013), "Caspian Sea Region", [Online: Web] Accessed 18 May 2016, URL: http://www.eia.gov/countries/regions-topics.cfn?fips=csr.

The figure shows the divisions of the Caspian Sea Basin that are the North Caspian Basin, the Middle Caspian Basin, the North Ustyurt Basin, and the South Caspian Basin.

Energy resources in the Caspian Sea region are one of the largest unexploited resources of oil and natural gas in the world. The proven and possible resources are estimated to be as high as 200 billion barrels and are rich in natural gas, with estimated, proven and possible reserves up to 7.89 trillion cubic meters (Din 2000: 1). "The estimated data of the oil and natural gas in the Caspian are greatly exaggerated and estimated to be around 200 billion barrels which contradict the preliminary estimates provided by the 3D seismic surveys. In the words of a Russian ambassador in Azerbaijan, A. Blokhin while speaking in the conference, "Oil, Gas, Processing and Petrochemical Products" which was held in June 1998 stated that the Caspian reserves are around 14 billion tons. Another estimate by a multinational oil and gas company, British Petroleum (BP) estimated around 20 billion tons of oil in the Northeastern part

of the Caspian which falls in the Russian and Kazakhstan's sector of the Caspian Sea" (Zhiltsov et al. 2015: 40).

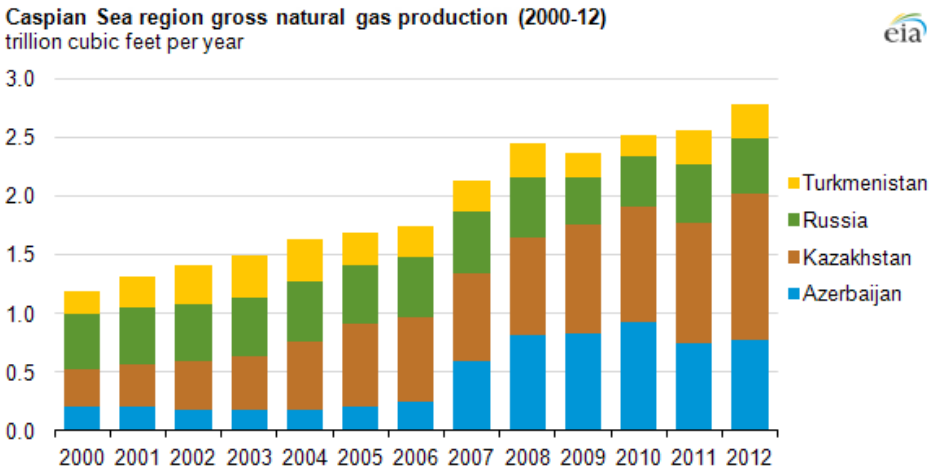
Graph 2.3: The Oil Production in the Caspian Sea region from 2000-2012.



Source: Eia, US Energy Information Administration (2013), Caspian Sea region, Eia, [Online: web] Accessed 20 May 2016, URL: https://www.eia.gov/beta/international/analysis_includes/regions_of_interest/Caspian_Sea/caspian_sea.pdf

The above map shows the oil production of the Caspian Littoral States from 2000 to 2012. The year 2000 shows very less oil production in the region. The oil production from 2000 to 2012 has increased in considerable amount. Kazakhstan is leading the oil production from 2000-2012. The oil production in Turkmenistan and Russia is very less as compared to Kazakhstan and Azerbaijan. The Russian sector and Turkmen sector of Caspian contains less oil resources. The year 2009, 2010, 2011 and 2012 shows the highest oil production in the Caspian Sea region. Azerbaijan ranks second after Kazakhstan in oil production in the Caspian Sea region.

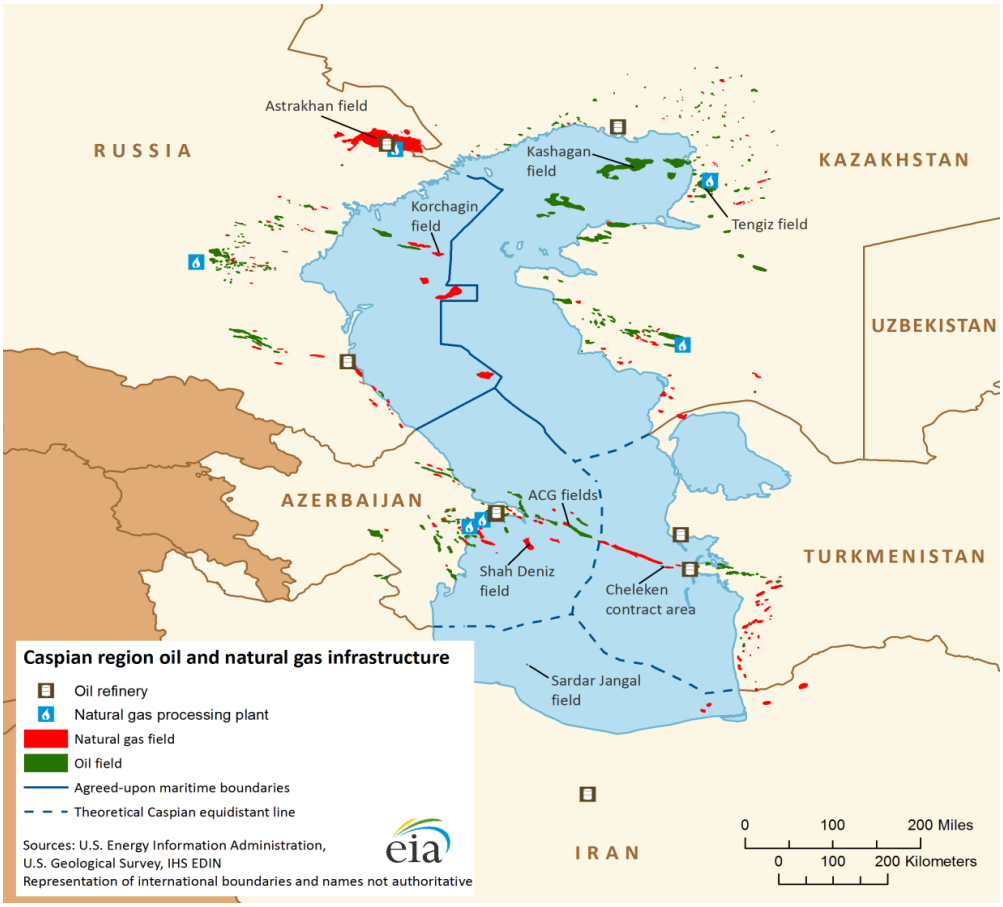
Graph 2.4: The Gas Production in the Caspian Sea region from 2000-2012.



Source: Eia, US Energy Information Administration (2013), Caspian Sea region, Eia, [Online: web] Accessed 20 May 2016, URL: https://www.eia.gov/beta/international/analysis_includes/regions_of_interest/Caspian_Sea/caspian_sea.pdf

The above map shows the gross natural gas production of the Caspian Littoral States from 2000 to 2012. The gas production from the year 2000 to 2012 has been increased in the Caspian littoral countries. Kazakhstan is leading in the gas production in the Caspian Sea region. Azerbaijan comes second in gas production after Kazakhstan. The production of Azerbaijan has suddenly increased in the 2007 because of the start in the gas production in the Shah Deniz gas field. The data shows that Azerbaijan and Kazakhstan are the two countries that have huge gas reserves. Both the countries with collaboration of the International Oil Companies (IOCs) increase their gas production.

Map 2.2: The Oil and Natural Gas Fields of the Caspian Sea region



Source: Eia, US Energy Information Administration (2013), Caspian Sea region, Eia, [online web] Accessed 20 May 2016, URL: https://www.eia.gov/beta/international/analysis_includes/regions_of_interest/Caspian_Sea/caspian_sea.pdf

The above map shows the oil and natural gas fields of the Caspian Sea region, oil refineries, and natural gas processing plants, agreed upon maritime boundaries and the theoretical Caspian equidistant line. The map shows the Kashagan hydrocarbon field in the Kazakhstan sector[5] of the Caspian Sea. Korchagin field is in Russian sector, Azerbaijan has Azeri-Chirag-Guneshi (ACG) field. Shah Deniz gas field is located south of the ACG field. The Cheleken peninsula is in the Turkmenistan sector of the Caspian Sea. The map shows the agreed upon maritime boundaries in the north Caspian basin and the theoretical Caspian equidistant line for delimiting the southern Caspian Sea.

[5] Sector is the specified zone which was given by the ministry of oil and gas of U.S.S.R in 1970 to demarcated the Caspian into sectors for the intention to carry out exploration and production.

Table 2.2: Onshore and Offshore Oil Resources of the Caspian Littoral States

	Crude Oil and lease condensate (billion Bbl)	Natural Gas (Tcf)
Azerbaijan	8.5	51
Offshore Caspian	6.8	46
Onshore Caspian	1.7	5
Iran	0.5	2
Offshore Caspian	0.5	1
Onshore Caspian	(s)	1
Kazakhstan	31.2	104
Offshore Caspian	15.7	36
Onshore Caspian	15.5	68
Russia	6.1	109
Offshore Caspian	1.6	14
Onshore Caspian	4.5	95
Turkmenistan	1.9	19
Offshore Caspian	1.1	9
Onshore Caspian	0.8	10
TOTAL CASPIAN	48.2	292
Offshore Caspian	19.6	106
Onshore Caspian	28.6	186

(s) = Value is too small for the number of decimal places shown.
"Offshore Caspian" refers to fields in the Caspian Sea.
"Onshore Caspian" refers to fields in the Caspian Basins which are not offshore.
Proved + Probable reserves exceed the value of 'proved reserves' in EIA's International Energy Statistics.
Sources: U.S. Energy Information Administration, IHS EDIN, Eastern Bloc Research Energy Databook 2012.

Source:- Eia, US Energy Information Administration (2013), Caspian Sea region, Eia, [Online: web] Accessed 20 May 2016, URL:
https://www.eia.gov/beta/international/analysis_includes/regions_of_interest/Caspian_Sea/caspian_sea.pdf

Energy Profile in Caspian Region of Russia

Russia is the leading oil-producing country in the world. The oil history of the country dates back to the 1880s and at that time it was a pioneer in oil production. The oilfields in the Absheron peninsula produced half of the world's oil. The partial occupation of the Soviet Union by Germany during World War II caused a decline in the oil production but again rose 30 times in 1984. The oil production in Russia began to fall after the disintegration of the Soviet. The crisis led to reduced domestic demand, export possibilities, and drilling volumes. The state tried to overcome the crisis through demonopolization and privatization. The oil companies viz., Rosneft, Yukos, and Lukoil were engaged in exploration activities, petroleum production and export. The crisis was overcome in 1997, when the production volumes were restored. The modern petroleum industry was born in the Russian Empire when the world's first oil well was drilled on the Absheron Peninsula near Baku in 1846 (Egorov 2017: 1-3). In 1929 and 1930 oil was first produced in the Volga-Urals province and Timon Pechora respectively (Krylov et al. 1998: 3). The North Caucasus region is rich in hydrocarbon resources. Krasnodar, Stavropol, and Chechnya have been traditional energy- producing regions. According to the Eastern Bloc Energy, approximately 65,000 bbl/d of oil is produced in the North Caucasus region of Russia. The Western Siberian region, Ural-Volga region, and the region between the Ural Mountains and the Central Siberian Plateau which extends through the Caspian Sea Basin are the major hydrocarbon-producing regions of Russia (U.S. Energy Information Administration 2013: 12).

LUKOIL, the second largest Russian oil company started exploring the northern sector of the Caspian Sea in 1995. The company spotted six operable fields for production by 2004. The first offshore platform, the Yuri Korchagin Field, started producing oil for the commercial market in 2010 (Eldarov et al. 2015: 342). The Russian sector of the Caspian was not fully developed industrially in the Soviet era, which resulted in large hydrocarbon deposit still in its Caspian sector. The Caspian region of Russia was declared as a protected zone in 1975 and mainly used for sturgeon production to get black caviar. The region has been given needed emphasis but despite this fact, the prospective oil reserves were evaluated at around 2-2.5 billion tons, which made them the country's largest. "The Republic of Kalmykia, the

Republic of Dagestan, and the Astrakhan region, possess major oil and gas reserves in the Caspian. In the Astrakhan region, six oil and gas fields and two gas condensate fields were found. Three fields viz., Astrakhansky, Promyslovskoye and Beshkulsky are developed. The Verblyuzhie Oil field and its exploration are carried out in the Alekseevsky Gas Condensate Field and the two fields, Bugrinsky and North Shadzhinsky are shut down. Small gas deposits at Promyslovskoye and Bugrinsky were discovered in between the 1950s-1970s and in 1960 the Beshkulsky Oil Field was explored. The Astrakhansky Gas Condensate Field (AGCF) was opened in 1976 and is located 70 km to the northeast of Astrakhan. This field is unique because of large reserves ranging from 3.6 to predicted 5.0 TCM and produces 11.5-12 bcm of natural gas every year" (Zhiltsov et al. 2015: 42).

"The Republic of Kalmykia has 44 oil and gas fields with the initial reserves of 64 million tons. According to earlier estimates, the Republic has 200 million tons of hydrocarbon reserves. Other unofficial estimates were around 1.3 billion tons of TOE and more. The offshore oil reserves in the Kalmyk section of the Caspian have been evaluated to be approximately 300,000 tons. The Republic of Dagestan has the longest history of oil production in the Northern Caucasus. The oil and gas reserves are spread over 28,000 km^2 with a total of 53 fields in which 45 are oil fields. In the mid 18^{th} century hand-dug wells were used for oil extraction in the Kayatkentsky and Berikeysky fields. In the late 19^{th} century, the drilling of the first well was started and the first industrial oil production was started in 1936 in the Izberbash area. The Tersky-Kumsky (Nogaisky) Oil and Gas region are in Dagestan. In the period from 1948 to 1978, the Inchkhe Sea Field was opened with the reserves of 25 million tons of TOE. According to estimates of the Institute of Geology, RAS Dagestan Research Center, the potential of hydrocarbon resources in the Dagestan shelf of the Caspian Sea is 880 million tons in which 340 million tons is oil and 540 million m3 is natural gas" (Zhiltsov 2015: 43).

The Yuri Korchagin field is a major hydrocarbon field that lies in the North Caucasus region of the Caspian Sea Basin. The field was discovered by Lukoil in 2000 and is owned by its subsidiary, Lukoil Nizhnevolzhskneft. Its first oil was extracted on 28 April 2010. It is located at depths between 11 to 13 m of water level and has probable oil reserves of 570 million barrel. Lukoil approximately extracts 2.5

million tons of oil and one billion cubic meters of gas per year. It spent R34.4bn ($1.12bn) for the development of the field from 2004 to 2009. The Yuri Korchagin fields have 30 wells out of which 26 are functional (Offshore Technology)[6]. The field has a thick ice covering but the extensive geological survey made it functional and producible. LUKOIL is actively doing extraction and production in the field (Lukoil)[7].

Map 2.3 Rakushechnoye, korchagin and Filanovskiy hydrocarbon field in the Russian sector of the Caspian Sea region

Source: Kuvykin Field taking form in Russian Sector of North Caspian Sea, [Online: web] Accessed 5 March 2016, URL: https://subseaworldnews.com/2014/01/27/kuvykin-field-taking-form-in-russian-sector-of-north-caspian-sea/

The above map shows the hydrocarbon resources of the Russian part of the Caspian Sea region. It shows the Rakushechnoye hydrocarbon Field, Korchagin hydrocarbon Field, Filanovskiy hydrocarbon Field, Kuvykin hydrocarbon Field and Khvalynskoye hydrocarbon Field.

The V. Filanovsky Field is located 190 km off Astrakhan at depths between 7 and 11 meters. This is one of the largest offshore oil fields of Russia discovered in 2005. It

[6] *Offshore Technology "Yuri Korchagin Field, Caspian Sea", [Online: web] Accessed on 5 February 2016, URL: Https://Www.Offshore-Technology.Com/Projects/Yurioffshoreoilfield/ Offshore Technology.

[7]*Lukoil, "YuriKorchagin field", [Online: web] Accessed on 27 January 2016, URL: Http://Www.Lukoil.Com/Business/Upstream/Keyprojects/Korchaginfield.

has 129 million tons and 30 bcm of recoverable reserves of oil and gas respectively. Commercial production started in October 31, 2016 with the construction of Phase 1 of the field. The field produces high-quality light low sulphur oil. The hydrocarbon resources of this field are transported via a pipeline that is run by the Caspian Pipeline Consortium (Lukoil).

The Yuri S. Kuvykin is a gas condensate field and is located in the northern part of the Caspian Sea. LUKOIL and Ramboll are developing the field. The Kuvykin Field is inflicted by strong ice conditions in winter seasons and for that a very high technology is needed to extract the hydrocarbons. The field is strategically very important to the Russian Federation and is closely watched by the Government of Russia (Ramboll)[8].

The Severo-Stavropolskoye Natural Gas Field- The oil and gas industry of Stavropol began in the 1950s and gave a great boost to the development of the natural gas transmission system in the country. The field was an initial point of the Stavropol-Moscow gas trunk line and delivered gas from Stavropol to Moscow in December 1956. In 1959, Stavropol gas was supplied to Leningrad, Caucasus, and Transcaucasia (Gazprom)[9]. The oil production started in 1953, in the Ozek-Suat Field which is in the eastern part of the territory. Five years later, development began on the enormous Velichayevsko-Kolodeznoye Field. The production of natural gas in the field started at the same time as its oil production. In 1979, the North Stavropolskoye Gas Field was transformed into a subsurface gas reservoir. It is now the largest such facility in Europe, with a net storage volume of 25 billion m^3. The first 50 kilometers of the Blue Stream Transnational Gas Pipeline was laid over Stavropol land. Stavropol now has more than 60 hydrocarbon fields and produces one million tons of oil and 380 million m^3 of natural gas annually (Oil of Russia 2011: 3).

Chechnya has been one of the oldest oil-producing regions in Russia and many travelers' accounts have mentioned so. Prior to the establishment of the Soviet

[8] *Ramboll, "The Development of the Kuvykin Field", [Online: web] Accessed on 28 January 2016, URL: Http://Www.Ramboll.Com/Projects/Rog/Development-Of-The-Kuvykin-Field.

[9] *Gazprom "Gazprom Transgaz Stavropol", [Online: web] Accessed on 2 March 2017, URL: Http://Www.Gazprom.Com/About/Subsidiaries/List-Items/Gazprom-Transgaz-Stavropol

government, the oilfields in Chechnya were exploited by the British, Belgian, German, and Chechen and Azeri firms. Russia led small scale home-based oil production in the conquered Chechnya. The first commercial oil production was held in 1893 in the north Grozny suburb of Starye Promysla. The vast oil reserves of the region attracted Hitler to conquer the region during World War II. The refining industry of Grozny peaked in oil production in 1971 with its three refineries, but the production of Chechnya declined when the refineries in Baku with improved facilities took over Chechnya. The Chechnya oil production again reached its zenith at the time of the Soviet Union with a highly developed petroleum industry infrastructure (Vatchagaev 2008: 1).

Combined Hydrocarbon Fields Developed by Russia and Kazakhstan

The Tsentralnoye hydrocarbon field Russia and Kazakhstan jointly develop the Tsentralnoye hydrocarbon field. It was discovered in 2008 and is located 150 kilometers from Makhachkala in the north Caspian Sea. TsentrCaspneftegaz, a Gazprom's subsidiary, and LUKOIL undertake development activities for Russia and KazMunayGas undertake the development of Kazakhstan side. Gazprom has a 25 percent stake in the project (Gazprom 2017: 1).

The Imashevskoye hydrocarbon field is located 60 kilometers northeast of Astrakhan and 250 kilometers southwest of Atyrau. Russia and Kazakhstan in 2010 signed an agreement to jointly carry out the geological surveys and explore the field. Gazprom and KazMunayGas, the National Company undertakes the development activities in the field. KazRosGas is the field operator (Gazprom 2017: 1).

Map 2.4: The maps shows the joint venture of Russia and Kazakhstan in the Tsentralnoye hydrocarbon field and Imashevskoye hydrocarbon field

Source: Russia and Kazakhstan are preparing the Tsentralnoye hydrocarbon field and Imashevskoye hydrocarbon field, Gazprom, [Online: web] Accessed 6 January 2018, URL: http://www.gazprom.com/about/production/projects/deposits/kazakhstan/

The map shows the jointly developed Tsentralnoye Hydrocarbon Field and Imashevskoye Hydrocarbon Field by Russia and Kazakhstan in the Northern Caspian Sea.

Energy Profile in Caspian Region of Kazakhstan

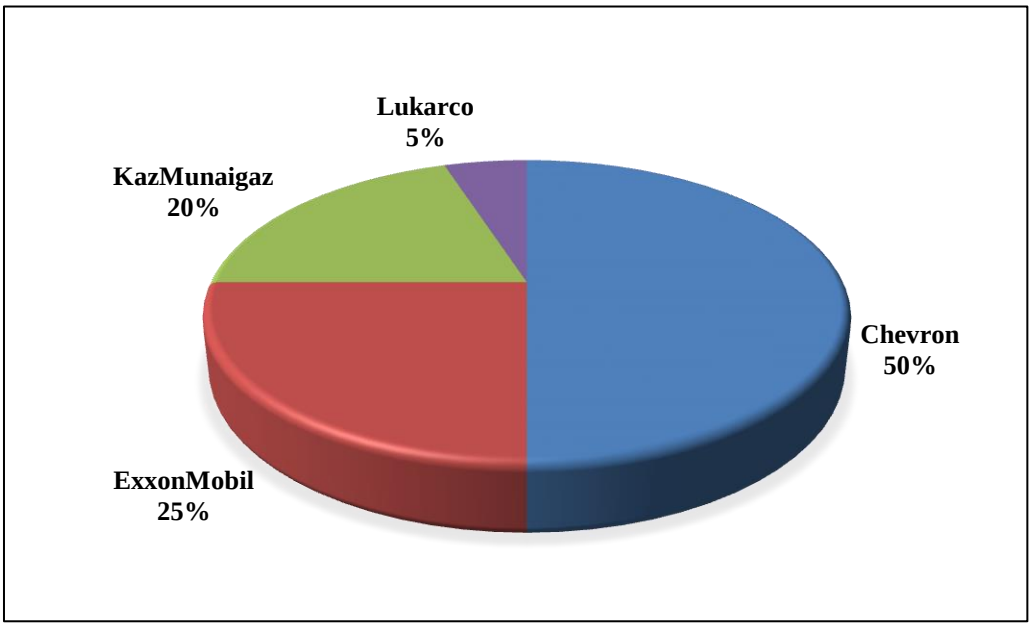
Kazakhstan has proved crude oil reserves of 30 billion barrels as of January 2018, and the 2nd-largest endowment in Eurasia after Russia and ranks 12th largest in the world (U.S. Energy Information Administration 2019: 2). SCR (State Committee on Resources) estimated that Kazakhstan has 32.8 billion barrels of onshore crude oil and 3.0 trillion m^3 of natural gas. According to the Ministry of Energy and Mineral Resources of the Republic of Kazakhstan, the Caspian sector of the country contains more than 60 billion barrels of standard fuel. The Emba and Mangyshlak basins have 14 major oil fields. The Tengiz hydrocarbon field, which lies in the northeast Caspian Sea, was opened in 1979 with the geological reserves of 4.9 billion tons and the recoverable oil reserves of over 1.437 billion tons. It is operated by TengizChevroil (TCO). The Caspian Sea shelf has an area of more than 100,000 km^2 which has hydrocarbon resources. By the mid-1990s about 7 percent of the sea shelf was

explored (Zhiltsov et al. 2015: 45). Another important field is Kashagan which was discovered in 2000 and is considered to be the biggest oil discovery outside West Asia. It has approximately 13 billion barrels of oil and has a substantial amount of natural gas deposits. The field is operated by ENI under the consortium named Agip Kazakhstan North Caspian Operating Company (Agip KCO). The oil field development in Kazakhstan reached two milestones in 2016. After several years of delays, the Kashagan Field restarted its production (U.S Energy Information Administration 2019: 12).

The Tengiz field is the largest oilfield in Kazakhstan and one of the largest and deepest oilfields in the world. It lies in the west part of the country and was discovered in 1979 (Levit 2016: 1). Korolev is another hydrocarbon field located near the Tengiz Field and is able to meet the annual oil demand of the country. Both the fields are operated by Tengizchevroil (TCO). Chevron holds a 50 percent interest in Tengizchevroil (Chevron)[10]. Kazakhstan official figure stated that the Tengiz and Korolevskoye Fields have 526-570 bcm and 16-29 bcm of proven gas reserves respectively. Sulphur impurities were a problem before 2000 but solved afterwards with the improved facilities. The field produces large volumes of oil and high quality of dry gas and LPG. It ~~is~~ produces approximately 2500 tonnes/day of LPG and 2.5 bcm of gas annually. TCO gross gas production in 2006 increased and reached almost 7 bcm, and half of the production, that is, 3.5 bcm was exported to Europe via the Central Asia-Centre pipeline (Yenikeyeff 2008: 26). The TengizChevrOil is a joint venture between Chevron (50 percent), ExxonMobil (25 percent), KazMunaiGaz (20 percent) and LukOil's subsidiary LukArco (5 percent). Oil production in 2015 amounted to 27.16 million tons. The improved refinery infrastructure has enabled the country to curb oil product imports after the disintegration of the Soviet (Levit 2016: 3).

[10] *Chevron, [Online: web] Accessed on 5 march 2018, URL: Https://Www.Chevron.Com/Projects/Tengiz-ExpansionOffshoreTechnology

Pie Chart 2.1 Share of TengizChevrOil Joint venture



Source: Levit (2016).

The pie chart shows the joint venture TengizChevrOil between Chevron (50 percent), ExxonMobil (25 percent), KazMunaiGaz (20 percent) and LukOil's subsidiary LukArco (5 percent).

Map 2.5: The maps shows Korolev Field and Tengiz Field.

Source: business overview, supersizing the output of a supergiant field, 'Tengiz Expansion, [Online: web] Accessed on 28 June 2018, URL: https://www.chevron.com/projects/tengiz-expansion

The above map shows the Tengiz field and Korolev hydrocarbon field in the Caspian Sector of Kazakhstan.

The Kashagan Hydrocarbon Field is the largest oil field discovered in the last three decades. The reserves are located in the deep about 4.5 kilometers below the sea surface. The estimate of geologists that about 13 billion barrels of oil and gas are recoverable but large quantities of hydrogen sulfide, a toxic gas is mixed with the natural gas. The high temperatures around the northern Caspian Sea range from -40 degrees Celsius in winter to 40 degrees Celsius in the summer which makes the hydrocarbon field difficult to drill. Again, the frigid winters and shallow water make this part of the sea particularly prone to freeze in winter. The thick layers of ice are building up around Kashagan for five months in a year, again posing a challenge to drill the field. Despite the investment in Kashagan, companies have struggled to get the oil and gas to market. After more than two decades of construction, operators had to shut the facility down in 2013 because of leakage in the pipeline (Nasa Earth Observatory 2015: 2). The Kashagan Hydrocarbon Field has a considerable amount of oil and natural gas, but the harsh climatic condition makes it tough to drill. The consortium developing the Kashagan is comprised of Eni, Shell, ExxonMobil and Total (each with a 16.8 percent stake); KazMunaiGaz (KMG) with a 16.87 percent stake; as well as China National Petroleum Corporation (CNCP, 8.33 percent) and Japan's Inpex (7.5 percent) (Hays 2016: 3).

The Rakushechnoye Hydrocarbon Field is located in the Mangyshlak Peninsula of western Kazakhstan. It is 15 kilometers away from the Caspian Sea and 105 km southeast of Aktau. The geographical positioning of the field is very lucrative as it is 120 km from Aktau Port (Sumatec)[11]. It was discovered in 1973 and production started in 1978 but halted in 1998. Again in January 2014 the field started producing with the capacity of 150 barrels of oil per day. It contains 331.67 million barrels proven oil (Hydrocarbons Technology)[12].

[11] *"Overview of Kazakhstan Operations: Rakushechnoye Field" Sumatec , [Online: web] Accessed 15 August 2017, URL: Http://Www.Sumatec.Com/Operation-Kazakhstan.Php.

[12] "Rakushechnoye (Shelly) Oil And Gas Field" Hydrocarbon Technology Https://Www.Hydrocarbons-Technology.Com/Projects/Rakushechnoye-Shelly-Oil-And-Gas-Field/

Zhanazhol Field is located in northwest Kazakhstan and deposit is found at a depth of 1.9 to 3.6 kms. It is a gas condensate field near the Aktobe region. The field was discovered in 1960 and has been producing since 1978 (nrgEDGE)[13].

Energy Profile in Caspian region of Turkmenistan

Turkmenistan has huge deposits of oil and natural gas reserves (U.S. Energy Information Administration 2016: 1). It has proven gas reserves estimated to be approximately 17.5 trillion cubic meters which accounts for 9.3 percent of the proven global reserves. The country ranks fourth in the natural gas reservoir after Iran, Russia, and Qatar. The national gas company of Turkmenistan, TurkmenGaz is the largest gas producer of the country (Mammadov 2015: 2). Almost 12 percent of the total gas production comes from the Caspian region and has liquid hydrocarbons of estimated 1.1 billion barrels and natural gas of estimated 255 bcm (U.S. Energy Information Administration 2013: 9). It has 32 contract areas out of which four are operated by foreign companies. Petronas, a Malaysian firm is the oldest investor in the offshore zone of Turkmenistan (Former Soviet Union Oil and Gas Monitor 2017: 2). By the explored hydrocarbon resources, Turkmenistan is the second after Russia in the post-Soviet space. Prior to the arrival of the oil epoch, the people of Turkmenistan produced oil by digging pits and supplied it to Persia present day Iran and Astrakhan. "The Russian officers during the 19th century called the region "Black California" because of the occurrence of oil near to the ground surface".

The Cheleken Peninsula in Turkmenistan is rich in energy deposits; it produced 208,000 tons of oil during the period of 1911-1912 (Zhiltsov et al. 2015: 46). Turkmenistan with the assistance of foreign companies has discovered more than 125 new oil and gas from 1990-2000. At present, the gas fields in western Turkmenistan can produce more than 15 Billion Cubic metre per year. Cheleken peninsula in the western part of country produces almost 90 percent of the total gas production of Turkmenistan. The Korpedzhe onshore oil and gas field was discovered in June 1995. It is located near the border of Iran. The field also exports gas to Iran. If the

[13] *Nrgedge, [online: web] Accessed on 16 September 208, URL: Https://Www.Nrgedge.Net/Project/Zhanazhol-Field

Turkmenistan gas pipeline via Iran would have realized then this hydrocarbon field would have supplied gas to Europe (Shammas and Nagata 2000: 532-533).

The Garashyzlyk Hydrocarbon Field is an offshore oil-producing field in the Caspian Sea region of Turkmenistan. Dzheitune (Lam) and Dzhygalybeg (Zhdanov) is the other two hydrocarbon fields which lie in the western part of the Cheleken Bay. The field lies between 8 m and 42 m and is spread over the area of 950km². The region between the Apsheron Peninsula of Azerbaijan and the Cheleken Peninsula of Turkmenistan has a notable amount of hydrocarbon deposits. The first well in the Dzheitune (Lam) Hydrocarbon Field was drilled in 1967 and till date, more than 100 fields are drilled. The production in the field was commenced in 1978. The first well in the Dzhygalybeg (Zhdanov) Field was drilled in 1996 and the production was commenced in 1972 (Offshore Technology)[14].

Energy Profile in Caspian Region of Azerbaijan

The history of oil production in Azerbaijan dates backs to centuries. The Arabian traveler, Marudee reported in the 10th century that both black and white oils were being extracted in Baku. The Italian traveler, Marco Polo while travelling through Baku saw people using oil for medicinal and religious purposes. Baku exported oil to the Middle East in the 14th century. However, large-scale commercialization of oil did not occur until the mid 19th century, when the world's first oil well was drilled near Baku in 1846 at Bibi-Aybat (Barnes and Briggs 2003: 3). The 15th century inscription showed that the first oilman was Allah Jaz. The owner of the land did not dig the oil himself but leases the property to an unnamed tenant (LeVine 2007: 5). Even after having vast and easily exploitable oil fields, the oil industry of Baku was not able to develop because of difficulties to transport oil to the market. The transportation of oil at that time was expensive and difficult. But, the problem of oil industry changed when the Nobel family in Norway took interest in the oil industry of Baku. The Nobel brothers, Robert Nobel and Ludwig Nobel established the Nobel Brothers Oil Extracting Partnership in 1873 and carried out the extraction and transportation of the

[14] *Offshore Technology Cheleken Contract Area Development", Caspian Sea [Online: web] Accessed on 15 March 2017, URL: Https://Www.Offshore-Technology.Com/Projects/Cheleken-Contract-Area-Development-Caspian-Sea.

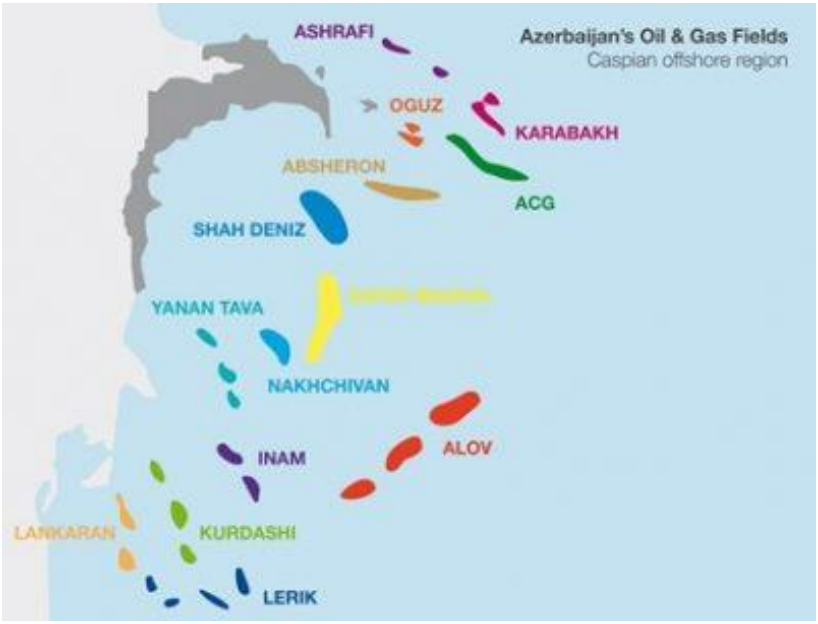
oil successfully. The Rothschild Company and Shell also played an important role in the oil industry by further contributing to innovations in oil transportation. A railway line was constructed in 1880, connecting Baku to its outlying oilfields. This railway was extended to the Georgian capital of Tbilisi in 1883. The Baku-Batumi pipeline was constructed between 1897 and 1907 (Barnes and Briggs 2003: 3-4). The contribution of the Nobel family and the Rothschild family is immense in the development of the oil industry of Azerbaijan. They developed several modern equipments such as tankers, pipelines and refining (Adams 1999: 12-13).

Soon, after the advent of the 19th century Baku enjoyed the first international oil boom in terms of production. The oil industry moved offshore in 1950. In 1994 the third oil boom occurred in Azerbaijan. The AIOC is a new international oil consortium which deals with strong alignment between the investing foreign oil companies and the Azerbaijani government (Adams 1999: 12-13). The first paraffin factory of the world was started in Azerbaijan in 1823. Neft Dashlary, the first offshore oil field of the Caspian Sea was set up in 1951 and is still functional. The Caspian Sea region of the country has the largest hydrocarbon deposits and the Azeri-Chirag-Gunashli (ACG) is the largest field (Azerbaijan Energy Information Administration 2013: 12). The State Oil Company of Azerbaijan Republic (SOCAR) is a public entity which deals with the exploration, production, processing, transportation of oil and gas in the domestic and international markets (Socar). In the 1970s-1980s Azerbaijan proceeded with oil exploration and production in the Caspian at depths 30-40 m. "The Gyuneshli Field was discovered in 1979, Chirag in 1985 and Azeri in 1988 and Kyapaz in 1989. Their reserves were evaluated to be 700 million tons of oil and 200 mcm of natural gas. Azerbaijan made public the information in 1999, about the availability of enormous reserves of natural gas (from 700 bcm to 1 TCM) and gas condensate (250 million tons) in the Shah Deniz shelf area" (Zhiltsov et al. 2015: 44).

The Azeri-Chirag-Deepwater Gunashli (ACG) Field was discovered in 1970s. It is 120 meters beneath the water and located 120 km east of Baku. It is the largest oilfield in the Azerbaijan sector of the Caspian Sea. A sophisticated web of subsea pipelines was laid in the Caspian Sea to transport oil from the offshore to the Sangachal terminal in Baku (BP Azerbaijan). Chirag has been producing oil since 1997 as part of the Early Oil Project. BP (British Petroleum) and Ramco and US (Amoco, Unocol, Penzoil)

dominated the contract. Eventually, the signing of the 'Contract of the Century' in 1994 brought these actors into an alliance with the Azerbaijan International Operating Company. A consortium of eleven corporations including BP, Amoco, Lukoil of Russia and State Oil Company of Azerbaijan Republic (Socar) carried active Oil production in the region. BP has been the major company to carry out development works in the hydrocarbon field (Marriott and Paluello 2012: 17).

Map 2.6: The maps shows Oil and natural gas deposits of the Caspian sector of Azerbaijan.



Source: - Gas Production in Shah Deniz Falls by 300 Mcm, [Online: web], Accesed on 15 March 2017, URL: http://caspianbarrel.org/en/2017/05/gas-production-in-shah-deniz-falls-by-300-mcm/

The Shah Deniz is an offshore hydrocarbon field situated 100 km southeast of Baku and spread over the area of 860 square kilometers. The first phase of the hydrocarbon field was initiated in 2006. Presently, it is producing 200,000 barrels of oil every day. In 2013, the second phase was sanctioned. "The field is operated by BP (28.83 percent), SOCAR (16.67 percent), Statoil (15.5 percent), Total (10 percent), Lukoil (10 percent), Nico (10 percent) and TPAO (9 percent) (Total Press release: 2014). The transnational gas deal is an important step in the creation of a Southern Energy Corridor which will deliver gas from the offshore Shah Deniz II field to Europe. The main shareholders in the Shah Deniz II Field will be BP (28.8 percent), SOCAR (16.7 percent), Statoil (15.5 percent), Total (10 percent), Lukoil (10 percent), Iran's NICO (10 percent), and Turkey's TPAO (9 percent)". Exports of natural gas to Europe

started in 2006 and the western route was preferred which crosses through Georgia and Turkey. In 2007, the Shah Deniz Deep was discovered under the Shah Deniz Field. Azerbaijan signed several agreements with Turkey and the European Union between 2008 and 2013 (The business year: 2014). The Sangachal Terminal that is spread over the area of 542 hectares is an important link between international oil markets and Azerbaijan. The terminal processes 1.2 million barrels of oil every day (bbl/d) and 41.5 million cubic meters (mcm) of gas per day (the business year 2014: 2-3).

Disputed field called Kapaz by Azerbaijan and Serdar by Turkmenistan The oilfield has been a bone of contention between Azerbaijan and Turkmenistan. The hydrocarbon field was discovered by Azerbaijan in 1959. The drilling in the field was started in 1986. Kapaz/Serder contains up to 80 mln tons of oil and 32 bcm of natural gas. Turkmenistan opposed the Azerbaijani ownership of Kapaz. Because of this issue, the hydrocarbon field was not functional and not developed like other hydrocarbon fields. In 2008, both the countries signed an agreement to abort exploration activities in the field, until a favorable solution (U.S Energy International Administration 2013).

Energy Profile of the Caspian Region of Iran

Iran has vast reserves of proven oil and natural gas. It ranks fourth in oil and second in natural gas reserves in the world. The Caspian sector of Iran has small hydrocarbon deposits and most of the country's hydrocarbon deposits are found between the ridges of the Zagros Mountain Range and the Persian Gulf (Hults et al. 2012: 237). Iran commenced its first exploration project in February 1996 in the Caspian (Khouei 2000: 78). The hydrocarbon deposits are situated in the deep sea basins which are difficult to extract and needs advanced technology (Mousavi M 2013: 161).

The **Sardar-e-jangal** is the only hydrocarbon field in the Iranian sector of the Caspian Sea. It was discovered in 2002. The gas field is in 700 meters water depth off the shore of the northern province of Gilan. It contains nearly 50 trillion cubic feet of proven natural gas. The field is estimated to hold two billion barrels of quality crude out of which 25 percent of the deposit is recoverable. The country is optimistic about

the hydrocarbon reserves in the Caspian region and seeks for foreign technical assistance to extract the deep water hydrocarbon resources (Iran Petroleum 2013: 9).

There are seven operational **crude oil refineries** in the Caspian Sea region. Majority of the refineries are situated within the range of 100 miles of the Caspian Sea coast. Turkmenistan and Azerbaijan both have two refineries each. Russia, Iran, and Kazakhstan have one refinery each. Azerbaijan has the biggest refining capacity in the region. Its refineries are located in the vicinity of Baku. The Dagestan Oil operates a small refinery in Makhachkala. Both the refineries of Turkmenistan are capable of processing most of the country's annual crude. Iran has no oil refinery in the Caspian region because it does not produce much oil in the Caspian Sea. Most of the Caspian crude is refined in the NIOC Tehran. But, the country is considering constructing a refinery in Neka (U.S. Energy Information Administration 2013: 13).

Table 2.3: Crude oil processing in Caspian Sea Region

	Operating refineries	**<100 miles from Caspian sea**	**Crude capacity (1,000 bbl/d)**	**<100 miles from Caspian sea**
Country	**Total**		**Total**	
Russia	40	1	5500	4
Kazakhstan	3	1	345	104
Turkmenistan	2	2	237	237
Azerbaijan	2	2	399	399
Iran	9	1	1451	220
TOTAL	56	**7**	7932	964

Source: Eia, US Energy Information Administration (2013), Caspian Sea region, Eia, [online web] Accessed 20 May 2016, URL: https://www.eia.gov/beta/international/analysis_includes/regions_of_interest/Caspian_Sea/caspian_sea.pdf

The above table gives country-wise data of a number of oil refineries in the Caspian Sea region.

The Caspian littoral states have **seven operational gas processing plants**. "Rosneft and Lukoil each operate one plant in the North Caucasus. Kazakhstan has three gas processing plants and Azerbaijan has two. The plants process the natural gas obtained from the Caspian hydrocarbon fields. Gazprom also operates a condensate splitter in nearby Astrakhan that takes in condensate from the large gas condensate field north of the city. KazMunaiGas operates Kazakhstan's third largest refinery in Atyrau. Kazakhstan government has considered building additional refineries in the area to service Kashagan" (U.S. Energy Information Administration 2013: 14).

Table 2.4: Natural Gas Processing in Caspian Sea Region

Country	Total	<100 miles from Caspian sea	Major activities
Russia	37	2	Gazprom and LUKOil run gas processing plants for natural gas from the large Astrakhan field and smaller gas fields in the North Caucasus.
Kazakhstan	14	3	TengizChevrOil runs a gas processing plant to pick up associated gas from the Tengiz oil field. Agip KCO of NCOC has been building a processing plant to handle associated gas from Kashagan.
Turkmenistan	2	0	Iranian company, Ramshir is currently building a processing plant for the Korpezhe Field to service the Iranian market.
Azerbaijan	2	2	SOCAR runs gas processing plants for the Caspian Basin fields, including Shah Deniz.
Iran	40	0	No refineries in the Caspian sector of Iran.

Source: Eia, US Energy Information Administration (2013), Caspian Sea region, Eia, [Online: web] Accessed 20 May 2016, URL: https://www.eia.gov/beta/international/analysis_includes/regions_of_interest/Caspian_Sea/caspian_sea.pdf

The table 2.4 shows the Caspian Sea area operating natural gas processing refineries.

The Caspian Sea is rich in oil and natural resources. According to the report of the U.S. Energy Information Administration, the offshore fields contain 19.6 billion bbl which is 41 percent of the total Caspian crude oil and lease condensate and 106 tcf of natural gas i.e., 36 percent of the total Caspian natural gas reservoirs. The region is traditionally oil and natural gas producing region. The Azerbaijan and Kazakhstan are rich in oil and natural gas. Turkmenistan have considerable amount of gas in its Caspian sector. Iran doesn't have much oil and natural gas reserves. Russia has some oil and gas fields. Russia and Kazakhstan share oil and gas field in their Caspian Sea region.

CHAPTER 3

GEOPOLITICS OF THE CASPIAN SEA REGION

The Caspian Sea is an intercontinental, international, transboundary enclosed inland water body (Gusarov et al. 2018: 125). According to H. E. Chehabi the Caspian Sea is a space where several empires, races, and cultures meet such as the Caucasians, Slavs, Turkish, Iranians, and Mongolians. It is home to many religions such as Islam, Christianity, and Buddhism. The distinct geographical space combined with the presence of the vast hydrocarbon resources has exposed the Caspian Sea region to the regional players[15] and global players[16]. The region is positioned in the centre of the Eurasia[17]. The abundance of oil and natural gas has attracted worldwide attention in recent times as never before. In today's energy hunger world, the Caspian Sea plays a major role in supplying energy to the world. However, Caspian Sea region is bestowed with the abundance of oil and natural gas butthere are some contentious issues that revolve around the legality of the Caspian Sea. The legal status of Caspian Sea is not clear. Is it a lake or a Sea? The Caspian littoral states since the disintegration of the Soviet Union were not agreed upon the legal status of the Sea. However, the convention on the legal status of the Caspian Sea that held in Aktau in 2018 delimited the surface water of the Caspian as a Sea but does not determine the seabed which holds maximum hydrocarbon deposits. Is determining the legal status of the surface water of the Caspian Sea is adequate and will resolve conflict? It will lead to conflict in the future and can escalate into military conflict as the majority of the hydrocarbon deposits are present in the Seabed of the Caspian Sea.

Legal Status of the Caspian Basin: A Contentious Geopolitical Factor

After the breakup of the Soviet Union, the geopolitics of the Caspian region changed significantly. Azerbaijan, Kazakhstan, and Turkmenistan were no longer part of the Russian Federation. The large hydrocarbon deposits in the bed of the Caspian Sea

[15]Regional players are Kazakhstan, Turkmenistan, Azerbaijan, Iran, Turkey, Afghanistan, India, Pakistan,
Ukraine, Georgia, and Japan.

[16] Global players are Russia, theUnited States of America (U.S.A), the European Union (EU) and China.

[17] Eurasia is acombined geographical space of Asia and Europe.

witnessed outpouring of foreign investment in the region. The newly independent states having most of the oil and natural gas reserves were quick to form domestic laws, bilateral agreements to delineate the Caspian Sea. The International Oil Companies (IOCs) also wanted to exploit the oil and gas reserves in the serene environment. The legal status of the Caspian Sea is a major contentious issue. The status of the water body as a lake or a sea is a problem. The status of the water body will determine the exploitation rights of resources of the basin. The legal status will also determine the transportation and navigation in the Caspian. A clear legal status will also resolve the interstate conflict which has arisen from the vague legal status of the Caspian Sea (Raczka 2000: 189). The legality of the Caspian Sea is always a matter of great concern for the littoral countries. Sometimes the littoral states have been changing their stand on the status of the Caspian. The Caspian Sea was always considered to be a lake when it was governed by a single regime. During the Soviet period, Russia had great control over the navigation and trade of the Caspian Sea. But, when the power was diffused among several states then it was considered as a sea (Ibid, 197). The countries lack the Caspian wide demarcation and delimitation of the water body. However, these countries have bilateral agreements which deal with the exploration and permission to use the resources (O'Lear 2004: 166).

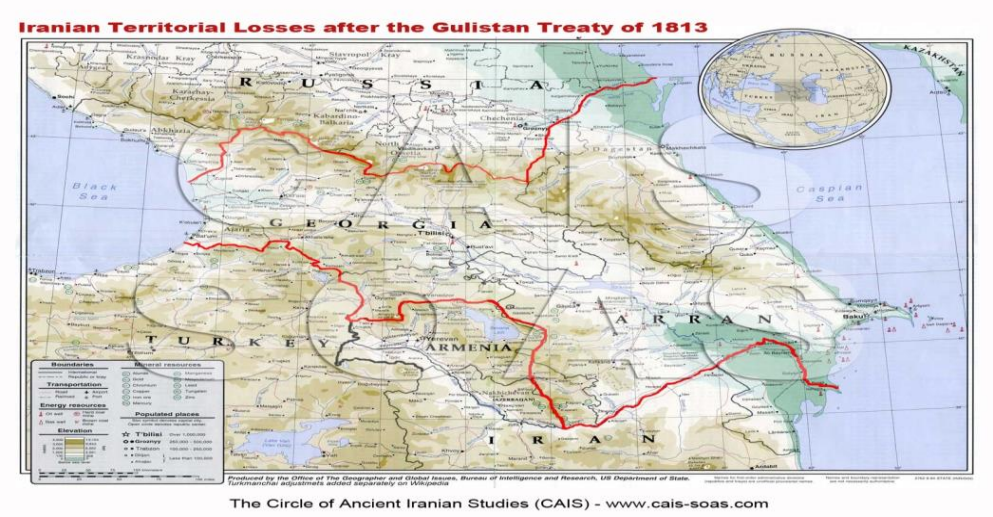
Treaties of the Caspian Sea

There were several treaties in the past three centuries to delimit the Caspian Sea region. Several treaties were signed between the empires of Russia and Persia, between the Soviet Union and Iran. Even at present times there are several treaties, agreements, and conventions to determine the legal status of the Caspian Sea. During the Russian Empire and the Soviet period, Caspian Sea was governed by Russia and Iran. But, after the disintegration of the Soviet Union, three new countries came into existence. The Newly Independent States (NIS) are Azerbaijan, Turkmenistan, and Kazakhstan. The rich oil and natural gas deposits of the Caspian region evoked interest of the NIS countries. They formulated several domestic laws, bilateral treaties and trilateral treaties for the uncomplicated exploitation of the energy resources of the Caspian. Now to consider the legal status of the Caspian Sea was the most important task. However, all the countries gave their theories which were in contrast with other.

The Russian-Persian Treaty of St. Petersburg also known as the treaty of alliance took place in St. Petersburg in 1723. In this treaty present day Iran then known as the West Persia ceded in perpetuity the length of the Caspian Sea to Russia (Mirfendereski 2001: 207). The current geopolitical rivalry among Russia, Iran,and Turkey can be traced back to the historical events which took place during the period of 1721-1723. The imperials powers of Russia, Turkey, and Persia wanted to conquer the Caspian Sea and the Caucasus. Mirza Tahmasp of the Safavid dynasty was confined by the advances of the Afghan and Turkish invaders. Tahmasp sent his envoy, Ismail Beg to request for assisting his kingdom from the rebels and invaders. Russia signed the treaty with Ismail Beg in which the Russian empire under Peter the Great promised to carry out sincere friendship and military assistance to Tahmasp. In return of the assistance and protection, Persia ceded the length of the Caspian Sea to the Russian empire (Mirfendereski 2001: 5-9). This was the treaty which gave a major portion of the Caspian to the imperial Russia.

The Golestan Treaty (1813) is a Peace treaty that was signed by the Russian and Persian Empires in 1813 at Golestan. The treaty ended the Russo-Persian war between the empires which started in 1804. Iran also lost the navigation rights in the Caspian Sea. It was also debarred from deploying its naval forces in the Caspian Sea. The treaty only allowed the Russia military fleet to exercise exclusive rights to station in the Caspian Sea. Iran lost Dagestan, eastern Georgia, northern Armenia and major portions of Azerbaijan to Russia (Rashidvash 2012: 259). This treaty gave absolute power to the Russian Empire in the Caspian Sea as Iran was debarred from navigation and devoid of deploying navy in the Caspian Sea.

Map 3.1: The map shows the ceded region of Iran to Russia after the Golestan Treaty



Sources: Treaty, "The Circle of Ancient Iranian Studies", CAIS Golestan (Gulistan), [Online: Web] Accessed on 11 July 2018, URL:http://www.cais-soas.com/CAIS/Images2/Maps/Gulistan-Treaty.jpg

Turkmanchai Treaty was signed in 1828 by the Persian Empire and the Russian Empire. The Empire of Persia following the Golestan treaty again attacked the Russian Empire to reclaim its lost territory. Before three years of the second Russo-Persian war in 1826, the Persian Empire with the support of the British Empire again attacked the Russian Empire to regain its lost territories to Russia. The second Russo-Persian War continued for two years. The Treaty of Turkmenchai even in the present day Iran is considered as one of the most degrading treaties that has been signed in the history of Iran (Rashidvash 2012: 258-259).The Turkmanchai Treaty did not alter the limitations put on Iran in the Golestan treaty and Iran was devoid of navigation and restricted to keep navy in the Caspian Sea (Tarock 1997: 193).

Treaty of Friendship (1921) was signed between the Russian Socialist Federal Soviet Republic (RSFSR) and Persia on February 26, 1921. The treaty formed the basis of bilateral relations between Russia and Iran. It provided the rights to Iran to develop navy in the southern Caspian Sea which was earlier only exclusive to the Russian Empire. The Port of Anzali and Ashuradeh Islands located in the south-eastern portion of the Caspian were returned to Iran that was taken by the Russian Empire. However, Russia preserved the right to preventive but conditional self-defense in matters relating to the security of the Caspian Sea. Article 5 of the treaty

prohibited Iran and Russia to anchorage or authorize the presence or passage to the force of foreign country, army, organization, individual, or materials that have hostile intentions toward the other state. Article 6 of the treaty gave the right to Soviet Russia to cross into the Persian territory if a third party intervened or seized the Persian territory or use the Persian territory to carry out base operations against Russia. Russia assured Persia that the troops would only deploy to Persia at the time of danger and would be removed from the Persian territory as soon as the danger as removed (Mirfendereski 2001: 175). The treaty marked the land borders in the Caspian Sea. The treaty continued to be the legal status of the Caspian Sea until the disintegration of the Soviet Union (Tarock 1997:193).

Russian-Persian Convention of Establishment, Commerce, and Navigation (ECN Agreement) was signed on 27 October 1931. Article 16 of the agreement stated that only the vessels of Persia and U.S.S.R. can be present in the Caspian Sea. The nationals, commercial and transportation companies of Iran and U.S.S.R. were free to navigate in the entire Caspian with the respective flags of their countries. Article 17 mentioned that the vessels of both the countries were to be treated favourably as it owns vessel. Article 17 (4) preserved a coastal belt of 10 nautical miles to each country to carry out fishing activities. Both the countries were treated equally in the Caspian Sea (Mirfendereski 2001: 139).

The 1935 Treaty between the USSR and Iran and the treaty of Commerce and Navigation in 1940 were similar as both the treaties reserved military and commercial navigation. They, therefore, excluded third states and their nationals from being crew members or port personnel in the sea. Both treaties of 1935 and 1940 granted liberty to carry out fishing activities in the entire Caspian, excluding the 10 mile zone along the other countries coasts (Ghafouri 2008: 86). The Treaty on Trade and Shipping between the USSR and Iran was accomplished on 25 March 1940. Russia and Iran reserved the navigation in the Caspian exclusive for their selves which proves that they were determined to keep the Caspian close entity without any outside influence (Zonn 2015: 78). The treaties of 1935 and 1940 provided Iran and the Soviet Union freedom to fish in the entire Caspian Sea (Janusz 2005: 2). The treaties of 1921 and 1940 vaguely mentioned the oil and gas field explorations,

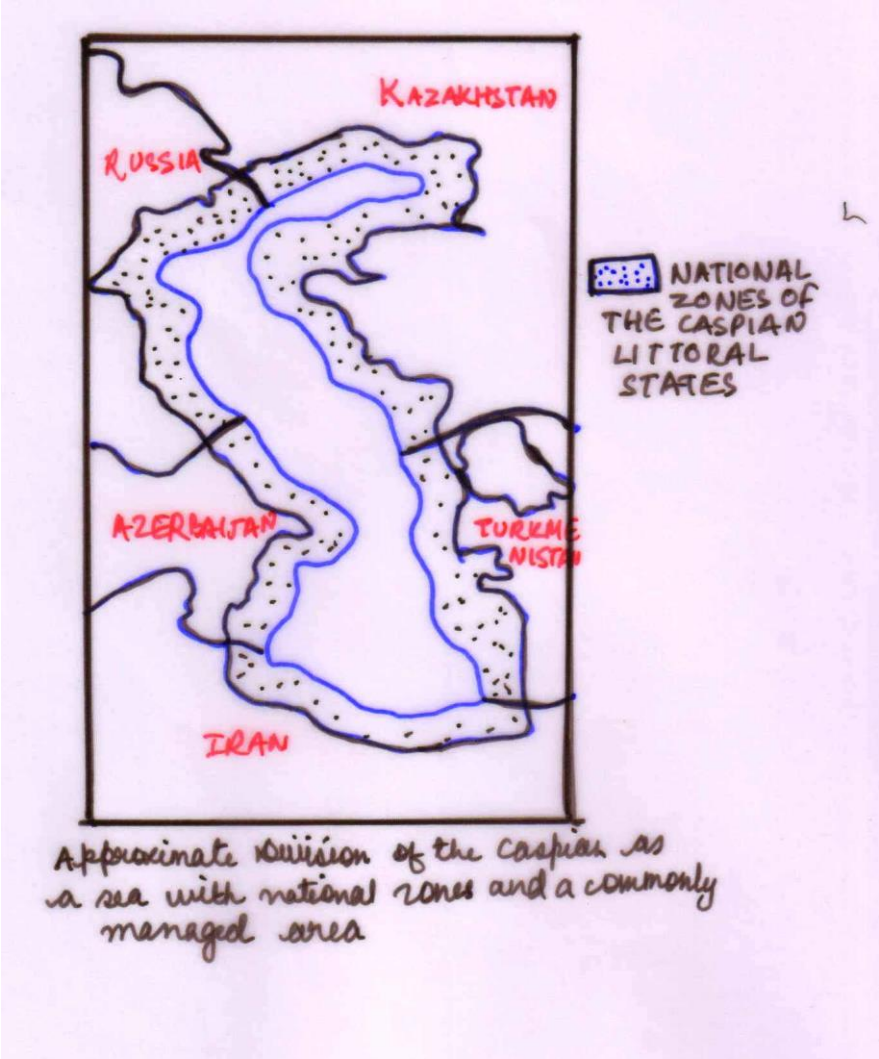
marine scientific research and drilling in the adjacent areas to the coast (Ghafouri 2008: 86).

Framework Convention for the Protection of the Marine Environment of the Caspian Sea was held on 4 November 2003 in Tehran to protect the deteriorating marine environment and to carry sustainable development of the marine environment. The conventions dealt with the need to take measures which will check the land based activities which harm the marine environment of the Caspian Sea. It addressed the need to recognize the significance of cooperation among the contracting parties and with relevant international organizations with the aim to protect and conserve the marine environment of the Caspian Sea (Tehran Convention Article 4).

The Caspian as a sea

The legality of the Caspian Sea is very difficult to determine as it is very complex. The international law is also unable to provide legal framework for the delimitation of the Caspian Sea. The previous treaties which were formulated during the Russian empire and the Soviet period mainly regulated the navigation and fishing rights. The past treaties failed to delimit the seabed utilization. For dividing the hydrocarbon resources the seabed is taken into consideration as the water layer does not govern the division of hydrocarbon resources (Kharbuz 2017: 62). The United Nations Convention on the Law of the Sea (UNCLOS) is not applicable to the landlocked countries of Azerbaijan, Turkmenistan, and Kazakhstan. The UNCLOS is only applicable to the countries which have sea or enclosed sea. The Caspian Sea cannot be categorised as an enclosed sea because the definition of enclosed sea is not suitable to the Caspian Sea. According to the Article 122 of UNCLOS "enclosed or semi-enclosed sea" means a gulf, basin, or sea surrounded by two or more States and connected to another sea or the ocean by a narrow outlet or consisting entirely or primarily of the territorial seas and exclusive economic zones of two or more coastal States. The Caspian Sea does not fit into the definition of the enclosed sea as it is not connected to an ocean by a narrow outlet or natural water reservoir (Abilov 2013: 128).

Map 3.2: National Zones according to United Nations Convention on the Law of the Sea



Source: Shannon O'lear (2004), "Resources and Conflict in the Caspian Sea", *Geopolitics,* 9 (1): 161-186.

The map 3.2 shows the division of Caspian Sea according to the UNCLOS. The littoral countries will get 25 nautical miles from the baseline and the rest of the parts will be shared by all the littoral countries.

The UNCLOS is not binding on the Caspian littoral countries because the convention is ratified and signed only by Russia. Iran has ratified it but not signed the convention. The landlocked countries cannot sign or ratify the convention as they are landlocked. So the UNCLOS is not applicable to the Caspian Sea (Mirfendereski 2001: 192-193). Russia did not accept the articles 15, 73, and 83 of the 1982 UNCLOS. The articles discussed the delimitations of the sea boundary, disputes concerning military

activities which include the military activity carried by the vessels and aircraft of government, and disputes concerning law enforcement activities in regard to the exercise of sovereign rights or jurisdiction. Iran also exempted it from the dispute resolution mechanism of the 1982 UNCLOS (Zimnitskaya and Geldern 2011: 5).

Even if it is categorized as a sea under UNCLOS then each littoral state will receive a territorial sea up to twelve nautical miles and 200 nautical miles of Exclusive Economic Zone (EEZ) and a continental shelf. The width of the Caspian is not 200 nautical miles and the jurisdiction of countries over the Caspian Sea will overlap (U.S Energy Information Administration 2013: 3). The north-south length of the Caspian is 1200 km. The east-west width is 250 km. The claimed or contested or the overlapping region can be regulated by 1958 United Nations Convention on the territorial sea and continental shelf or by the 1982 UNCLOS. The maritime dispute under the 1958 UNCLOS was solved by the International Court of Justice (ICJ). The 1982 UNCLOS gave authority to International Tribunal for the Law of the Sea[18]to settle the differences of the parties. UNCLOS is binding on all states as customary international law. However, interestingly the dispute resolution provision does not have the status of customary law and it is not binding on the states (Zimnitskaya and Geldern 2011: 5). The Newly Independent States delimit and divide the Caspian by bilateral and multilateral agreement.

Article 6 of the 1958 conventions of the United Nations Convention on the territorial sea and continental shelf regulated that if there is overlap in the jurisdiction of the water body then the involved states should discuss the boundary line. If there is no boundary line then a median line can be demarcated as boundary unless another line was justified by special circumstances. Article 15 of the UNCLOS preserved the basis for a territorial sea delimited on the basis of median line, or by negotiation and geometry modified by circumstances in the light of historic title or other special circumstances (Mirfendereski 2001: 191). Article 74 of the UNCLOS, 1982 states that the delimitation of the Exclusive Economic Zone between States with opposite or adjacent coasts shall be effected by agreement on the basis of International Law[19] in

[18]"International Tribunal for the Law of the Sea is the United Nations body with specific expertise in sea law".

[19]"Article 38 of the Statute of the International Court of Justice defines the International law that includes the international conventions, whether general or particular, establishing rules expressly

order to achieve an equitable solution. If no amicable agreement is derived then, the concerned States should cooperate by adhering to existing and making new bilateral, trilateral, or multilateral agreements. The concerned states should cooperate and make temporary provision which is convenient to them. During the transitional period the states were advised to not to jeopardize the reaching of the final agreement. Such arrangements shall be without prejudice to the final delimitation. Where there is an agreement in force between the States concerned, questions relating to the delimitation of the Exclusive Economic Zone shall be determined in accordance with the provisions of that agreement (UNCLOS 1982: 52).

The delimitation of the Caspian is unclear as a sea because the UNCLOS fails to define the high sea. According to the UN convention the definition of the high sea is "all parts of the sea that are not included in the Exclusive Economic Zone, in the territorial sea or in the internal waters of a State, or in the archipelagic waters of an archipelagic State". Article 88 of the UNCLOS states that the high seas shall be reserved for peaceful purposes (UNCLOS 1982: 57). If any territory of the Caspian demarcated as under high will open for all the countries and the Caspian Sea will be fraught with western warships. This is the reason behind strict abhorrence of Russia and Iran to categorize the Caspian as a sea. The legal status of the Caspian as a sea can open the Volga-Don canal of Russia to all the countries, which is not acceptable to Russia. The Caspian as a sea can pull several western countries to keep navy in the region which can further escalate the militarization in the Caspian Sea. The biggest apprehension of Russia is that the delimitation of the Caspian as a sea can lead to active U.S presence in the Caspian Sea region (Zimnitskaya and Geldern 2011: 5). All issues concerning the exploitation of the lake and its resources should be settled and handled within the framework of international contracts and with the participation of all the Caspian Sea littoral states. Russia and Iran put argument that the Caspian Sea is not a sea. As it is not as sea it cannot be delimited under the subject of standard international practice and laws. Russia and Iran pursued the idea that the Caspian is a lake and all the hydrocarbon production must be shared by all the littoral states (Tarock 1997: 194). The consideration of the Caspian as a lake will enable Russia and

recognized by the contesting states, international custom, as evidence of a general practice accepted as law".

Iran to exploit the oil and natural gas of the Caspian Sea region, as it will be shared by all the littoral states.

Russia and Iran considered the Caspian to be a lake (Tarock 1997: 194). But Azerbaijan, Kazakhstan, and Turkmenistan challenged the legal validity of the treaties that were formulated by the Soviet Union and Iran. The treaties that are mentioned under the Vienna Convention on Succession of States (1978) mention that if states agree to follow the treaty after the separation of parts of a state, then it will be applicable. The rights and obligations of the predecessor state and its successors are uniformly obligatory on all. This was affirmed by the Alma-Ata Declaration of 1991, which Kazakhstan, Turkmenistan, and Azerbaijan had to carry out the obligations which got its origin from the treaties and agreements concluded by the U.S.S.R.(Ghafouri 2008: 86). The Vienna Convention on Succession of States (1980) did not bind the NIS to adhere to the treaties that were formed during the Soviet period (Zimnitskaya and Geldern 2011: 6). So, the NIS insists on considering the Caspian as a sea as it will give more shares of oil and natural gas to the countries.

There should be a consensus to determine the Status of the Caspian, but Russia in the past has vehemently discarded the notion of the Caspian as a sea. But, why Russia does not want the Caspian Sea to be a sea? Russia is reluctant to accept the Caspian as a sea because it will lead to internationalization of the Volga-Don canal which connects the Caspian to the Black Sea and the Baltic Sea. Russia did not want the canal to be open for free navigations by all the countries (Abilov 2013: 129). If the foreign countries will use the canal then it can be security threat to Russia and economic loss to Russia. If it will be categorized as a sea then its water will be regulated by the UNCLOS which will open the Caspian for the use of all littoral states and the IOCs (Zimnitskaya and Geldern 2011: 2). The acceptance of the Caspian as a sea can tempt several foreign countries who vie for the oil and natural gas of the Caspian. The foreign involvement in the region was not acceptable to Russia. Boban and Loncar (2016) argued that the delimitation of the Caspian as a lake would have increased its power in the Caspian Sea region. They further asserted that the Condominium approach provided more power to Russia in the region. This lake approach further prevented Turkmenistan and Kazakhstan to utilize the Russian waterways as international waterways and to be dependent upon Russia for exporting

their oil and natural gas to the European markets. The lake approach was designed to make the Newly Independent States (NIS) more dependent on Russia for foreign trade. The opening of Volga-Don canal for trade must have given more access to the NIS especially Kazakhstan to connect with the world markets which will result into the loss of political and economic value of Russia.

The Caspian as a lake

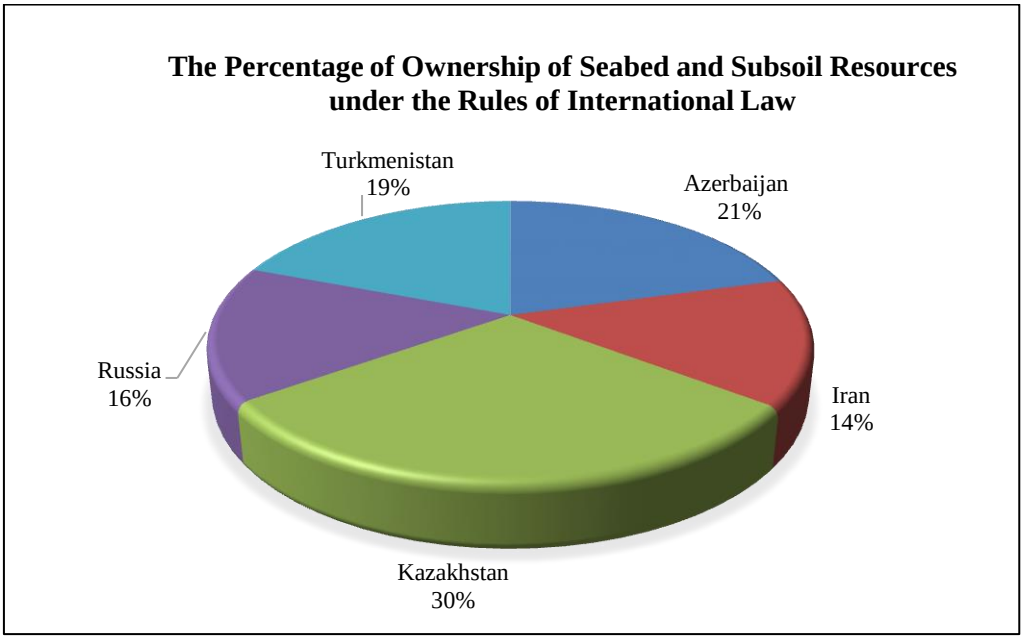
The classification of the Caspian as a lake may be cited from the classical American doctrine of international law[20]. The Caspian can be treated as a lake or an enclosed sea. It can be equally divided among the littoral states. But, the consent of each state is important. The will of the Border States are important when the legal status of the Caspian Sea is determined. The states may decide it to utilize as a common property. They can divide its waters to open and territorial, with limitations or exclusivity of rights of third parties on shipping, fishing, or other types of maritime regimes. Border Lake can be divided by the will of littoral states into the zones of functional jurisdiction in maximum capacity including seabed, waters, subsoil, and airspace (Frappi and Garibov 2004: 35). If the Caspian is considered as a lake then customary international law[21] concerning border lakes would apply (Janusz 2005: 3). All other international waters, i.e. waters bordering on more than one state, are governed by admiralty law[22]. If the Caspian is considered to be a lake then the littoral states are open to form agreements which can govern and utilize the Caspian. The states are free to formulate their individual admiralty laws even if it is not appropriate with other littoral states (Zimnitskaya and Geldern 2011: 3).

[20]The doctrine was formulated with the experience of Great Lakes between the US and Canada.

[21]"Customary international law refers to international obligations arising from established international practices, as opposed to obligations arising from formal written conventions and treaties. Customary international law results from a general and consistent practice of states that they follow from a sense of legal obligation".

[22]"Admiralty law is the combination of domestic maritime law and international law governing the relationships between private entities operating vessels on the oceans".

Pie-chart 3.1: Ownership of Seabed and Subsoil Resources under the Rules of International Law



Source: Haghayeghi, M. (2003), Russia's Regional Role: Conflict or Cooperation the coming of Conflict to the Caspian Sea, *Problems of Post-Communism*, 50(3): 32-41.

Pie-chart 3.1 demarcates the national share of Caspian littoral countries according to the rules of International law. Turkmenistan will get 19 percent of ownership of Seabed and Subsoil resources, Azerbaijan will get 21 percent, Russia will get 16 percent, Iran will get 14 percent and Kazakhstan will get 30 percent of the ownership of Seabed and Subsoil resources of the Caspian Sea.

Azerbaijan is in favour of determining the Caspian as an international or Boundary Lake. Azerbaijan opposed the 1921 and 1940 treaties between the Soviet Union and Iran as it did not deal with hydrocarbon exploitation. It further stated that the treaty was unacceptable to Azerbaijan as it was done between the Soviet Union and Iran and is not applicable to modern day Azerbaijan (Abilov 2013: 131). Azerbaijan put forward the idea to delimit the Caspian as an international or Boundary Lake. The country issued a draft convention on the legal status of the Caspian Sea on 12 October, 1995. The draft mentioned that the Caspian must be divided into sectors on a median line basin. This lake theory was giving Azerbaijan the sovereignty over the seabed, biological resources, navigation, water column, and surface of the Caspian Sea. The lake theory of Azerbaijan was basically formulated to turn the Caspian into

internal or inland waters. The acceptance of the Caspian as a boundary lake or inland lake means that Azerbaijan will have complete jurisdiction over the seabed and the surface water of the Caspian Sea (Mirfenderski 2001: 192). The lake theory of Azerbaijan could have given it the opportunity to carry out hydrocarbon exploitation in its sector of the Caspian Sea without the interruption of other littoral states.

Map 3.3: Division of the Caspian Sea as a lake

Source: Shannon O'lear (2004), "Resources and Conflict in the Caspian Sea", *Geopolitics,* 9 (1): 161-186.

Map 3.3 divides the Caspian Sea into national sectors on the basis of median line approach. Among all the littoral countries Iran will receive less amount of Caspian Sea if Caspian is considered to be a lake.

The Caspian Sea as a Condominium

Another theory to determine the legal status is by using the condominium approach. According to the condominium theory a border sea is jointly governed by all the

coastal states. This approach was proposed by Iran and Russia. It was sporadically supported by Turkmenistan but it kept on changing its position. Russia and Iran claimed that the Caspian should be defined by the Soviet-Iranian treaties of 1921 and 1940. According to the treaties the Caspian was jointly developed by both the countries and there was no division. But in opposition to their present claim the diplomatic notes exchanged by them during the Soviet period always referred the Caspian Sea as the "Soviet-Iranian Sea". Russia in its note to the Secretary General of the United Nations on the legal status of the Caspian Sea shed light for the need for common utilization of the natural resources by all the littoral countries. It further asserted that unilateral actions should be disqualified. Russia further emphasised that it will take appropriate and necessary measures to restore suitable regime of the Caspian Sea. Iran in its letter to the UN Secretary General also opposed the concept of sea for the Caspian as the Soviet-Iranian agreements did not have boundary (Pawletta 2015: 25-26). The condominium principle signifies joint exploration of the oil and natural gas field in the Caspian. However, the Soviet Union and Iran never cooperated to carry out the oil and natural gas production in the Caspian Sea (Abilov 2013: 126). The condominium approach is not acceptable in delimiting the Caspian as Iran never had the equal jurisdiction in the Caspian Sea. Russia and Iran in the Caspian Sea was divided by the Astara-Hassanqoli line.

The preference of Iran to delimit the Caspian as a lake was to expel the U.S from carrying out oilfield exploration and production with the collaboration of Azerbaijan in the Caspian region. The stand of Iran changed in mid 1990s and it demanded the sectoral division of the Caspian Sea. According to the new plan of Iran each littoral country would get 20 percent of the Caspian Sea (Zimnitskaya and Geldern 2011: 3). The Iranian leaders have asserted that it has territorial and treaty rights of 20 percent over the surface area and seabed of the Caspian Sea. But, the sector of Iran is recognized about 12 percent to 14 percent. Deputy Foreign Minister of Iran Ali Ahani has stated that no energy exploitation by bordering countries should take place in disputed parts of the sea. His superior, Foreign Minister Kamal Kharrazi, escalated the rhetoric and declared that no bordering country has the right to exploit the Caspian energy reserves "before a legal status is established for the sea (Cohen 2002: 2).

Astara-Hasankuli line as the boundary of the Soviet Union and Iran

The Astara-Hasankuli line was practiced as an unofficial demarcation line between the Soviet Union and Iran in the Caspian Sea. The official land boundary between theSoviet Union and Iran was drawn in 1956 which connects Astara village of Azerbaijan to Hasankuli village in Turkmenistan. The line was again utilized for demarcating the airspace boundary between Iran and the Soviet Union in 1964 and was heavily guarded by the Soviet Union. The natural resources were also issued according to the line which limits the jurisdiction of Iran in the Southern Caspian Sea. The ministry of oil and gas of the U.S.S.R in 1970 demarcated the Caspian into sectors for the intention to carry out exploration and production. The median line principle given by the international customary law divided the Caspian into sectors. The territory based on an equal distance from the coast of states to the center of the sea until the boundaries meet was given to the republics. The sea basin inside this sectoral division was considered to be the territory of the coastal state. According to this division, Russia gained 64.000 Km^2, Kazakhstan gained 113.000 km^2, both Azerbaijan and Turkmenistan achieved approximately 80.000 km^2 (Abilov 2013: 125-126). In the same year the law on water space established the lines of delineation for suitable competencies between the Republics of the Union which applied the strict notion of territorial delimitation. The Astara-Hassanqoli line was in effect between the Soviet Union and Iran. Iran did not object the delimitation, oil exploitation and internal subdivision made by the U.S.S.R. (Mirfendereski 2001: 173-175).

After the disintegration of the Soviet Union, Russia was reluctant to accept the delimitation of the Caspian Sea which was based on the Astara-Hassanqoli line. If the Soviet Union demarcation was accepted then it could have reduced the territory of Russia which it demanded after the disintegration. Russia demanded for equal but undivided share of the Caspian Sea. The Russian sector has less hydrocarbon deposits as compared to Azerbaijan, Kazakhstan and Turkmenistan. So, Russia wanted to exploit the oil and natural gas resources of the newly independent states by maintaining the undivided share. The proposal was accepted by Iran which also had less oil and natural gas in its sector that is located south of the Astara-Hassanqoli line. According to Moscow the old Soviet delineation was only for administrative divisions and it did not provide jurisdiction over the territory of the Caspian Sea to any of the

republics of the Soviet Union. In proof Russia pointed the September 1989 Azerbaijan SSR constitution which did not mention the ownership of any part of the Caspian. But Baku insisted to retain the old Soviet delineation. During the Soviet period Azerbaijan SSR was entrusted to undertake exploration activities in the offshore deposits of the Caspian as it was proficient in producing oil since the 19th century. Azerbaijan SSR was equipped with modern infrastructure and technology. U.S.S.R and Azerbaijan SSR joint action agreement provided the republics to carry out exploration and production in the Kaverochkin, 26 Baku Commissars, and Promezhutochnoye hydrocarbon fields. When the disintegration of the Soviet Union happened Azerbaijan renamed the three hydrocarbon fields as Chirag, Azeri and Kyapaz respectively (Mirfendereski 2001: 187-188).

The Caspian as a closed Sea

Russia and Iran determined the Caspian Sea as a closed sea. The closed sea is exclusively governed by the littoral states and they are allowed to mutually determine the rights and obligations regarding the utilization of the sea. If there is an absence of a consensual agreement then the concept of high sea will be applicable to the Caspian Sea. The high sea should have given sovereignty over the territorial waters to the littoral states and the central part should have opened for all the countries. But Russia and Iran both supported the concept of the Caspian as a closed sea. This prohibited the foreign powers to enter the Caspian Sea. Iran supported the closed sea doctrine in both in its internal legislation and international level. Iran reaffirmed that the Caspian is a closed sea in 1974 and stated that the closed sea is different from an enclosed sea. According to the international law “closed sea” means a sea that has no connection to the world ocean and is surrounded by two or more states. The closed seas are excluded from the provisions of the Convention of 1982 and thus remain entirely under the exclusive control of the littoral states, which may exercise their sovereignty without any restriction either in the entire sea or its parts (Pawletta 2015: 20-22).

Turkmenistan was the first country to delimit the Caspian after the disintegration of the Soviet Union. Turkmenistan passed law on national borders in 1992. The law established 12 nautical miles from its shore to the Caspian Sea. It regulated some part of the Caspian Sea by the domestic legislation of the country. Turkmenistan again in 1993 enacted a law that established 45 nautical miles of the Exclusive Economic Zone

(EEZ) beyond the territorial sea in the Caspian Sea. It also suggested that middle of the Caspian should be utilized by all the littoral countries. Russia and Azerbaijan signed an agreement on 20 November 1993 on the development of the Azeri and Chirag oil and gas deposits which gave affirmation to Azerbaijan over its national (Mirfendereski 2001: 190-191). The Moscow Conference which was held in October 1994 was very vital in determining the legal status of the Caspian Sea. In the Conference Azerbaijan proposed to convert the Caspian into Boundary Lake with national sectors. The sector would comprise of the ownership of the water column and the seabed. Kazakhstan proposed that the Caspian should be considered to be a close sea with the demarcation of national sectors in compliance with the United Nations Convention on the Law of the Sea. The proposal made by Azerbaijan and Kazakhstan was rejected by Russia (Coote 2017: 17). The demand by both the countries was to insure full legality over the hydrocarbon fields of their Caspian sector.

The status of the Caspian Sea was becoming a concern for all the littoral states. There were several domestic and bilateral agreements to determine the status of the Caspian. The rich oil and natural gas deposits along the bed of their sectors prompted the littoral countries to quickly determine the legal status of the Caspian Sea. They consider their natural interest first as the export of the energy resources could generate revenue to the littoral states which was vital for their national interest. The Caspian littoral countries aimed to determine the legal status and legal regime of the Caspian Sea. So, the joint meeting of the foreign ministries of all the five littoral states developed Draft Caspian Status Convention in a conference which was held in Almaty in May 1995. The convention was established for the continued dialogue to determine the legal status of the Caspian Sea. Again the meeting of the Foreign Ministers of the Caspian littoral states on 12 November 1996 in Ashgabat the principle of consensus was announced as an exclusive way to the approval of all future agreements regarding the Caspian Sea (Pawletta 2015: 38). But again after having agreements the northern Caspian countries delimited their Caspian sectors.

Azerbaijan and Turkmenistan agreed to delimit the Caspian on the basis of the median line. They set up a joint committee of experts to study the delimit process of the Caspian Sea. The first meeting of the group was held in Ashgabat on 5 April, 1998 and the next happened in Baku on March 10, 1998. Russia and Azerbaijan in April

1988 announced that an agreement was reached between them to divide the seabed adjacent to their coasts (Mirfendereski 2001: 195). On 13 May 2002, Kazakhstan and Russia completed an Additional Protocol to the previous treaty. This time the exact coordinates were formulated to delimit their sectors which contained general exploitation provisions of the three oil fields. The Additional Protocol formulated the common use of the water column by Russia and Kazakhstan. The freedom of navigation and pipelines were to be decided under separate bilateral or multilateral agreements. Azerbaijan and Kazakhstan signed a delimitation agreement which is also referred as Agreement between Kazakhstan and Azerbaijan on 29 November 2001. Each point on the middle line is located the same distance away from the nearest points on the coastline, including islands. Again, on 27 February 2003 both the countries completed an additional protocol that delimited the seabed of both the countries along the median line. The treaty was mainly done to exploit the hydrocarbon resources of the sea bed because the water column was left undivided. The last sector of the North Caspian region was delimited between Russia and Azerbaijan on 23 September 2002. It is also referred as the Agreement between Azerbaijan and Russia 2002. The treaty provided the sovereign rights to both the countries to carry exploration and resources management in their sector of seabed and subsoil in the Caspian Sea (Pawletta 2015: 41).

The final arrangement between Russia, Azerbaijan and Kazakhstan determined the junction point of the lines that delimit the seabed and subsoil of the Caspian based on bilateral agreements. It was signed in 2003 in Kazakhstan with the clear definition of the coordinates of the junction (42° 33, 6’ North 49° 53, 3’ East). The agreement divided the northern Caspian Sea in which Russia received 19 percent, Kazakhstan received 29 percent and Azerbaijan received 18-19 percent of the total area of the Caspian Sea (Frappi and Garibov 2004: 37-38). The last treaty to delimit the Northern Caspian was carried by Russia, Azerbaijan and Kazakhstan which is known as Tri-Point-Border Agreement 2003. The delimitation of the Caspian was done by taking the Convergence Point of the adjacent areas of the Caspian Seabed on 14 May 2003 (Pawletta 2015: 41). The treaties were mainly formulated to use the hydrocarbon resources as the agreements are hardly carried to divide the water columns.

The bilateral and trilateral agreements signed by Russia, Azerbaijan, and Kazakhstan in 1997, 1998, and 2001, and between Turkmenistan and Kazakhstan in 2014, have effectively ended any dispute with seabed borders in the northern Caspian. The bilateral and trilateral agreement solved their conflict as there is hardly any conflict after the agreements. The major disputes always occurred in the Southern part of the Caspian Sea (Garibov 2019: 4). But, the bilateral and trilateral agreements among the countries are rejected by Iran. The major reason for the contradiction of Iran is that it considered the status of the Caspian as the Iranian-Soviet treaties of 1921 and 1940 (Pawletta 2015: 41).

Caspian Summits

The first Caspian Sea summit was held in the capital city of Turkmenistan in Ashgabat in April 2002. The then President of Turkmenistan Saparmurat Niyazov hosted the conference. Turkmenistan proposed that each littoral state should be given 15 nautical miles from its shoreline and 25 nautical miles from shoreline for fishing. Iran claimed for 20 percent of the Caspian and condemned the bilateral agreements of Russia with Azerbaijan and Kazakhstan. Niyazov expressed the discontent with the conference as there was no concrete decision regarding the legal status of the Caspian Sea. The proposal made by Turkmenistan was accepted later in the fourth Caspian summit. The second Caspian Sea summit was hosted by Tehran in October 2007. This summit mainly voiced the concerns about the development of the Trans-Caspian pipeline. Russia and Iran opposed the pipeline on the environmental grounds and on the unclear legal status of the Caspian Sea. The Trans-Caspian pipeline if implemented might have rejected the plan of Iran to get 20 percent of the Caspian. The third Caspian Sea summit was held in Baku in November 2010. In this summit the President of Turkmenistan Gurbanguly Berdimuhamedov and the President of Azerbaijan, President Ilham Aliyev agreed that a bilateral deal will be sufficient to build the Trans-Caspian pipeline. There was no concrete and final decision on the development of the legal status of the Caspian Sea (Coote 2017: 19).

The fourth Caspian Summit was held in 2014 in Astrakhan, Russia. The Caspian littoral countries gave consent to establish national sovereignty zone of 15 nautical miles from the coast. It also stated that the states will have sovereignty over the water and the water resources extending further 10 nautical miles from the 15 nautical

miles. The Exclusive Economic Zone was taken from the international maritime law. The major purpose of Russia in the Astrakhan summit was achieved as only the Caspian countries were allowed to exercise military forces in the Caspian Sea (Boban and Loncan 2016: 85).The exercise of navy in the Caspian Sea gave dominant position in the region as it has the largest naval fleet in the region. The fourth submit also blocked the intervention of foreign naval fleet in the Caspian Sea region which further proved to be lucrative for Russia as it can actively be involved in the disputes of the Southern Caspian Sea. The Russian objective in the region is to maintain its power and status quo in the region. Its aim is to thwart the development the U.S backed Trans-Caspian pipeline (Coote 2017: 20).

Map 3.4: The Legal Status of the surface water of Caspian Sea according to the Aktau Convention, 2018

Source: What does the new Caspian Sea agreement mean for the energy markets? , August 17, 2018, Stratfor, https://worldview.stratfor.com/article/what-does-new-caspian-sea-agreement-mean-energy-market

Map 3.4 shows the Legal Status of the surface water of Caspian Sea according to the Aktau Convention, 2018.

Russian Prime Minister Dmitry Medvedev signed a decree on June 21 approving the Draft Convention on the legal status of the Caspian Sea. The article 14 of the draft approves the Caspian littoral countries to lay oil and gas pipelines in the bottom of the Caspian Sea. The consent of the participants through whose sectors the pipeline will pass through is sufficient as no other country needs to approve it. Article 3 of the draft establishes that the Caspian Sea is only open to the armed forces and navy of littoral states and foreign navy or military is prohibited (Garibov 2018: 2). The fifth Caspian summit was held in Akatu, Kazakhstan on 12 August 2018. The summit proved to be extraordinary. The convention classified the surface of the Caspian as a sea which means that each littoral state will control 15 nautical miles and will be exclusive for the mineral exploration and exploitation and 25 nautical miles will be provided for fishing. The rest of the part would be considered neutral waters for the common use. The summit also thwarted the outside navy intervention in the region. This move was lucrative for Russia and Iran which aimed to keep the U.S led NATO military intervention outside the Caspian. The summit did not discuss about the delimitation of the seabed of the Caspian Sea which holds the maximum hydrocarbon deposits. There should be bilateral and multilateral treaties to delimit the Caspian Sea (Stratfor 2018: 3-4). The Aktau convention can be a positive factor in the development of the Trans-Caspian pipelines as only Azerbaijan, Kazakhstan and Turkmenistan need to give approval to build the pipelines.

Serdar/Kyapaz

Azerbaijan and Turkmenistan had strained relationship during the1990s because of dispute over the **Kyapaz/Serdar oilfield** deposit in the Caspian Sea (Gachechiladze 2002: 121). The exploration in the oilfield was started in 1986 by the joint agreement of the Azerbaijan Soviet Socialist Republic and the Union of Soviet Socialist Republics (USSR). Azerbaijan named the hydrocarbon field to be kyapaz and Turkmenistan calls it Serdar. In the first official visit of the President of Azerbaijan to Russia in 1997 Heydar Aliyev signed the protocol to jointly explore and develop the Kyapaz oilfield with the help of the Russian national oil company Lukoil and Rosneft with the State Oil Company of Azerbaijan (SOCAR). The contract signed between the countries made it clear that Moscow has accepted the Azerbaijani claim over the Kyapaz oilfield which was also claimed by Turkmenistan. The involvement of state

owned energy entity (Lukoil) into the agreement made it clear that Azerbaijan has an unrivalled claim over the disputed oilfield. Azerbaijan always involved the oil and natural gas companies of Russia to participate in the exploration and production of the hydrocarbon fields. The decision of Russia to join the exploration of the Kyapaz oilfield gave a latent expression that the northern neighbour of Azerbaijan has accepted its claim over the oilfield (Mehdiyeva 2011: 118).

Map 3.5: Conflict ridden hydrocarbon fields in the Southern Caspian Sea

Source: Coote, B. (2017), The Caspian Sea and Southern Gas Corridor a view from Russia, *Atlantic Council Policy Global energy Centre*, [Online: web] Accessed 26 May 2018, URL:https://www.atlanticcouncil.org/images/publications/Caspian_Sea_and_Southern_Gas_Corridor_web_0427.pdf

Map 3.5 shows the Conflict ridden hydrocarbon fields that are Serder/Kyapaz and Alov in the Southern Caspian Sea.

Turkmenistan claims the oilfield on the equitability and the distance of the oilfield from its Caspian shore. Turkmenistan threatened to take the oilfield dispute to court (Mehdiyeva 2011: 119). The oilfield is 56 nautical miles from the Turkmen coast and 99 miles from the Azeri coast of the Caspian. Turkmenistan opposed to the development of the oilfield. Ashgabat also threatened Moscow to stop exporting gas to its northern neighbour. The President of Russia Boris Yelstin annulled its

participation from the oil deal in the wake of its relation with Turkmenistan. Another reason for the withdrawal of Russia was that Rosneft was no longer participation in the project. The project if carried without Rosneft could have created extra financial burden on the government of Russia. The oilfield is located in the territory of Turkmenistan if the Caspian Sea is divided into the median line. Even the President of Azerbaijan, Heidar Aliyev, stated that the oilfield is located in the border area of the countries if the Caspian was divided according to the median line (Mirfendereski 2001: 194). He gave a proposal to Turkmenistan to develop the field together, but his offer was declined. The relations between the countries deteriorated and the Presidents of both the countries did not meet for a decade. The President of Turkmenistan, Gurbanguly Berdimuhamedov invited Chevron executive to discuss the development of the oilfield (Kharbuz 2017: 62).

The relationship between Azerbaijan and Turkmenistan revamped in 2008 when the President of Turkmenistan visited Azerbaijan in May 2008. Both the countries discussed about joint exploration of the Kyapaz/Serdar hydrocarbon field (Brill 2010: 268). The First Deputy Prime Minister of Azerbaijan, Yagub Eyyubov visited Ashgabat in 2008. In the meeting with the President of Turkmenistan he discussed the development of joint projects in the energy sector. The parties signed an agreement regarding the suspension of any exploration works at the oilfield till the matter is resolved. The tussle between the countries rose when armed patrol boat of Azerbaijan accused Turkmenistan of conducting exploration work in the oilfield. The Azerbaijani Ministry of Foreign Affairs summoned the ambassador of Turkmenistan in Baku, Toyli Komekov and issued a note which accused Turkmenistan of violating 2008 agreement. Azerbaijan confirmed that it will take measures to ensure its sovereignty over the Caspian Sea. But, Turkmenistan confirmed that it was carrying seismic exploration and has nothing to do with Azerbaijan. Ashgabat accused Azerbaijan of the provocations (Foreign policy new: 2012). Azerbaijan again offered Turkmenistan to develop the oilfield. But, the President of Turkmenistan announced that the government will take Azerbaijan to the International Court of Arbitration to resolve this dispute (Kharbuz 2017: 62). If the relation between Baku and Ashgabat will be improved and the project is developed by the cooperation of both the countries then the hydrocarbon field will be linked to Baku and Turkmenistan by a small off-shore pipeline (Brill 2010: 268).

Another major dispute over the ownership of hydrocarbon field is between Iran and Azerbaijan. The **Araz-Alov-Sharg** which is known as **Alborz** in Iran is located 52 nautical miles from Iran. The British Petroleum (BP) Amoco was carrying out exploration activities on behalf of Azerbaijan in the Alov field. Iran opposed the Azerbaijani activities in the hydrocarbon field until the legal regime of the Caspian is not decided. But, Azerbaijan did not listen to Iran. In retaliation Iran also decided to carry out the exploration activities. It formed Khazar Exploration and Production Company (KEPCO) consortium with Lasmoplc, Shell and Weba. There was a protest from Azerbaijan claiming that some of the studies were conducted in the territory of Azerbaijan. There was a continuous tussle between the countries until two military aircraft and warship threatened two Azeri vessels on 23 July 2001. As a result, the BP suspended drilling in the area and the development of the field was frozen. BPAmoco instantly announced its withdrawal from the field and removed its vessels. Iran resumed talks with Petrobras[23] in 2015. Petrobras and Khazar Exploration & Production Company reached an agreement in 2010 to develop the field, but the U.S sanctions on Iran compelled Petrobras to leave the exploration. The visit of Azerbaijani President, Ilham Aliev to Iran made a landmark decision regarding the development of the field. They announced to jointly develop the field on 23 February 2016 (Kharbuz 2017: 66).

Russia proposed a fresh policy to **delimit the Caspian Sea in November 1996**. According to the new proposal each state must have exclusive jurisdiction over an area of 39 nautical miles from its shoreline and the rest of the Caspian must be shared jointly (Asopa 2001: 4). In the new proposal Russia was willing to accept the national sectors and Exclusive Economic Zones within certain limits but beyond that the sea must be under common jurisdiction of all the littoral states. The proposal was signed by Russia, Iran and Turkmenistan. Azerbaijan and Kazakhstan discarded the Russian policy of delimiting the Caspian. The then President of Kazakhstan, Nursultan Nazarbayev stated that the policy will thwart the economic development of the country (İpek 2007: 1183). Azerbaijan and Kazakhstan opposed the Russian policy because most of their oil and natural gas field are located after 15 nautical miles from their respective coast. Both the countries are rich in energy resources and the new

[23]Petrobras is a semi-public Brazilian multinational petroleum corporation.

policy could mean to share their resources. This policy was only formulated to benefit Russia.

Median line approach and problem of Turkmenistan

Turkmenistan has agreed to divide the Caspian Sea using the median line approach. Russia, Azerbaijan and Kazakhstan also support the approach. But the major problem with Turkmenistan is where to draw the line as the disputed Kyapaz/Serdar field lie in the mid of the basin where Azerbaijan and Turkmenistan median line meets. The reason for the claim of the hydrocarbon by Azerbaijan is because of its protruding Absheron Peninsula in the Caspian Sea. If the median line is drawn from the coastline of the peninsula then it will give an edge to Azerbaijan over Turkmenistan. But Turkmenistan insists on measuring the median line from the coastline because it will give an edge to Turkmenistan over Azerbaijan (Rabinowitz et al. 2004: 31-32)

The Russian Federation and the Republic of Kazakhstan signed an Agreement on 6 July 1998 on the Delimitation of the Seabed of the Northern Part of the Caspian Sea. The agreement has also determined the altered median line as one based on the equidistance from negotiated baselines, with exception of several parts that ignore equidistance as a principle due to the islands, geological structures and other issues or geological expenditures (Frappi and Garibov 2004: 37). The major purpose of the delimitation was to exercise their sovereign rights in the exploitation of its subsoil. The President of Russia, Vladimir Putin and the then President of Kazakhstan Nursultan Nazarbayev signed a protocol in May 2002 to divide the three gas fields in the northern Caspian Sea. They divided and shared the Tsentralnoye, Kurmangazy and Khvalynskoye gas fields on an equal basis. The national oil and natural gas companies of Russia that is Lukoil and Gazprom made announcement in 2003 that it will carry out drilling in the Tsentralnoye oil field in 2007. Lukoil, Gazprom with Kazmunaigaz that is the state owned oil and gas Company of Kazakhstan set up a venture, Tsentrkaspneftegaz to carry out the exploration in the Tsentralnoye field (Bahgat 2006: 4-5).

Azerbaijan and Kazakhstan were able to come to an agreement in 2001. They have also signed an agreement on delimitation of the Caspian seabed that stated that the seabed and subsoil of the Caspian ‘sea’ will be delineated between the parties by the

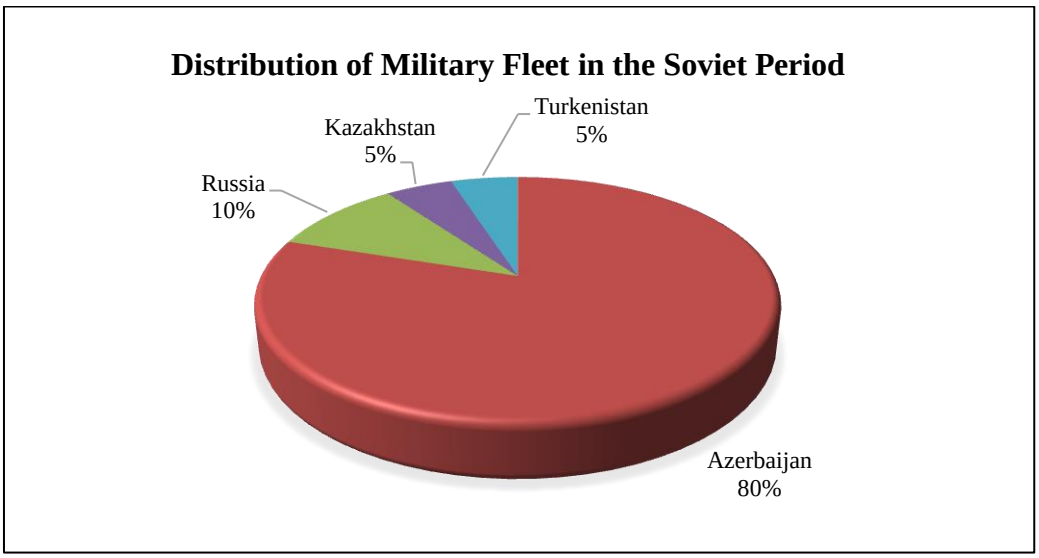
median line based on the equidistance of baselines, islands and coast. Specific coordinates have also been determined (Frappi and Garibov 2004: 37). Following the ratification of these bilateral treaties between Russia, Kazakhstan, and Azerbaijan, the three countries declared that the Northern Caspian was open for business and investment as they had reached a consensus on the legal status of the basin. Russia again in January 2001 signed an agreement with Azerbaijan which was similar to the 1998 agreement with Kazakhstan. Iran and Turkmenistan, however, declared that the agreements between the other three littoral states lack validity and that the Caspian Sea needs a five nation agreement. Moscow and Tehran have continued to adopt conflicting approaches to the legal status of the basin. Indeed, in recent years the Caspian has been the main issue that had strained the Russian-Iranian relations (Bahgat 2006: 4-5).

Militarization in the Caspian Sea Region

The militarization in the region dates backs to centuries during the Tsarist Russian Empire and the Soviet Union. The Soviet Union settled a small military naval base at Astrakhan. Iran was given power to exercise navy in the Russo-Persian treaty of Friendship in 1921. After the disintegration of the Soviet Union, Russia offered a quarter of the Caspian fleet to the Newly Independent Countries. Turkmenistan and Kazakhstan declined the offer and preferred to be operated by the common fleet under the Russian commandment. However, after few years they determined to develop their own naval fleet and infrastructure (Laruelle and Peyrouse 2009: 22-23). The militarization in the Caspian Sea has increased since 2001. The confrontation that erupted between Iran and Azerbaijan over the Araz-Alov-Sharg field escalated the military build-up in the Caspian Sea region. To protect the hydrocarbon fields and its resources the littoral countries increased their expenditure on military and defence equipments. The U.S, Israel and Turkey are also transferring arms to the countries. The arms transfer of the U.S-NATO in the region increased to 4.1 percent by 2000. The 2001 dispute increased the attention of Iran towards the Caspian. The national news agency of Iran on its navy day in 2001 reported that the Iranian navy will deliver Mouj gunboats for patrolling its territorial water in the Caspian Sea. The Iranian Northern Command is in charge of the Caspian naval forces (Katik 2004: 271-272).

Russia being the largest and most technologically advanced is militarily very developed in the Caspian Sea region. Iran comes second to Russia as it has increased its military might in the region. Azerbaijan, Turkmenistan and Kazakhstan are also increasing their naval fleet in the region (Haghayeghi 2003: 36). The Russian fleet contains over 100 ships, minesweepers, patrol boats, combat boats, aerial observation ships, attack boats, missile launchers and hovercrafts (Laruelle and Peyrouse2009: 23). The disintegration of the Soviet Union led to loss of the strategic naval base that was in Baku. During the Soviet period Baku consisted of 80 percent of naval fleet, another 10 percent to Russia and 5 percent each to Turkmenistan and Kazakhstan (Garibov 2014: 46).

Pie-chart 3.2: Distribution of Military Fleet in the Soviet Period



Source: Garibov, A. (2014), "Militarization of the Caspian Sea: Naval Arms Race and Conflicting Interests" in Carlo Frappi and Azad Garibov (eds.) *The Caspian Sea Chessboard Geo-political, Geo-strategic and Geo economic Analysis*, Milan: ISPI.

Pie-chart 3.2 shows thedistribution of Military Fleet in the Soviet Period. Azerbaijan had 80 percent of military because of its geostrategic importance and as a traditional oil bearing region during the Soviet period.

The navy of Azerbaijan was formed soon after the disintegration of the Soviet Union. The priority of the naval fleet of Azerbaijan is to protect its Caspian Sea coast and guard its oil refinery installations (Katik 2004: 274). Azerbaijan has base in Baku and fleets in Lankoran, Sangachal and Sumgayit. Azerbaijan acquired 4 minesweepers, 3

patrol boats and 5 landing ships and the strength of navy reached 3,000 personnel (Garibov 2014: 46).

Kazakhstan determined to build its own naval forces in 1994. Kazakhstan during the Soviet period owned five ports namely Aktau, Kuryk, Atyrau, Bautino and Sogandyk, but none of them were equipped military naval infrastructure. Kazakhstan modernized the Aktau port to hold the new Kazakh fleet but it did not develop any full-fledged marine military infrastructure. Kazakhstan signed military cooperation agreement with Russia in January 1996 which aimed at assisting the development of the maritime force of Kazakhstan. Kazakhstan acquired patrol boats from Germany, the United States, the United Arab Emirates and Turkey during 1990s (Garibov2014: 46). The then President of Kazakhstan, Nursultan Nazarbayev was determined to transform the country into advanced military power and particularly naval power by 2015. The defence minister of Kazakhstan in 2007, Danial Akhmetov announced special financial contributions for the naval forces. The ports of Kuryk, Aktau and Bautino are funded to accommodate various sizes of ships (Laruelle and Peyrouse 2009: 28).

Turkmenistan maintained close cooperation with Moscow in the defense field. It was the last Caspian littoral country to establish its own independent forces. Turkmenistan in 1994 terminated its majority of the military cooperation with Russia. But they were cooperating in guarding the maritime borders till 1999. Turkmenistan had three Caspian ports namely Turkmenbashi, Cheleken and Bekdash. The ports were poorly equipped with naval military infrastructure. Asghabat started to acquire several small size ships in 2000s. A 1970 Point class cutter was provided by the U.S within the framework of bilateral defense cooperation. Kalkan-M and Grif-T class patrol boats were acquired from Ukraine, and seven patrol and destroyer boats were rented from Iran in 2003. Turkmenistan did not have an independent fleet till 2000. Its naval forces were integrated in the border guard (Garibov 2014: 46).

Table 3.1: The naval forces of the littoral states: military personnel and major vessels (above 250 tonnes of full-load displacement FLD* level)

	Azerbaijan	Iran	Kazakhstan	Russia	Turkmenistan
Active personnel	2,200	3000	3000	15000	500
Principal surface combatants (FLD > 1500 tonnes	-	-	-	2 Frigates (Gepard class)	-
Patrol and coastal combatants (FLD between 250-1500 tonnes	1 Corvette (Petya II class) 1Offshore patrol vessel 3 Coastal patrol crafts w/anti-ship missiles 3 Patrol boats	1 Corvette (Mowj class) 3 Coastal patrol crafts w/anti-ship Missiles (other smaller Missiles and artillery boats)	1Coastal patrol craft w/guided missiles 5 Fast patrol Boats 15 Patrol boats	2 patrol crafts w/guided missiles 3 patrol hydrofoils With missiles 1 patrol craft with CIWS or SAM	2 Fast patrol crafts w/guided missiles 4 Coastal patrol crafts w/anti-ship missiles 12 Fast patrol boats 1 Patrol boat
Mine warfare and countermeasure vessels	4 Coastal mine hunters	1 coastal Mine sweepers (a number of other ships)	-	5 coastal Mine sweepers 2 inshore mine hunters	-
Amphibious	3 Landing ships medium 2 Medium landing crafts 1 Landing craft utility	-	-	2 Medium landing crafts 4 Landing crafts utility 5 Landing crafts aircushion (hovercraft)	-

Source: - Frappi C and Garibov A (2004), the Caspian chessboard: geopolitical, geo-strategic and geoeconomic Analysis: Milan.

The Iranian fleet in the Caspian Sea has several ports namely Nowshahr, Bandar-e-Anzali, Babolsar, Neka, and Anzali. The increased western presence in 1994-1995 compelled Iran to strengthen its naval base in Bandar-e-Anzali port of the Caspian

Sea. Iran modernized its Anzali, Nowshahr, Bandar-e Torkman and Babolsar ports. The Caspian naval force of Iran comprised of several divisions or brigades of ships and submarines (Laruelle and Peyrouse 2009: 25).

The initiative taken by the U.S and Russia for creating cooperation in the Caspian Sea region was not very successful. The Caspian Guard was launched by the U.S, but failed to provide any benefits or cooperation. Russia to deter the involvement of the U.S in the Caspian Sea region launched CASFOR. It was only supported by Iran (Garibov 2014: 46-47). The major reason for the cooperation between Iran and Russia was to eliminate the U.S from the Caspian Sea region (O'lear 2004: 167). The presence of the western power in the region also escalated the militarization in the Caspian Sea region. North Atlantic Treaty Organization (NATO) considers the Caspian Sea region to be strategically very important. It focuses on the security of the American companies engaged in the oil and natural gas sector of Azerbaijan and Kazakhstan. It focuses on the security of eastern turkey and the Baku-Tibilis-Ceyhan pipeline and the South Caucasus pipeline. Azerbaijan, Turkmenistan, and Kazakhstan developed close ties with NATO by signing the Partnership for Peace (Laruelle and Peyrouse 2009: 29). The unclear legal status of the Caspian Sea in the past has raised conflicts in the Caspian Sea region. The northern Caspian Sea is delimited by Russia, Azerbaijan and Kazakhstan but the southern Caspian Sea which has contention between Azerbaijan and Turkmenistan, Iran and Azerbaijan has created a major problem. According to the Aktau agreement the surface water is delimited, but the sea bed is still not delimited which can create a problem. The Caspian summit 2014 focused on the demilitarization of the Caspian Sea. But, the step taken by the Russian navy warships in the Caspian Sea to fire missiles at the terrorist organization Islamic State (ISIS) in Syria was in sharp contrast with the Russian policy in the Caspian Sea region. The missile launch showcased the military might of Russia and might have escalated arms race and militarization in the Caspian Sea region (Aliyev and Souleimanov 2015: 3).

The geostrategic location of the Caspian Sea combined with huge oil and natural gas reserves makes the region sought by various regional and global players. Even in the past the great game between the Russian Empire and the British Empire occurred to get control over the region. The great game lasted for two decades. The Caspian

region saw another power vacuum after the disintegration of the Soviet Union. The abundance of energy resources combined with excellent geostrategic location draws the United States of America, the European Union, China, and Turkey to the region. Russia, Iran, Kazakhstan, Turkmenistan and Azerbaijan are actively taking part in the new great game (Iqbal and Afridi 2017: 233-235). Because of the New Great Game the political and economic blocs eventually evolved to vie for influence in the Caspian Sea region. On the one side, there is a loose and unofficial alliance between the U.S, Turkey and Azerbaijan. The main aim of this bloc, especially of the US, is to weaken the influence of Russia in the Caspian Sea region. The power bloc mainly worked towards reorienting the economic interests of the members of the CIS towards the American and other Western investments. The second bloc is an understanding or mutual interest pact among Russia, Armenia and Iran. This triangle, for a variety of political, ethnic, and historical reasons, is aligned against Azerbaijan. Other sets of players not part of these blocs, but influencing the situation in the region, are Britain, France, Italy, China, Spain and Japan. The Russian-Georgian relations are also exceptionally important and complicated by the policies of both the countries regarding the Caspian (Thomas: 2000). The power blocs are influencing each other in the New Great Game at the same time cooperating with each other. The geopolitics of the region is very tangled which has various implications.

Russia objective: Maintain Dominance

Russia is one of the key players in the Caspian Sea region. Its presence in the region for over one and a half century and close historical and cultural ties with newly independent states has determined its leading position in the region. Another factor for the superior position of Russia in the region is the strong military potential. After the disintegration of the Soviet Union, Russia emerged as a largest successor state of the Soviet Union. Its strategic location in the heartland of Eurasia gives it an edge over other players in the geopolitical rivalry. The interests of Russia in the Caspian Sea region are several. Hydrocarbon resources in the area are one of the main factors which drive Russia to get control over the region. Russia is one of the strongest players in the New Great Game. It is arranged in an exceptionally rewarding spot in the core of Eurasia and assumes a great geopolitical role in the region. The rich energy resources in the region are also lucrative for Russia. The huge amount of

hydrocarbon assets is exported by Moscow to the European Union which is extracted in Kazakhstan, Turkmenistan and Azerbaijan. That is the reason Russia is resolved to keep up the central position in the extraction, refining, and exportation of the hydrocarbon assets of the area (Iqbal and Afridi 2017: 236).

In recent times, there has been developing enthusiasm among some western nations in the oil-gas segment of Russia as an extra source of supply other than West Asia. This is because 18-20 percent of the absolute oil consumption of the European Union is met by imports from Russia. For Russia, the European Union is a noteworthy oil goal, representing 50-60 percent of its all-out fares. Political solidity and financial development in Russia under Putin and the change measures embraced to manufacture a market economy, including privatization, appear to have urged a few western nations to search for speculation openings in the oil and gas industry of Russia (Gidadhubli 2003: 2028). The geostrategic setting of Russia is additionally extremely rewarding and even now the Soviet foundation assumes an extraordinary locale in the improvement of the nation. The energy ability and geostrategic setting of Russia in Eurasia make the nation a noteworthy player both regional and international political issues, particularly energy security (Hall and Grant 2009: 119). The monetary flourishing and political spot of Russia in the area is as yet a central point that impacts the geopolitics of the littoral states.

Russia assumes a noteworthy presence in the development of hydrocarbons in the area. The infrastructure builds during the Soviet period plays an important role in Kazakhstan and Turkmenistan. The Soviet infrastructure was even utilized to transit the early oil (Chow and Hendrix 2010: 31). The geographical proximity of Russia to the European nations has given it lucrative position in the geopolitics of the Caspian Sea region. Russia can export its oil and natural gas to the European markets via the Black Sea. The gas export is a vital source of national income of Russia. Another reason Russia has a strong geopolitical hold over the region is the unstable southern region which is fraught with secessionist movements and the Islamic extremism. Russia needs to verify a stable political interior and harmony in the close-by regions. Religious radicalism alongside weapons carrying and medication dealing is viewed as a genuine risk in the region (Iqbal and Afridi 2017: 236). The two southernmost oblasts Rostov and Volgograd shape the southern part of the Russian Federation. It is

helpfully arranged on the briefest conceivable vehicle course among Kazakhstan and Ukraine, which sidesteps the unsteady Caucasus. Moreover, all the routes from Russia pass through the Caucasus region. In this way, all traffic of weapons and drugs and potentially explosives conveyed to or from the North Caucasus must cross either the Rostov or the Volgograd region. Astrakhan, Volgograd, and Rostov additionally control every one of the conduits from the Caspian to the Black Sea and from the Caspian oilfields and Iran northward to Central Russia. Along these lines, Russia put heavy check on the security of its southern region and northern region of the Caspian (Kurilla 2000: 1). It seems that it has an exceptional obligation to cultivate security in the Caspian and Caucasus regions (Hall and Grant 2009: 115-116). Russia has been successful in effectively taking measures to stop the Islamic radicalism in the region.

For Moscow, the Caspian basin is a conventional zone of national interests. The geopolitical factor even more than the economic factor influences the Russian policy towards the region in the1990s. Russia did whatever it takes not to lose further its impact and to keep up geopolitical locales in the basin area, and frequently to the detriment of its monetary advantages. Around then it could not grow full-scale investigation of characteristic recourses because of financial troubles and insufficient infrastructure. It effectively contradicted to the production of global oil consortium with the interest of outside states, since it attempted to avert new Caspian states from growing autonomously their hydrocarbon assets and collaboration with outer powers, especially the US and the EU. During the second phase of the Caspian geopolitical game, the strategy of Moscow changed in an increasingly useful manner. It began to collaborate with other littoral states by advancing commonly valuable ventures in the energy circle. Russia opposed the development of the alternative pipelines to keep its monopoly over the energy flow and infrastructure. The circumstance with firm Russian position in transportation issue has changed in recent years. The danger to lose power over fare courses has pushed Moscow to be increasingly adaptable and thorough with the Caspian littoral states (Kaliyeva 2004: 3). Russia is a significant player in the new great game politics, modifying its strategy when needed by accommodating the augmented presence of the US and China, while simultaneously keeping up its situation as the littoral's most compelling player in the geopolitics of the region (Hall and Grant 2009: 115-116).

Role of Kazakhstan in Caspian Basin's Diplomacy

Kazakhstan is a huge nation which sits in the Eurasian heartland with flanking China, Kyrgyzstan, Turkmenistan, Uzbekistan, the Russian Federation and the Caspian Sea (Energy Sanction Secretariat 2013: 26). It is situated in the geographic vicinity of Iran, Turkey, Afghanistan and the Caucasian republics of Azerbaijan and Georgia. Its huge oil assets have boosted its geopolitical significance for Europe, Russia, the USA, Asia and the West Asia (Yenikeyeff 2008: 12). Brill (2010) argues that the oil reserves are the subject of political infighting and grand geopolitics. The oil consumption is very low in Kazakhstan which gave it excellent opportunity to export its oil reserves. Kazakhstan has accelerated its production in the northern Caspian basin. It sees the advancement of its hydrocarbon assets as a foundation for its financial prosperity. The landlocked position constrains the oil export of Kazakhstan. To export its oil it rely upon the pipeline infrastructure which transit its oil to various destinations. The Kazakh oil development and its flow to the global energy market is feasible. Kazakhstan assumes a significant position in the energy security of China and the Western countries. In the present situation, Kazakhstan is a piece of chessboard in which geopolitical amusements are directed by extraordinary forces like the US, Russia, and China. It has turned into the point of convergence of vital competitions in the twenty-first century (Iseri 2009: 37-38).

Kazakhstan has geographical, historical, ethnic and economic ties with Russia. Russia still assumes a significant backdrop in the international affairs of Kazakhstan. It has kept up a realistic locale in the region. Kazakhstan benefits from exporting oil to the western countries and by taking part in the energy initiative by the U.S. Simultaneously it likewise balances the power of Russia in the region by keeping ties with the western countries. Kazakhstan trades its hydrocarbon assets to China, as it needs energy to fuel up its rapid developing economy (Jafar 2004: 191-192). The American, English, Chinese, Russian, French, Italian, Indonesian, and Dutch oil and gas companies were taking exploration and production in the Kazakhstan sector of the Caspian Ocean (Yenikeyeff 2008: 12). Kazakhstan occupies special position in the exit energy routes determined by the U.S. The western countries also convinced Kazakhstan to export oil through tankers across the Caspian Sea for feeding the BTC pipeline. The U.S aim is to bypass Russia and Iran from the pipeline which exports oil

to the European markets. Kazakhstan plays an important role in the energy security of China (Iseri 2009: 37-38).

Turkmenistan's approach towards Caspian Energy Scramble

Turkmenistan never existed as an independent nation before the foundation of the Soviet rule. The desert region offered an exchange course to Persia, China, India, and Russia and has an incredibly social and noteworthy centrality. The Caspian Sea was not geopolitically vital to the nation until the Tsarist Russia (Canzi 2004: 162). The rich natural gas reserves of the Caspian Sea region of the country make it vital when energy security is considered. The reliance of Turkmenistan on Russia for exporting its gas gives a lucrative position to Russia in comparison with the U.S. The US is additionally motivated to attain the rich gas reserves of the country. Washington consistently campaigned for the realization of the undersea Trans-Caspian gas pipeline through Azerbaijan and Georgia to Turkey. Turkmenistan can have excellent bilateral energy cooperation with Iran as the Islamic republic is trying to reinforce its greater participation in the region (Kaliyeva 2004: 5). The maritime and land border between Iran and Turkmenistan proves to be very lucrative for both the countries. Iran and Turkmenistan are engaged in oil and gas swaps. Iran is a getaway to reach international waters for Turkmenistan. The presence of Turkmen minority in Iran is also another reason for the interest of Turkmenistan in Iran. The countries shared long cultural ties as both the countries were under the Persian Empire (Atai and Azizi 2012: 746-747).

Azerbaijan's Multi-vector Approach in the Caspian Region

Azerbaijan has procured a one of a kind verifiable topography. It is fundamentally situated on the conventional medieval Silk route from East Asia toward the West. Baku has consistently been the door in the Caucasus through which the East reached Europe, through Georgia and the Black Sea. Azerbaijan has been the quintessential borderland. It is a hotspot of such a significant number of societies and developments. It is an adjoining point of Europe and Asia, Islam and Christianity, Russia and the Middle East, Turks and Iranians and Shia and Sunni Moslems. Current political activities are as of now reactivating the idea of this Silk Route as a boosting the regional cooperation (Adams 1999: 12). The country is extensive and interlinked

region of the Black Sea and the Caspian Region. The ruling elites of Azerbaijan have always adhered to the balanced and interest based political decisions. Azerbaijan shares cordial relations with Russia, Turkey, Iran, the U.S, and the EU. From a geopolitical point of view, Azerbaijan is able to achieve economic prosperity and national security. The small state of Caucasus region is able to achieve economic autonomy because of the rich hydrocarbon resources of the Caspian Sea region. The excellent leadership qualities have also given boost to the economic development to the country (Nuriyev 2008: 157).

Oil and geopolitics have been intertwined in the Azerbaijani case, where hydrocarbons have been produced since 1870. Accordingly, the consortia in this nation, which is detached from the real markets, mirror harmony between two power alliances viewing for impact in the Caspian. This nation has the greatest number of global consortia in the Caspian littoral to build up its principle oil and gas territories in the south. The first and biggest consortium is Azerbaijan International Working Co. (AIOC). The other primary consortia are each going for an enormous oil creation infrastructure, with the Shah Deniz gathering and Chevron's Absheron venture to turn into the greatest gas makers in Azerbaijan. Azerbaijan with the help of Baku wants to play an important role in transporting oil and gas from the Caspian to Europe (Shammas and Nagata 2000: 490).

Iran's crippling presence in the region

The remarkable land area of Iran joining the Caspian Sea and the Persian Bay is rewarding and serves it diplomatically (Abolhosseini et al. 2017: 227). The western strategy is one of the fundamental obstacles that keep Iran from building its energy ties with the Central Asian nations and the Caucasus countries. Western nations and organizations do not give the expected costs to ventures that incorporate Iran. They likewise restrict Iran's support in significant energy projects (Efegil and Leonard 2001: 358). The hostile relation of the U.S with Iran has thwarted the energy projects of Iran in the Caspian Sea region (Bahgat 2003: 103). The U.S. sanctions, in particular, the D'Amato Act, has threatened the International Oil and Gas Companies who invest in the energy sector. Iran-Libya Sanctions Act (ILSA) disallows organizations investing more than US$20 million in Iran. The US organization and Congress consider Iran to be a 'rogue state' and try to seclude it. This regulation

methodology implies that the improvement of the Iranian fare courses has to a great extent been solidified since 1996. Practically the majority of the large oil consortium in the Caspian region involves atleast one U.S company which are debarred by the U.S laws from undertaking energy projects in Iran (Jaffe and Manning 1998: 116). The U.S sanctions on Iran have inflicted the energy sector of the country.

The geostrategic positioning of Iran is conducive for the country. The Iranian route can be short and economical as compared to the Turkish and Georgian route. The Bill Clinton administration waived the economic sanctions on the Russian, French and Malaysian firms investing in the oil sector of Iran. The special envoy for the Caspian energy, Richard Morningstar stated the perseverance of the U.S to block the oil and gas firms in investing in Iran. The US sanctions has disabled Turkmenistan, Kazakhstan and Azerbaijan to develop pipeline routes with Iran Caspian (Jaffee and Manning 1998: 116). The sanctions have disabled Iran badly and impacted the energy development and energy sector of Iran (Bahgat 2006: 6-7). Iran plays a significant role in the energy security of India. Iran can play a significant role in transiting the Caspian oil to India by the process of oil swap. The Hormuz chock point which lies in the Persian Gulf can be vital in transporting Caspian oil to South Asian countries. The amicable relation of India with Iran gives the Islamic country leverage over the China or Pakistan route or through the Afghanistan-Pakistan (Koolaee and Kalesar 2010: 90-91). Iran can carry out oil swaps with Turkmenistan. Iran envisioned itself as a main transit the pipeline route after the disintegration of the Soviet Union (Atai and Azizi 2012: 749-750). The extensive pipeline system in the southern Iran and well equipped ports on the Persian Gulf and Sea of Oman can benefit Iran in the geopolitics of the Caspian Sea (Karagiannis 2003: 156-157).

America's Caspian Energy Policy: Promoting Sovereignty and Prosperity

The involvement of the U.S in the Caspian Sea region happened after the disintegration of the Soviet Union. The power vacuum gave opportunity to the U.S to penetrate into the Caspian Sea region. (Deshpande 2010) argues that there were several factors which led to the vigorous U.S presence in the region. The presence of hydrocarbon resources in the Caspian Sea region prompted the U.S to be

geopolitically active in the region. To lower the Russian influence in the region was also one of the objectives of the U.S. as it is against the single dominance in the Caspian Sea region. Another major purpose of the U.S in the region was to stop the terrorist activities in the region. The terror attack on the U.S gave legitimacy to the country to setup military bases in the Central Asian countries. The U.S with Russia and China is one of the major players in the new great game. The U.S policy toward the Caspian littoral has been consistent since the disintegration of the Soviet Union. The major purpose of the U.S is to promote democratic, market oriented reforms in the former republics of the Soviet Union. It is successful in integrating the newly independent states into international political, security and economic institutions. It promotes peace and stability in the region. The U.S worked toward the conflict resolution and non-proliferation of weapons of mass destruction in the region. To promote market oriented economies is one of the major agenda of the U.S which helps it to get the energy resources of the Caspian Sea region. Market economy will facilitate the US economy to grow and at the same time giving hard currency to these newly independent states. The US with the help of Turkey is playing a crucial geopolitical role in the region (Croissant 1997: 354-355).

Energy security is vital to the foreign and domestic policy of the U.S. Almost all the Presidents of the United States of America have focused on the energy security of the country. The Clinton administration focused on the Caspian region and carved two major policies. First objective was to gain the accessibility of the energy resources of the Caspian Sea region. The second objective was to thwart the development of the Russian influence in the region (Page 2004). The inner cabinet of the American President G.W Bush was equipped with the energy experts who focused on the oil and geopolitics (İşeri 2009). Bush stated that the US is addicted to get oil from politically unstable regions of the world. So, he further emphasized on the supply diversification rather than only depending upon Persian Gulf. The President of U.S Barack Obama was also of the same opinion as his predecessor on the subject of the energy supply and security. The US emphasized on the energy diversification after the post cold war period (Raphael and Stokes 2014). The oil shock of 1970's compelled for achieving energy supply diversification. The oil shocks created deep sense of energy insecurity in the country. As the Caspian can play a major role in securing the energy needs of

the country. The direct involvement of the U.S in the Caspian Sea region started with the Contract of the Century (Marriott and Paluello 2012).

The new great game is much more complex than the great game. The new great game has several players who are adamant to take maximum utilization of the energy resources of the Caspian Sea region. U.S, China and Russia works toward limiting each other influence in the heartland of Eurasia. The U.S wants to receive constant energy supplies from the Caspian Sea by liberalizing the economy (Raphael and Doug 2014: 185). The U.S had adopted a new edition of the containment policy in the southern belt of Russia. The major U.S ambition in the region is to thwart the development of the triple bond of Russia, Iran and China which can challenge the hegemony of the U.S. The Caspian hydrocarbons are quite incidental to this project as oil and oil pipeline come in handy as a means of keeping these regimes in line, as the importance of energy cannot be ignored in the modern world (Nourzhanov 2006: 61).

China's energy policy towards the Caspian region

The role of China in Kazakhstan has dramatically increased and the Chinese energy firms are actively engaged in the energy sector of the country (Almaz 2018). The energy companies of China are turning into dominant economical force in Kazakhstan's onshore projects, displaying a financial power that has given them advantageous relationships which are not found in the Western firms in the region. The role of China has increased in Turkmenistan and they are able to replace Russia as a dominant outside power in the region. The presence of China in Kazakhstan dates back in 1997 when CNPC brought 60.3 percent share of AktobeMunaigaz and gained development rights of the Uzen oilfield. The energy projects of China got successful in the Caspian Sea region with the realization of the Atyrau-Alashankou pipeline on the Kazakh-Chinese border (Brill 2010: 265). China is emphasizing on the economic relations and do not focus on the great game or new great game (Brill 2013: 1). Brill (2010) has focused that the augmented role and outsized financial investment of China in Kazakhstan and Turkmenistan has altered the terms of play for Kazakhstan and Turkmenistan even more than the opening of the BTC to Azerbaijan. The then President of China Hu Jintao visited Turkmenistan in December 2009 to inaugurate a gas pipeline to China. The ceremony was attended by the Presidents of Kazakhstan, Uzbekistan, and Turkmenistan (Brill 2013: 1).

China has developed economic relations with Kazakhstan by investing in its energy infrastructure. The energy ties between Kazakhstan and China is boosting their bilateral relationship. China creates mutually dependent win-win intergovernmental partnerships as well by buying Kazakh energy companies and then reselling shares to Kazakh governmental entities like Kazmunaigaz (KMG). The large investments made by the CNPC in Kazakhstan tie both governments together (Blank 2011: 268-269). The Chinese President Xi called for the conception of a Silk Road Economic Belt at an address made at the Nazarbayev University in Astana (Brill 2013: 3). China at present is the principal trade partner for Kazakhstan and Turkmenistan. The might of China in both the Caspian countries has left other major powers behind for the struggle for influence (Stegen and Kusznir 2015: 91).

The demise of the Soviet Union lessens a prime security threat to China. But China was skeptical of its role in the more multipolar world because of the emergence of the U.S dominated unipolarity. China wanted to find its fresh role in the regional affairs in Kazakhstan and Turkmenistan (Walsh 1993: 273).The most challenging task in front of China was the rise of the ethno-nationalism or the ethno-nationalism combined with the resurgent Islam like in Xinjiang region. China's open door to the West is becoming the basis for the opening of its north-western frontier (Walsh 1993: 274). China shares a 1783 km long border with Kazakhstan. The security is very imperative for China as the region is already very sensitive. Any instability in the Xinjiang region can have serious repercussions in the energy flow from Caspian Sea Region. The role of China is more than just an energy importer as it focuses on confidence building measures with the newly independent states. China is skeptical of having the North Atlantic Treaty Organisation (NATO) presence in the Caspian and Central Asian region. The presence of NATO compelled China and Russia to collaborate in the region. Russia and China are highly skeptical of the U.S presence in the region which happened after the terror attack of 9/11 (Ong2005: 427). China needs to secure energy supply and wants to secure stable border relation with Kazakhstan for the uninterrupted flow of energy from the Caspian Sea region.

One reason china has actively participated in the region is to protect and stabilize its own separatist movement. The Uyghur separatist movement in *Xinjiang* Uygur Autonomous region is a major concern for China. It is concerned because of the rising

Islamic separatist movement in the region which has close affinity to the Turkic language and culture. The separatist has used religious factors to mobilize armed opposition against the Chinese rule and it is threat to the security of the state (Ong 2005: 427). China is determined to control the separatist movement in its western part as it is geopolitically very vital as it has border with Caspian littoral country of Kazakhstan (Walsh 1993:277). The Uyghur separatist movement is a threat to the Belt and Road Initiative (BRI) of China (Clarke 2017: 18). The plan of China to develop the Xinjiang region aims to cater the energy needs of Xinjiang. China planned an industrial growth in the Xinjiang region. The enthusiasm with which Beijing is entering into the Caspian market suggests that the prize that they seek is at least as much geopolitical justness if not supremacy in this region (Brill 2010: 272). Economic cooperation could assist the development of Xinjiang and adjoining provinces that have been low priorities in China's economic planning (Walsh 1993: 274). Since the collapse of the Soviet Union and the launch of Xi Jinping's Belt and Road Initiative and the opening up of Central Asia through Xinjiang by energy transport links which extends to Europe would give economic growth to China (Castets 2019: 4). China further connects the Caspian through the BRI. The Caspian Sea region plays an important role in the broader plan of China's Transport infrastructure.

Map 3.6: The map shows the Xinjiang Oil and Gas Pipeline, and BRI

Source: Ma, A. (2019), This map shows a trillion-dollar reason why China is oppressing more than a million Muslim, [Online: web] Accessed 1 April 2019, URL: https://www.businessinsider.in/This-map-shows-a-trillion-dollar-reason-why-China-is-oppressing-more-than-a-million-Muslims/articleshow/68125406.cm

Map 3.6 shows the Xinjiang Oil and Gas Pipeline, and BRI which passes through the Caspian Sea region and traverse to European Union. The Xinjiang region is very important to China because of its geostrategic location as it join China to the Caspian Sea region and European Union.

Role of Turkey in the New Great Game

Turkey being an imperial power had foothold over Asia, Europe and Africa (Dash 2000: 3301). Turkey is an eminent regional power which influences the geopolitics of the Caspian Sea region. The geographical location of Turkey and its close relations with Azerbaijan has facilitated to the country to actively participate in the geopolitics of the Caspian Sea region (Mousavi 2010: 162). The geographical position of the country makes it a conjunction point for west and east. Turkey tried to exploit its rich geographical position and to earn a great geopolitical role in the region. The BTC

plays a major role for Turkey as it connects the Caspian region directly to the Caspian and Europe. Turkey plays an important role in the Southern Gas Corridor. The Trans-Adriatic pipeline and Trans-Anatolian pipeline passes through Turkey. Turkey plays a significant role in the energy geopolitics in the Caspian Sea region. Turkey has maintained a pragmatic economic policy which helps it to receive economic benefits from the EU and Russia (Bajrektarevic 2015: 9). Turkey as a transit route and with its geopolitical location has been a great influence in the region.

Turkey with its secular approach and western-oriented Muslim state has been a great supporter of the US. Turkey has received the U.S. support in its quest to become a bridge between the Western countries and the southern republics. Turkey was supported by the U.S as the small country wanted to become a transit hub of the regional pipeline network carrying the Caspian oil to the world markets. The US has played its game in the region by utilizing Turkey in the region and undermining the importance of Iran in the region (Croissant 1997: 355). Turkey at the same time wants to regain its cultural influence in the region as considering Azeris, Turkmen, Kazakhs are Turkish peoples. At the same time it wants to elevate itself as a modern and successful state to gain major influence in the region (Bajrektarevic 2015: 9). Turkey has good relations with Azerbaijan. They have cooperated with each other in the BTC pipeline and the South Caucasus pipeline. They have cooperated and have good bilateral relations (Fidan 2019). Turkey is playing a great role in the energy geopolitics of the region with its balance approach and cordial relations with east and west. But somehow it has got into the power bloc of the US, the EU, Israel and lessening the Russian and Iranian impact in the Caspian Sea region.

Role of the European Union in the New Great Game

The European Union also plays a major role in the energy geopolitics of the Caspian Sea region. The energy resources are important to the development of the EU. The EU needs gas for its development. Russia has been a long standing supplier in the natural gas industry. The interdependence of Russia and the EU plays a great role in the geopolitics of the region. The EU with the US and other allies want to lessen the influence of Russia and Iran but cannot vehemently oppose Russia as it is dependent upon the Russian gas. The Russian economy is also dependent upon energy export as most of the Russian gas is exported to Europe. The EU security concerns in recent

years drove big trade partners in Europe and Turkey to take active steps to diversify its energy supply rather than just be dependent on the Russian natural gas imports. The economic sanctions imposed by the US and Europe in an attempt to get Russia to remove troops from Crimea, have also resulted in the stalling of the major Russian oil and gas projects to supply customers in Turkey and Germany (World Energy Council, World Energy Resources Natural Gas 2016: 36). The EU in an attempt to diversify its gas imports wants to reach the newly independent Caspian littoral countries. There are several pipelines which are made to diversify the energy needs of the EU rather than only depending on Russia. These Caspian littoral states also get Foreign Direct Investment which is vital to their economic development.

The International Oil Companies (IOCs) were interested to exploit the energy boom of the Caspian Sea. As the proven reserves were announced by the respective littoral states of the Caspian Sea region, the oil giants were quick to conquer the oil resources of the region. As many parts of the world were witnessing the drying up of the oil and natural gas, the Caspian seemed to be like a blessing. Indonesia and Canada's reserves were estimated to last only for 9 years, the United States were able to run for 10 years and Russia and Nigeria's in 20 years. Therefore, the western world knew that in order to continue development and industry at its current rate, the tapping of the Caspian oil reserves would be necessary (Barnes and Briggs 2003: 12). The people of Caspian countries also get exposed to the modern ideologies which were conducive for their development.

India, Pakistan, and Afghanistan are also small regional players in the geopolitics of the Caspian Sea region. These countries are developing and need energy to sustain their economy. The Caspian Littoral countries can play a major role in the future energy security. It can also help to diversify world energy sources rather than only depending upon west Asia.

The geostrategic location of the Caspian Sea and the abundance of energy resources confer it very important position in the heartland of Eurasia. The Caspian Sea region has abundant hydrocarbon resources. Since the ancient time to the present day the Caspian region has witnessed several powers which seek to conquer the region for its rich energy resources. The legal status of the Caspian Sea as a lake or a sea is a major issue. The convention on the legal status that held on 12 August 2018 delimited the

surface of the Caspian, but the seabed is still left undecided and that is contentious issue as most of the hydrocarbon deposits are available in the Seabed. The unclear legal status has lead to disputes between Azerbaijan and Turkmenistan over the Kyapaz/Serdar field and for Arov oilfield between Iran and Azerbaijan. The 2018 Aktau submit has debarred the outside military presence in the Caspian Sea. The landmark decision was held in the convention which paved the way for the construction of the Subsea Trans-Caspian pipeline as the consent of those countries is needed through whose territory the pipeline is traversing. The littoral states because of its unclear status are building naval force to demarcate and save their hydrocarbon fields to protect from other countries. It has created several problems to the littoral countries because they are unable to explore and utilize the hydrocarbon fields because of its ambiguous nature. All the littoral states are building navies to protect their Caspian sector and hydrocarbon resources from each other. All the militarization and politics that the littoral countries are doing with their favoured allies have given a geopolitical twist and conflict in the region.

CHAPTER 4

ENERGY POLICIES OF CASPIAN LITTORAL COUNTRIES

The energy policies of the Caspian littoral countries are unique from each other, but the factors which drive the energy policies of the littoral countries are similar for Kazakhstan, Azerbaijan, and Turkmenistan. The geographical location of the Caspian littoral countries, the land border with other countries, the economic condition of the littoral countries and the political instability in the surrounding regions determine the energy policies of the Caspian littoral states. Does the landlocked geographical position determine the energy policies of the Caspian littoral countries? Are the energy policies of diversification ~~is~~ successful and why the Caspian littoral states emphasis on the supply diversification? Why Azerbaijan, Kazakhstan, and Turkmenistan try to balance the Russian influence in the Caspian Sea region? Why the Caspian littoral countries seek foreign investment? The landlocked position has been challenging for the newly independent countries but the factor does not entirely block the energy development of the countries. The geographical position of Azerbaijan is close to Europe which gives leverage to the Caucasian country in exporting the oil and gas to the European Union (EU). The positioning of Kazakhstan and Turkmenistan close to China makes their energy policies lenient towards China. The Russian energy policies are concentrated to maintain its superiority and play a greater role in the Caspian Sea region. Energy policies of Iran are mainly focused to formulate good commercial relationship with other Caspian littoral countries.

Energy Policy of Russia

The Russian objective in the Caspian Sea region is to develop the oil and natural gas in the Caspian Sea region. The huge hydrocarbon resources of the Caspian Sea region play a significant role in the economic development of the country. The Russian policy is to export oil and natural gas and generate revenues. Russia is actively engaged in the Caspian Sea region as it wanted to maintain its influence over its former Soviet states of the Caspian Sea region. The energy policies of Russia are focused to gain geopolitical advantage in the region by engaging in the economic, political and security matters of the Caspian Sea region. These are the important policies of Russia in the Caspian Sea in the 1990 just after the Soviet disintegration.

The period after the disintegration of the Soviet Union was not marked by exceptional energy development of the Caspian Sea. There were several reasons for the slow development which included lack of consensus on energy policy priorities among the political elites of Russia. The reason for the failure was the wrong policy choices by the government. Another major problem was the domestic battles for the privatization of the energy sector of Russia and the poor international standing which was accompanied by capital insufficiency. In spite of several problems Russia was actively seeking development projects and got stake in the construction of the Caspian Pipeline Consortium (Antonenko 2004: 221-222).

During the Soviet period, the Caspian littoral states except Iran was under Soviet Union and totally dependent upon Russia. But after the Soviet disintegration, the economic condition of Russia was deteriorating and it was not capable to deliver economic benefits to the newly independent states. The important breakthrough occurred on July 6, 1998 as President Yeltsin of Russia and Nazarbayev of Kazakhstan signed an agreement on dividing the northern portion of the Caspian seabed between the two countries. The deal marked the first time the acceptance by Russia to recognise the claim of Kazakhstan in its offshore oil resources. Another agreement between the Republic of Azerbaijan and the Russian Federation on 23 September 2002 on the division of the adjacent areas of the Caspian Seabed cleared the way for several IOCs to develop the Azeri-claimed zone of the southern Caspian. On the other hand, only the seabed is addressed on July 6, 1988 deal. The agreement specifically states that other issues such as pipelines will have to be governed by subsequent accords. This gives Russia the right to veto the “trans-Caspian corridor”, which is a U.S proposed system of undersea pipelines for crude oil and gas export from Kazakhstan, Turkmenistan and Uzbekistan to Azerbaijan, Turkey and Georgia to the European markets. The July 6 deal directly benefits the huge northern Caspian consortium, Offshore Kazakhstan International Operating Co. (OKIOC) as they were able to cooperate and develop the hydrocarbon fields in the Caspian Sea region (Shammas and Nagata 2000: 499).

The energy policies of Russia in the Caspian Sea took a major turn when Vladimir Putin became the President. Putin announced the creation of a special presidential representative for the Caspian affairs. The region was discussed by the Russian

Security Council. The new Russian foreign policy concept mentioned the Caspian Basin and in July a joint company composed of Lukoil, Gazprom, and Yukos was created to develop the Caspian Sea resources (Saivetz 2000). In the 2000s Russia was able to get more economic benefits and it cooperated more with other Caspian littoral states to exploit the hydrocarbon resources of the Caspian Sea region. The new policies were economically driven and non-confrontational. Active diplomatic efforts were undertaken to solve regional issues, which comprise of high level summits with leaders of all the Caspian States, as well as active shuttle diplomacy by the Russian presidential envoy (Antonenko 2004: 224). Russia pursued the Caspian littoral states to use its soviet era pipeline for transiting the Caspian oil to the European markets and express concern over the building of the trans-Caspian pipelines. Putin was able to achieve its goal as the northern route is still significant and the proposed trans-Caspian pipeline is still on a halt (Kazantsev 2008: 1085). Russia opposed the construction of the Trans-Caspian pipeline on the environmental basis as it can damage the marine ecosystem of the Caspian Sea. The pipeline can also trigger earthquakes in the Caspian Sea region.

The production of hydrocarbon in late 1980s in the Soviet Union was based upon the centralized planning, utilizing development programs with inefficient technology (U.S. International Energy Agency 2008: 14). Vladimir Putin was well aware of the importance of oil and gas in the Soviet economy. In the early 1980s, oil production was the mainstay of the Soviet economy, producing almost 20 percent of the world's oil and most of the export revenues of the state. He could not fail to see the connection of the collapse of the Russian economy and the decline of the Russian oil production by almost one half in 1990-1994 with the associated loss of export revenue. After becoming the President at the end of 1999, Putin met with the Russian oligarchs in July 2000 and assured them that the authorities would not review the outcome of privatizations. But he also made it clear that they must stay out of politics, in particular that they should not criticise or challenge the President. In a series of speeches and in meetings with the Western reporters over the next few months, Putin expanded on his goal to extend cooperation in security matters towards integrating Russia into closer economic cooperation with the United States and the European Union. As part of the U.S.-Russia dialogue on Strategic and Energy Security in 2002, he specifically mentioned joint Russian-American efforts in the oil and gas business,

praising the cooperation with Chevron on the Caspian Pipeline Project (Leonard 2016: 122-123). The policies of Putin in the region were mainly focused on cooperating with the western firms rather than competing with them. The cooperation of Russia was fruitful for the country as it generated revenue for Russia which was suffering from the economic crunch after the Soviet disintegration.

After the collapse of the USSR, Russia attempted to keep strategic control over the oil export flows from the Caspian Basin in general and from Kazakhstan in particular. Moscow viewed maintaining a transit pipeline monopoly as a sure-fire way to prevent the energy-exporting Caspian littoral states from developing independence from Russia. However, in the 1990s Russia was deep in a political and economic crisis due to clashes within its post-communist political system and the transition to a market economy, and the country lacked both the capital and corporate mechanisms for developing natural resources. Major International Oil Companies (IOCs) entered the market and launched oil field development projects with minimal participation on the part of Russia. (Cohen 2008: 90). The influence of Russia was getting weaker in the Caspian Sea region because of the involvement of the West. Russia viewed the Caspian Sea region as strategically important. Mackinder in his heartland theory explains the importance of the region which encompasses the Caspian Sea region also. Russia through the Caspian region is able to directly connect with the Caspian littoral states and formulate cooperative bilateral and multilateral relations. Russia wants to utilise and export hydrocarbon resources of the Caspian Sea region as the country gets hard currency by exporting the oil and natural gas. At the same time it wants to utilise its Soviet era pipeline to transport hydrocarbon resources of the Caspian region to the European markets.

From 1995 to 2000, Russia took important steps forward in energy sector reform. The targeted energy goals were not achieved in 1995 because of the poor performance of the overall economy. The lack of investment and old technology led to the drop in the energy production from 1990-1995 (Leonard 2002: 446). The strategy of Russia in the Caspian Sea region has evolved over time, in particular with respect to its interest in the natural gas resources of the Caspian littoral states. It has developed from a position focused more on capturing resource rent to one focused on commercial control and preventing competition by other potential players from the east or west

(International Energy Agency 2008: 14). When Vladimir Putin became President he took effective steps to improve energy and trade relations with the Caspian states who were at that time drawing closer to the EU. KazRosGaz a marketing organisation was formed to transport natural gas from the Karachaganak field of Kazakhstan which created continuous flow of natural gas to the Orenburg refinery of Gazprom. The Kremlin also began strongly encouraging the Russian firms to take equity stakes in projects in the Caspian states. In response, Rosneft increased its activity in the Caspian Shelf section, taking a 25 percent stake in a joint venture with KazMunaiGaz to develop the Kurmangazy field in Kazakhstan in 2002, and originally setting the period for exploration from 2006 through 2011 (Brill 2010: 260). According to the energy strategy of Russia, the country emphasised on exploring the new hydrocarbon fields in the Caspian Sea region (Energy Strategy of Russia 2010: 64).

Russia wants a secure neighbourhood for its own internal stability and for the uninterrupted flow of oil and gas to the region. In this process it has to take active measures to control Islamic fundamentalism and terrorism in its surroundings. The Caucasus is severely affected by insurgency. The Chechen war and the war of Dagestan have given security concerns to the pipeline infrastructure. Russia is actively seeking and doing its best to keep the region secure. Russia had full control over the region in the Soviet period. So, somehow it sees the region as its sphere of influence and wants exclusion of all the international actors (Croissant 1997: 354). The imperial past of Russia also influence its energy policies in the region. Russia considers the region to be its soft belly and a very strategic place, so it cannot imagine it to be merging in the West. It wants to export the Russian gas to the EU as it generates revenue for the country. Russia insists Kazakhstan and Turkmenistan to utilise its Soviet era pipeline, so it can generate revenue from transiting the oil and gas. The energy policies formulated under the presidentship of Vladimir Putin in the Caspian Sea region proved to be more rewarding for Russia as it established the country to be a reliable partner after the Soviet disintegration. The Russian policy in the Caspian region has changed from competitiveness to cooperating with the Caspian littoral countries and the West. Russia has stake in the AIOC and it exports the oil coming from Azerbaijan and Kazakhstan to the European markets by its Soviet era pipelines.

The policies of Azerbaijan mainly focus on balancing the Russian influence with the West. The energy policies of the Caspian littoral countries are comprehensive and are mainly focused on the diversification of the export of the oil and natural gas. The land boundary of Kazakhstan and Turkmenistan gave the country opportunity to cater to the energy policies which have been securing the export diversification to China. Russia, during the Soviet period was the global power and regional hegemony in the region. Its energy policies are mainly focused on establishing its lost influence in the region. It seeks a greater role in exporting the hydrocarbon resources. Turkmenistan follows a neutral foreign policy and the energy policy of the country is also influenced by it. It practices open door policy but the excessive control of states is not amicable for the development of the hydrocarbon fields in Turkmenistan. The multi-vector foreign policy of Kazakhstan is followed in the energy policy also. It cooperates with Russia, the EU and the US in the Caspian Sea region. Iran has very less oil and natural gas deposits in the region. It does not have any fixed energy policy,; rather gets benefit from its geostrategic location. The sanctions on Iran have severely hampered its development in the region. The Caspian countries emphasise on the diversification of supply routes as it guarantees the security as blockage by the one country cannot shattered the economy of these countries as they are energy export driven economy. The Caspian littoral countries of Kazakhstan and Azerbaijan focus to attract the participation of IOCs as they help to generate foreign revenues to the littoral countries. The energy policies of these countries are formulated to corporate western powers in the energy sector of the Caspian Sea region to maintain balance with Russia. The littoral countries despise the excessive control of Russia after getting independence. It does not want to get dominated by the large neighbour.

Energy Policy of Kazakhstan

Kazakhstan is an oil exporting economy. The economic development of the country is mainly dependent upon the oil resources. Foreign direct investment in the energy sector and the revenues generated through oil export help to attain higher Gross Domestic Product. The growth of Kazakhstan is fuelled by the petroleum sector, which contributed approximately 30 percent of the Gross Domestic Product of the country and half of the total export revenue US$ 17.4 billion in 2005 (Nurmakov2010: 20). The increased oil output by 12.5 percent in the Kashagan

oilfield in 2016 contributed to higher growth and the Gross Domestic Product grew by 4.3 percent year-on-year in the first nine months of 2017, as compared to 0.4 percent in the same period of 2016 (World Bank 2017: 1). The maximum percentage of Foreign Direct Investment occurs in the oil and gas sector of Kazakhstan, driven by the aspiration to access the fine quality of oil of the Caspian Sea. The oil output accounted for 25 percent of Gross Domestic Product in 2003. Out of the total inward Foreign Direct Investment (FDI) flow during the period of 1999-2001, three-quarter went to the oil and gas sector. Kazakhstan received the highest cumulative net Foreign Direct Investment (FDI) inflow per capita among all the Commonwealth of Independent States (CIS) during 1989-2001 (Shiells 2003: 9-10).

The abundance of oil in the Caspian sector of Kazakhstan guaranteed economic development of the country. The geographical location of the country was also central in determining the energy policy, as it shares land border with Russia and China. The involvement of the US in the Caspian region was increasing as it wanted to secure energy supply diversification for the transatlantic community[24]. The geographical location combined with vast oil resources led Kazakhstan to follow the multi-vector foreign policy. Kazakhstan, after the collapse of the Soviet was vigilant about the dominance of large neighboring countries, China and Russia. Kazakhstan maintained good relations with the US and China to balance influence in the region (Clarke 2015: 8). The President of the country was aware of the significance of oil resources to the world. Kazakhstan deliberately formulated the multi-vector foreign policy to attract all the global and regional players in the energy sector of the Caspian, which could create balance in the region. After the disintegration of the Soviet, Kazakhstan was independent and found itself in the triangular foreign policy. The foreign policy of the country was mainly focused on China, Russia and the USA.

The large neighbouring countries, Russia and China might have compelled Kazakhstan to bandwagon with them. But, Kazakhstan was not in a position to bandwagon with any of them, rather focusing on balancing both the powers. Kazakhstan was not going to boost its relationship with China at the expense of Russia or vice-versa. The President of Kazakhstan, Nursultan Nazarbayev during the time of independence stated that the foreign policy of Kazakhstan is based on multi-

[24] Transatlantic community here means United States of America and the Countries of Western Europe.

vector policy (Diyarbakırlıoğlu and Yiğit 2014: 72). The multi-vector foreign policy means giving importance to all the vectors without ignoring one vector over others. The energy policy of Kazakhstan is influenced by the multi-vector foreign policy of the country. The multi-vector foreign policy was adopted to attract all the players in the energy sector of the Caspian region without having a dominance of the single power.

Kazakhstan crafted incredibly balanced energy policies and was very cautious not to antagonize Russia. Why in the initial years after the disintegration, Kazakhstan was hesitating to sign any binding agreement initially on the Baku-Tbilisi-Ceyhan Pipeline with the US? The most significant reason was that Kazakhstan was not in a position to bandwagon with the US as it also wanted to have good relations with Russia (Nourzhanov2006: 62-63). Kazakhstan was dependent upon Russia for export of its oil resources. During the Soviet period, the oil and gas infrastructure[25] were entangled, but after the dissolution of the Soviet Union, Kazakhstan faced several challenges as the centralized Soviet system collapsed and most of the energy infrastructure went to Russia. Kazakhstan was dependent on the Russian pipelines. One of the major challenges was to construct new pipelines of its own which required time and capital. So, for getting investment Kazakhstan turned to the United States of America (U.S.A). Nazarbayev followed pragmatic and balancing policies by getting economic stability through the Western MNCs backed by the US government which infused its economy with hard currency to secure stability in the early years after the independence. Since, the signing of the first contract with the US firm and later on Kazakhstan decided to join BTC pipeline, Nazarbayev always offered Russia to actively participate in the oil and gas ventures of the country (İpek 2007: 1180-1185). The US involvement in the Caspian energy sector was lucrative for Kazakhstan as it earned 13.8 billion USD investments during the period of 1991 to 2007, which was about 30 percent of all the FDI in the country (Yesdauletova 2009: 32).

The government of Kazakhstan embraced privatization. It opened its Caspian Sector for the international oil companies, but, still, there was a government hold in the energy sector. KazMunaiGaz (KMG) is the national oil and natural gas company of Kazakhstan which undertakes major energy activities in the Caspian Sea region of the

[25] Oil and Gas infrastructure means Oil and Gas pipelines and refineries.

Kazakhstan Sector. It was created in 2002. KMG holds 16.88 percent equity interests in the Kashagan hydrocarbon field and 20 percent equity interests in the Tengiz hydrocarbon field. KMG has interests in the hydrocarbon field in the Caspian sector of the country ranging between 33 percent and 100 percent. The Ministry of Energy oversees the oil and natural gas industry of Kazakhstan (U.S. Energy Information Administration 2017: 4). Nazarbayev opened the energy sector[26] for the foreign investments, but preserved reasonable state control over the economy. The country was open to foreign investment by the Japanese, Russian, Korean, American and British firms. This policy proved to be a great step by the government which improved the infrastructure in the energy sector and at the same time generated revenue from privatization (Cohen2008: 18). The first oil firm to enter in the Caspian sector of the country was an American company, Chevron in the Teniz hydrocarbon field. Chevron with a local Kazak[27]company, Tengiz, established the joint venture named Tengizchevroil which started an operation in 1993. Kazakhstan joined the Caspian Pipeline Consortium with Russia and Oman in 2001 and the shares of the Caspian Pipeline Consortium were divided among eight companies in which Russia was a major shareholder (Yesdauletova 2009: 32).

Kazakhstan also involved private foreign ownership in the oil sector by selling off the majority of shares of the State Oil Company of Kazakhstan. Earlier, the government created a state holding company, KazMunaiGas, to oversee oil enterprises which were inherited from the Soviet production in the Caspian basins until foreign companies could take over. Kazakhstan did not convert KazMunaiGas into a National Oil Company rather it sold off its assets to foreign companies. The government of Kazakhstan in October 2008 reached an agreement with foreign companies to form a new joint operating company, North Caspian Operating Company (NCOC) B.V. The consortium includes equal shares to Royal Dutch Shell, Exxon Mobil, TOTAL, ENI, and also KazMunaiGas of Kazakhstan. The smaller shares are with ConocoPhillips and INPEX. NCOC became the operator of assets formerly held by Agip Kazakhstan North Caspian Operating Company NV (Agip KCO), notably the giant Kashagan field. Smaller petroleum companies have stakes in a variety of energy assets of Kazakhstan. While the National Oil Company KazMunaiGas holds small stakes in

[26] Energy Sector means Oil and natural gas Sector of the Caspian Sector of Kazakhstan.

[27] Kazak means Kazakhstan not the ethnic group.

some of these assets. Kazakhstan has the most privately owned assets in the Caspian region (U.S. Energy Information Administration 2019: 6).

Kazakhstan has signed several agreements regarding the energy development in the Caspian sector. They cooperated and granted mutual concessions to each other regarding the demarcation and delineation of the boundaries of hydrocarbon fields. It stipulates that the hydrocarbon fields that are located on the border area of both the countries in the Caspian Sea will be explored together and the production will be shared by both. The ownership of Imashevskoe and Kurmangazy hydrocarbon fields in the Northern Caspian Sea which are located on the border area of the Caspian is shared by both. The agreements were part of the Kazakh-Russian intergovernmental agreement, 1998 on the Caspian seabed delineation which framed the distribution of hydrocarbon resources in the border area (Cohen 2008: 89). Kazakhstan has received great energy cooperation from Russia, be it hydrocarbon exploration, production, refining or exporting of oil to foreign markets through the pipelines. The quality of Kazak oil is better than the Russian and Azeri oil as it contains less sulphur. The less sulphur content lowers the maintenance of the pipeline. The good quality of the Kazak oil increases its demand in the world markets. Kazakhstan is dependent upon Russia for the refining of crude oil which goes to the foreign market. The pipelines which were built during the Soviet period were constructed to connect the Siberian and Caucasian fields to the European markets. Kazakhstan and Russia successfully cooperated and accomplished the Caspian Pipeline Consortium and Uzen-Atyrau-Samara Pipeline (Sorbello 2015: 28-32). Kazakhstan has maintained a cooperative and balance energy policy with Russia and gave license to the Russian energy firms to carry out hydrocarbon explorations and construct pipeline infrastructure.

The multi-vector foreign policy of Kazakhstan proved to be lucrative for the country, as it received the US cooperation and FDI (Foreign Direct Investment). The involvement of the US in Kazakhstan started in 1993 with the agreement between the government of Kazakhstan and American Multinational Energy Corporation, Chevron Corporation. The countries together established the TengizChevroil joint venture (Cohen 2008: 147). The multi-vector foreign policy in the energy sphere gave vast opportunity to Kazakhstan as it was able to portray itself as a source of energy

security to the West[28]. Kazakhstan through the BTC pipeline is able to diversify import destination for Europe. Kazakhstan provides energy security to the West. The Ukraine Gas crisis obligated the transatlantic community to take a prompt decision on securing and diversifying multiple oil and gas supply routes. Kazakhstan through BTC was contributing to the energy security of the Western countries (Starr et al. 2014: 22-23).

Kazakhstan, being a landlocked country formulates policies which secure multiple export destinations, as blockage in any single destination can severely hamper the energy supply which can hamper the economy of the country, as energy export contributes a considerable amount to the GDP of the country. The Aktau agreement on the legal status of the Caspian Sea gives hopes to construct a Trans-Caspian pipeline which will further diversify the export destination of Kazakhstan. The Caspian country has always maintained a close dialogue and cooperation with the US. The energy is one of the prime factors of the foreign policy of Kazakhstan. The President of Kazakhstan, Nursultan Nazarbayev on his official visit to the US in January 2018 met the United States Secretary of Energy, Rick Perry and the State Agency for Foreign Private Investment President Ray Washburn and discussed about the energy cooperation between Kazakhstan and the USA and the implementation of projects at the Tengiz and Kashagan oilfields (Embassy of Republic of Kazakhstan 2019: 2).

In the energy policy of Kazakhstan, the EU has a major position. Kazakhstan has signed several programmes with the EU. Kazakhstan became the first signatory to the European Energy Charter on 17th December 1991 and later to the Energy Charter Treaty (ECT) on 17th December 1994. Kazakhstan has also been a part of the Interstate Oil and Gas Transportation to Europe (INOGATE) which started in 1996 (Umbach and Raszewski 2016: 4). The role of Kazakhstan in the INOGATE was to export oil through the energy infrastructure under the East-West pipeline. The role of Kazakhstan is immense as it secures the supply diversification source to the EU. Developing dialogue on energy issues with Kazakhstan is very significant to the EU. The relevance of Kazakhstan was evident when the then President of Kazakhstan signed the Memorandum of Understanding on Kazakhstan-EU Cooperation in the

[28] West implies to United States of America and Europe.

Field of Energy in Brussels in December 2006 (Tazhin 2008: 68).Kazakhstan signed the Roadmap on Energy Cooperation with the EU. In the memorandum of Understanding on Cooperation in the field of energy, Kazakhstan was recognized as the major oil and gas producer in the Caspian Sea region. It called for mutual interest of the both to cooperate in the energy sector to increase the security of energy supplies and the predictability of energy demand. It stated that the EU strives to diversify its energy supplies and emphasized that importance of multiple pipeline routesfor Kazakhstan. They pledged to develop the energy transportation system and pipeline of mutual interest. The memorandum also explains that both the parties should discuss the policies which can impact the energy security (MOU between the EU and the Republic of Kazakhstan 2006: 2-3).

By adopting a new Central Asian strategy in June 2007, the EU has intensified its energy and wider political-economic cooperation in Kazakhstan. Kazakhstan became an important trading partner of the EU. Astana has explicitly expressed its interest and intention to deepen its energy relationship with Europe. For Kazakhstan, its energy cooperation and modernization partnership with the EU becomes even more important in the near and mid-term future, as it seeks to diversify its oil and gas exports. The European Union plays an eminent role in the energy security of Kazakhstan as it reduced the overdependence upon China (Umbach and Raszewski 2016: 55).

The energy policies of Kazakhstan are multi-vector. So, they welcomed the move made by their eastern neighbour China in 1997. The period when China entered into the Kazakhstan energy sector, majority of the hydrocarbon fields like the Kashagan and the Tengiz and the CPC pipelines were administered by the US, European and Russian firms. The initial focus of China was to acquire marginal hydrocarbon fields in the Caspian Basin. The first major cooperation of Kazakhstan with China was formalized when AktobeMunaiGaz made agreement with CNPC to give 60.3 percent of rights to explore and exploit the Zhanazhol Oilfield in June 1997. CNPC inaugurated the Xinjiang Oil Pipeline in December 2005 (Alvarez 2015: 61). The pipeline was transporting 5.6 million tons of crude to China in 2008 which increased by the previous year which was 4.8 million tons. Kazmaunaigaz signed an agreement with China (Sinopec) to modernise the Atyrau refinery in 2009 which amounted around US$1 billion. Kazakhstan received US$10 billion as long-term credits during

the financial crisis. Out of the total amount, China purchased 50 percent share of MangistauMunaiGaz amounting to US$3.3. Another US$1.7 billion was given as a loan to KazMunaiGaz, and the rest of the amount of US$5 billion was given to loan to the Development Bank of Kazakhstan from the Export-Import Bank of China (Brill 2010: 266). The government of Kazakhstan in 2005 approved the $4.18 billion acquisition of the assets of PetroKazakhstan by CNPC. The China International Trust & Investment Corporation (CITIC) acquired the Karazhanbas fields near the city of Aktau for $1.9 billion in 2006 (Cohen 2008: 92-93).

The energy policies of Kazakhstan are in sync with the multi-vector foreign policy of the country. Kazakhstan embraced privatization and is open to get investment by foreign countries. The energy firms from Russia, the US, Europe and China are given priorities. The foreign direct investment supported the country to boost economic development. The presence of Russia, the US, the EU and China in the energy sector of the Caspian checked and balanced the power of each other. The former President of Kazakhstan, Nursultan Nazarbayev always consulted his counterparts in Moscow, Washington, Brussels and Beijing and discussed about the important energy projects (Cohen 2008: 83-84). The energy policy of Kazakhstan is very balanced and it considers the interest of all the global and regional powers. The presence of several players in the region balances the energy game in the region and thwarts the development of a single dominant player. Kazakhstan is very watchful after the Soviet disintegration, as it would not like to be dominated by any other country. To balance the Russian presence in the energy sector of the Caspian Sea, it welcomed the western energy giants in the region. It further welcomed the initiative of China, to balance the Russian and western powers in the region. Kazakhstan follows the diversification of export routes through different modes of transportation, be it pipelines, railways or through the tankers (Yesdauletova 2009: 32). It transports oil to Europe through tankers and exports oil to China and Russia through pipelines.

Energy Policy of Turkmenistan

Turkmenistan follows an open door policy in respect to the energy policy in the Caspian Sea region. It accepts foreign investment and export trade, especially through the development of transport infrastructure. It also aims at increasing national production capacity to meet external demands, diversification of energy export routes,

increasing the export capacity, safety of the energy transportation routes and networks to foreign markets. Turkmenistan is also a founding member of Energy Charter Treaty, which works for cross-border energy cooperation. The country strives for the establishment of a global dialogue in energy security, efficiency, diversification and investments (Khan 2018: 2-3). The energy policy of Turkmenistan is strongly controlled by the political considerations. After the disintegration of Soviet Union, the regulatory and legal foundations were getting developed in till 2000. Turkmenistan analyzed various pathways to develop its oil and natural gas by considering the most politically viable and economically feasible. The government of Turkmenistan initially adopted a cautious approach toward the implementation of market economy reforms (Srivastava and Asghar 2000: 239-240).

Turkmenistan adopted the Oil and Gas Development Plan in October 2006 for the period of 2007-2030 which aimed to increase oil and natural gas production and exports (International Energy Agency 2014: 15). The State Agency for the Management and Use of Hydrocarbon Resources also known as 'Agency' is the state institution which controls the energy resources of the country. The institution is under the exclusive control of the President of the country. It has monopoly over the decision concerning gas reserves, the issuing of licenses and the use of revenues. Gas is sold at the borders of the country and the construction of pipelines on the Turkmen soil exhibits an exclusive competence of the state owned company Türkmengas, under the control of the Agency. Cooperation with foreign companies in upstream production is not encouraged, except for the national oil and gas corporation, China National Petroleum Corporation (CNPC) (Azzena 2016: 2-3).

The current President of Turkmenistan, Gurbanguly Berdymukhamedov, while attending an energy conference in the capital city of the country, Ashgabat invited the energy companies to help develop the vast gas reserves of the country. He encouraged the energy companies of the US, Europe and the East Asia to help Turkmenistan to explore the hydrocarbon fields in the country. He stressed that Turkmenistan has embraced an "Open Door" policy, in which "foreign partners" were expected to operate under "international norms" and enjoy a legislative foundation that gives equal conditions and possibilities to all those wishing to do business in Turkmenistan. The policies of Gurbanguly Berdymukhamedov were liberal and open as compared to

the former President of Turkmenistan, Saparmurat Niyazov. The energy policies of Niyazov were basically aligned with the foreign policy of the country which was positive neutrality. His government was in strong favour of neutrality. The energy sector during his presidential tenure was relatively closed. The only foreign presence was of Russia, as most of the pipeline infrastructures were attached to Russia. The new President Berdymukhamedov, has adapted new policies that are favourable to the foreign investors. Several energy firms left Turkmenistan before 2007, leaving a dearth of investment because they experienced political challenges and investment problems. Since then, Turkmenistan created a more business-friendly environment, attempting to attract foreign investment to increase both oil and gas production and expand its export portfolio energy sector. Turkmenistan restructured the Oil and Gas Ministry in 1998 included five state-run companies to control the hydrocarbon activities of the country (Eurasianet 2008: 1-2).

Turkmenistan formulated new strategy which aimed at attracting foreign investors into the oil and gas industry. It developed the legislative base which was in accordance with the international standards which regulated the activities of both the national and foreign oil companies. The law "On Hydrocarbon Resources" was adopted in Turkmenistan in March 1996. It regulated the relations appearing in the course of the performance of oil works over the whole territory being in the Turkmenistan jurisdiction. The moderate reforms led by the Turkmen government sparked the interest of western government and the international oil and gas companies (Zhiltsov 2015: 91). The hydrocarbon law which is also known as petroleum law declared the oil and natural gas resources to be a national property. The Cabinet of Ministers of Turkmenistan was assigned with the rights to manage the hydrocarbon resources. They were also responsible to prepare the strategy to develop the hydrocarbon resources, manage the rates of production and to formulate the rules to conserve the hydrocarbons resources. The law permitted the foreign companies to be involved in oil exploration and production, through the negotiation of PSA or Joint Venture Agreements (JVAs) (Brill 2004: 8).

The role of Russia has been replaced by China in the energy sector of Turkmenistan. Chinese firms are investing in the major underdeveloped gas sectors of Turkmenistan (Brill 2010: 265). Turkmenistan was financed by China Development Bank for the

construction of the Turkmenistan-China pipeline. The gas exports agreements of Turkmenistan with China are reportedly produce-or-pay arrangements, where loans are tied to gas repayment in stable, relatively low prices over a long period so exports are not profitable, but continuous. Turkmenistan signed an agreement with China in 2012 which bound it to export 65 bcm of gas per year (Azzena 2016: 7). The country is still not open to international oil and natural gas companies. The open door policy has delivered some benefits to Turkmenistan as the Chinese firms are investing in the region (Khan 2018: 2). Even after following neutrality policy which focused on attracting International Oil Companies (IOCs) and emphasized on the diversification of exports routes, the energy policies of the country failed to deliver the desired results. The major reason for the unsuccessful energy cooperation in Turkmenistan was the lack of investments for the construction of new pipelines and the unwillingness of the Turkmen Government to invest and share in the production-sharing agreements (PSAs) with foreign companies (Azzena 2016: 3).

Turkmenistan exports more than 50bcm gas to Iran which feeds its northern zones (Khan 2018: 2). Turkmenistan always maintained good relations with Iran, even when Iran was going through the rough phase of sanctions. The relationship between the countries started with the period of Nyyazow presidency in 1996 when the first rail line connecting the landlocked Turkmenistan to the Persian Gulf was established. The export of natural gas began in the same year with the completion of the Korpeje-Kurt Kui pipeline, which assured 11 bcm per year of gas to the Islamic Republic of Iran. The line has always been upgraded and modernised. The neutrality policy of Turkmenistan proved to be good in the Iranian case, as even in the period of sanctions the country continued to trade with its southern neighbour. The accomplishment of the Korpeje-Kurt Kui pipeline was the first break in the Russian monopoly over the Turkmen gas exports. The cooperation between Turkmenistan and Iran proved to be a positive example of regional cooperation in the Caspian Sea region (Azzena 2016: 5-6). The lifting of sanctions from Iran can have positive effect as it can be engaged in oil swaps through the Iranian territory. The Iranian route will diversify its energy supply route and give more energy security to Turkmenistan. It will reduce the dependency on the Russian and Chinese routes, creating a more balance energy supply diversified routes for the landlocked Turkmenistan.

Turkmenistan, under the ambitious guidance of Gurbanguly Berdimuhamedov, has been trying to establish itself as an active player in the energy geopolitics of the Caspian region. Turkmenistan focused on export diversification. The neutrality strategy was aimed to find different commercial partners through which the country can generate revenue. The strategy also emphasised on not relying on one partner as it can control or affect the economy in the reverse manner, as in the gas pipeline in the country. The strategy was not as successful as it was considered. The dependence of Turkmenistan on Russia and Iran to transport its gas is balanced by the involvement of China. The Chinese firms are actively engaged in the energy sector of Turkmenistan. But, it needs to consider actively on more gas export outlets. It should actively pursue the TAPI pipeline and join the Southern Gas Corridor. The geographical location of the country has determined the energy policies of Turkmenistan. Theoretically, the geostrategic positioning of Turkmenistan seems to be very lucrative as it is positioned near the energy hunger countries of China and Russia but the same large countries can dominate the small Caspian littoral country of Turkmenistan for the energy resources. Again, Turkmenistan is located near the political unstable countries like Afghanistan and Pakistan which are not business friendly and the export of the natural gas seems to be difficult to these south Asian countries (Azzena 2016: 11). The energy policies of Turkmenistan need restructuring and the control of State should be loosened. It should promote foreign investment in the energy sector of the country.

Energy Policy of Iran

The Caspian sector of Iran has very less oil and natural gas reserves as compared to Russia, Azerbaijan, Turkmenistan and Kazakhstan. The country does not prioritize oil and natural gas production in its Caspian sector, but it prioritizes to strengthen its economic relation with other Caspian littoral states. As the economic sanctions on Iran are lifted, the new foreign policy of Iran has given special consideration to the other Caspian littoral countries (Parkhomchik 2018: 150). National Iranian Oil Company (NIOC), under the supervision of the Ministry of Petroleum carries the upstream oil projects including the production and construction of export infrastructure. The Supreme Energy Council established in 2001, oversees the energy sector of the country. The council is headed by the President of Iran (U.S. Energy

Information Administration 2013: 7). In the words of the former managing director of the National Iranian Oil Company, Ahmad Qalebani, Iran has been getting benefits because of the abundance of hydrocarbon resources. He emphasised that Iran plays an important role in the energy security of the region. He further stated that the energy, strategy, politics and economics of the country is intertwined with each other (Iran petroleum 2013: 15). The development of the hydrocarbon fields and pipeline infrastructure was not possible to build in the Iranian sector of the Caspian Sea because of the US sanctions on Iran. The sanction incurred by the US was affecting the economic development of Iran. The country began to open its oil and natural gas sector for the foreign investment in the mid-1990s.

Iran developed project Caspian Sea Republic's Oil Swap (CROS) to transport the Caspian oil to terminals in the Persian Gulf. The first swap was done by transporting the oil from Tengiz oilfield in Kazakhstan (Zonn and Semenov 2015: 120). The cooperation in the Caspian Sea region has several beneficial effects on Iran and the Caspian littoral countries. Iran is actively engaged with Turkmenistan in the Caspian Sea region. The geographical proximity of both the countries gives them a greater prospect for cooperation in the field of energy as both share land and maritime border with each other. The presence of vast gas resources in the Turkmen sector of the Caspian Sea can benefit Iran (Atai and Azizi 2012: 746). Iran swapped more than 254 million barrels of oil from 2000 to 2010, generating $880 million revenues (Parkhomchik 2018: 156). Iran can play an important role in securing energy to the South Asian countries through oil swaps. Oil swaps with Iran are a rather efficient shipment option for the Caspian basin producers. For Iran, the oil swap is lucrative as most of the refineries and petrochemical complexes of Iran are located in the northern and central regions of the country. The swap arrangements enable to supply crude to its refineries in the north at a lower price, while generating income for handling swap operations in the Persian Gulf (Cohen 2008: 132).

The impact of sanctions on Iran has been dramatic. It had several implications on the energy sector of Iran as the investment by foreign companies was stopped due to the U.S sanctions. The development of the Azerbaijan-Iran pipeline was thwarted because of the US opposition. International Oil Companies wanted to develop hydrocarbon fields in the region by cooperating with Iran, but they sought for more secure legal

and political environment before contemplating any new investments and the sanctions made the investment tough (Maloney2014:16-19). The Iranian government is taking several reforms in the energy sector of the country. The re-elected government of Hassan Rouhani on May 2017 focuses on the market-based reforms focusing on both strengthening the economic ties with the key trade partners and ensures an increase in the flow of foreign investments. The lifting of the international economic sanctions has given the opportunity to Iran to implement the enhanced industrial projects in its Caspian sector. Iran has discovered an oilfield in the Caspian region named as Sardar-e-jangal. Oil production in the hydrocarbon field is not a top priority for Iran as it does not have cost-efficient technology to extract oil and natural gas from deep water. The oilfield needs high technology and large scale investment (Parkhomchik 2018: 150-155). Iran has to upgrade its technology to produce oil in the Sardar-e-jangal hydrocarbon field.

The energy policy of Iran is intertwined with the foreign policy of the country. The motto of the Iranian foreign policy since 1979 has been 'Neither East, nor West, Islamic Republic'. But in the recent decades the orientation of Iran has changed and it looks to the East rather than the West. The economic sanctions and containment by the West pushed Iran to cooperate with Russia in the Caspian Sea region. The country has put aside its historic rivalry with Russia and tried to cooperate with Russia in the Caspian Sea region. The hostile US policy towards Iran in the present times under the administration of President Donald Trump has pushed Tehran to boost its economic relations with the non-Western powers especially Russia (Clement 2018: 3). The Aktau agreement of 2018 regarding the legal status of the Caspian Sea proved that Iran is cooperating with other Caspian littoral countries. Earlier according to the Soviet-Iranian treaty, the Caspian was considered to be a lake by Russia and Iran, but it was considered to be a sea by Turkmenistan, Azerbaijan and Kazakhstan. Iran considered Caspian to be a lake but in the Aktau agreement with other littoral countries, they came into a consensus to have sovereign rights over the 25 nautical miles from the coast and the rest of the Caspian Sea is open for all the states.

The political and economic isolation of Iran and the restrictions imposed on oil and gas field development can be considered a disruptive factor in the global energy security as the country might have been an alternative energy source for the EU

during the Russia-Ukraine gas dispute. However, this was not possible because of the sanctions on Iran. After the sanctions were waved off on 16 January 2016, the country started increasing its oil production and exporting capacity in order to regain the market share that it had lost. Furthermore, Iran is going to introduce a new form of petroleum contracts in order to make them attractive for foreign investors. It is forecasted that Iran will be a sustainable source of energy for the global market in the near future. Iran can export gas to Europe through the Iran-Turkey pipeline. In this regard, foreign investments and technology transfers are required for developing the oil and gas fields in Iran and for constructing the necessary energy transfer infrastructure (Abolhosseini 2017: 235). The geostrategic proximity of Iran with Europe and the Caspian can be lucrative for the country as it can transit the Caspian oil and gas to Europe.

Iran is actively participating in the (International North South Transport Corridor (INSTC) which is 7,200 km multi-mode network of road, rail and ship routes, linking the Indian Ocean and Persian Gulf via Iran to Russia and North Europe. INSTC is designed to connect Northern Europe with India and Southeast Asia. The route will also connect the railroads of Iran, Azerbaijan and Russia through Bandar Abbas and Chabahar ports of Iran, the Central Asian states, Russia and onwards to Europe. (Financial Tribune 2018: 1). Iran can play an active role in the INSTC and can again claim its lost position in the region because of the economic sanctions. Iran plays an important role in the eastern branch of the North-South transit corridor that is India-Kazakhstan-Iran-Turkmenistan. The corridor will give a geopolitical significance to Iran (Chaudhary 2018: 2). The geostrategic location of Iran has played a significant role in determining the energy policies of the country. The US sanctions on Iran has sternly hampered the progress of the Caspian energy sector of Iran. As the sanctions are lifted, Iran can up its energy game in the Caspian Sector.

Energy Policy of Azerbaijan

Oil plays an important role in the economic development of Azerbaijan. So, the government of Azerbaijan puts extensive and comprehensive efforts to formulate the energy policies of the country. The main energy objective of Azerbaijan is to promote and to facilitate the greater foreign investment in the petroleum sector of the Caspian Sea region. One of the major milestones in the energy sector of Azerbaijan was taken

by the third President of Azerbaijan, Heydar Aliyev. After assuming the office as the President of Azerbaijan in 1993, Aliyev was floored with the investments offers by the foreign IOCs. But, he took his time to analyze the given agreements. After his introspect, he held meetings with the officials and representatives of several companies and assured them of clearing the agreements. The negotiations were carried out between the IOCs and the government of Azerbaijan for three months. Finally, in 20 September 1994 Aliyev signed a contract which was hailed as the "contract of the century" agreement with the ten foreign companies (Bayulgen 2010: 93). The agreement comprised of the production sharing agreement on joint development of Azeri, Chirag, and Guneshli fields in the Azerbaijan sector of the Caspian Sea. The agreement was historical, political, and of international significance and this is the reason why it was named as the "Contract of the Century". This was the first move of the west in the Caspian Sea region after the Soviet disintegration. But why the government of Azerbaijan was in haste to sign the agreements? There were several reasons for cooperating with the West. Firstly, to generate revenue through the foreign direct investment in the Caspian sector of Azerbaijan as the economic condition of the country was not well after the Soviet disintegration. The second reason was that it ought to balance the power of Russia by enticing the US and the EU. Azerbaijan prefers to balance Russia and the West in the region rather than bandwagon with the West. Heydar Aliyev formulated very pragmatic energy policies which bolstered the economic development of Azerbaijan (Kjaernet 2010: 153).

The contract of the century agreement was a gateway of Azerbaijan to the West. After the accomplishment of the agreement, Azerbaijan proved itself to be a reliable partner of the EU and the US. The geostrategic location of Azerbaijan proved to be conducive for the country, as it is located on the western shores of the Caspian Sea sharing the borders with Georgia and Turkey which is located near the Bosporus Strait and Europe. The geostrategic positioning of Azerbaijan is superior to Turkmenistan and Kazakhstan when the connectivity to the European markets is considered as these countries are landlocked and are situated in the eastern shores of the Caspian Sea. Baku being the hub of the oil activities since centuries, proved to be a better supply source to rely for diversifying its energy supply routes. Azerbaijan while cooperating with the west also secured multiple pipeline routes to export its oil and natural gas. These pipelines are the Baku-Tbilisi-Ceyhan Pipeline, the Baku-Tibilisi-Ezbrum and

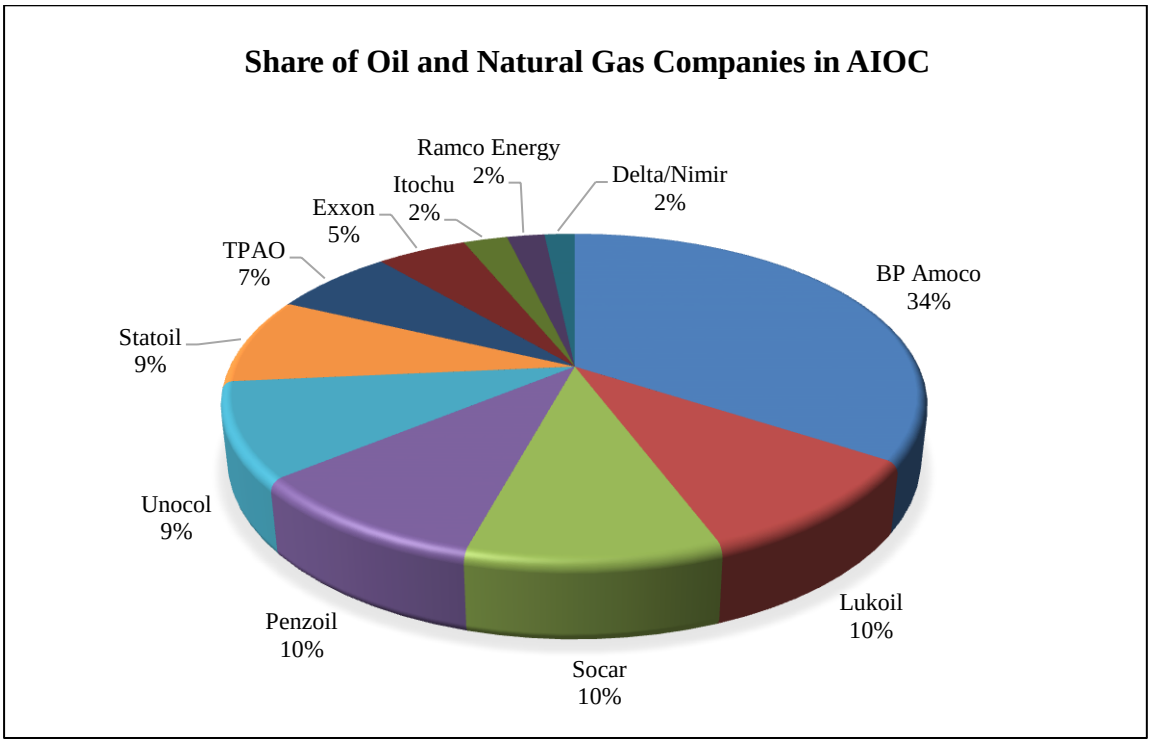
the Southern Gas Corridor. The contract of the century comprised of 13 major oil companies namely Amoco, BP, McDermott, Unocal, SOCAR, LUKoil, Statoil, Exxon, Pennzoil, Itochu, Ramco, TurkiyePetrolleri and Delta. The oil companies were from eight countries namely Azerbaijan, USA, Great Britain, Russia, Norway, Japan, Turkey and Saudi Arabia. The estimates of the oil reserves in the initial phase of the agreement were anticipated to be 511 million tons but later on proved to be 730 million tons (Huseynzade and Aliyev 2015: 176-177).

The contract of the century was the beginning of the successful implementation of the petroleum strategy of the President of Azerbaijan, Heydar Aliyev. He utilised the revenue of oil and gas for the development of the country. President of Azerbaijan in the opening speech in the 1st International Oil-Gas Production in the Caspian Sea Exhibition, held in Baku on May 24, 1994 stated that cooperation with the western oil companies would ensure the development of the oil industry of Azerbaijan and would lead to mutual partnerships with the western countries. The objectives of energy policy of Azerbaijan were further explained by him at the signing ceremony of the "Contract of the Century" on September 20, 1994 and he stated that the agreement signifies that the country is open for the world and for the world economy. The President declared that the country is an independent state and has been building relations with the developed countries of the world. By signing this contract, it opened the way for foreign investments and created the basis for the activity of companies in other spheres in Azerbaijan. The energy policy carved by the President, Aliyev consolidated friendly relations in all fields and economic cooperation with the participating countries. The most important thing is that this contract brought great benefits to the present and future of the Azerbaijani people and created a base for the elevation of its prosperity (Ilgar 2010: 59-60). The energy policies of Heydar Aliyev were very pragmatic and effective and displayed the world that Azerbaijan is an independent state that can implement effective energy related decisions mainly by its own virtues and deliverance.

The International Oil Companies (IOCs), like the Royal Dutch Shell and the Nobel Brothers Petroleum Company were involved in the development of the petroleum industry of Azerbaijan. During the Soviet period, Azerbaijan signed the largest number of Production-Sharing Agreements (PSAs). SOCAR is the National Oil

Company of the country which serves as a nominal partner in all the production sharing agreement of the country. It owns the majority of the oil of the country and natural gas fields. SOCAR deals with both the PSA negotiations and implementation with the investors. SOCAR maintains 20 percent interest in the hydrocarbon field. There are smaller publically-owned oil companies which have significant investments in Azerbaijanfields such as Arawak Energy Ltd. of the UK. The international energy firm has signed extraction contracts with Azerbaijan and operates through the Azerbaijan International Operating Company Consortium (AIOC) (U.S. Energy Information Administration 2013: 6). AIOC was formed in September 1994. It developed the three largest offshore fields that are Azeri, Chirag and Guneshli. The AIOC group is led by BP Amoco. There is a 30-year PSA to find and develop 4.3 billion barrels of oil at a cost of $10 billion. BP Amoco, is the largest investor in Azerbaijan and leads in five PSA ventures to develop up to 11.4 billion barrels of oil and over 2 TCM of gas in AIOC' s, Shah Deniz, North Apsheron, Inam and Alov (Shammas and Nagata 2000: 486). AIOC shares are held as follows: BP Amoco (34.24 percent), Lukoil (10.10 percent), Socar (10.00 percent), Pennzoil (9.82 percent), Unocal (9.52 percent), Statoil (8.56 percent), TPAO (6.75 percent), Exxon (5 percent), Itochu (2.45 percent), Ramco Energy (2.08 percent) and Delta/Nimir (1.68 percent) (Shammas and Nagata 2000: 486). The companies from Europe held the largest share in the hydrocarbon fields of the Caspian Sea region. AIOC became an important microcosm of international politics, where governments supported the political needs of their major investors and oil investment in Baku became synonymous with national self-interest (Adams 1999: 14).

Pie-chart 4.1: Share of oil and natural gas Companies in AIOC



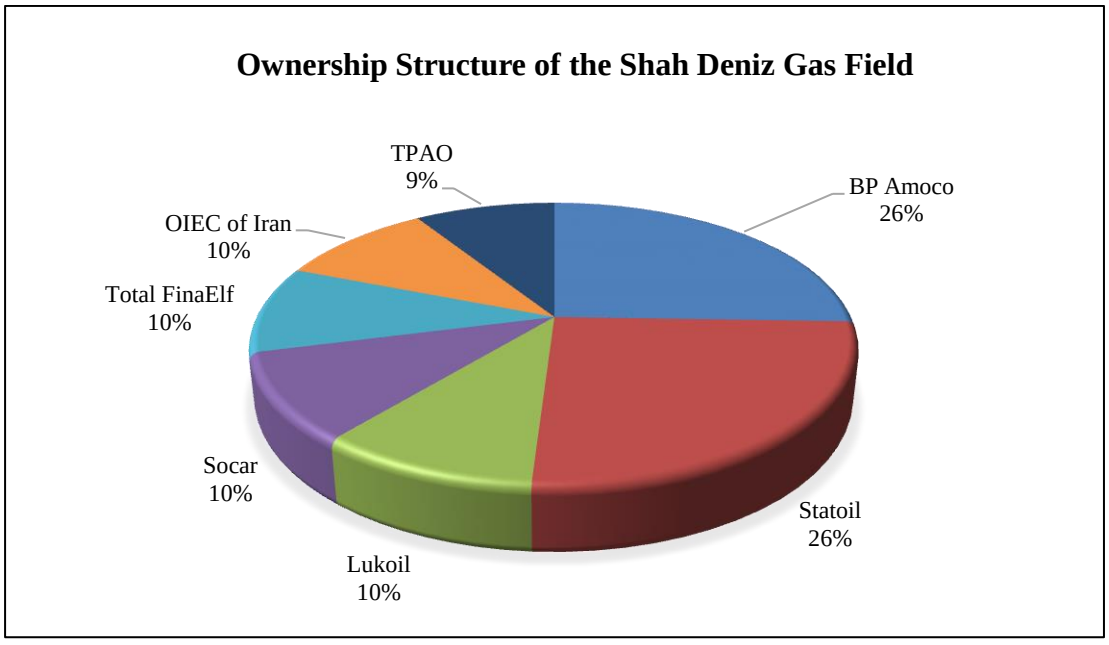
Source: Adams, T. (1999), "Oil and Geopolitical Strategy in the Caucasus", *Asian Affairs*, 30 (1): 11-20.

The pie diagram shows the share of various oil and natural gas companies in AIOC. The largest share is held by BP Amoco which is a joint company of British and American firm. The western countries have very good energy relations with Azerbaijan. The Russian company Lukoil is also given 10 percent means Russia is also given importance in the energy sector of Azerbaijan. The Caucasus country balances the powers in the region by economically collaborating with their IOCs.

The Shah Deniz is the largest gas filed in the Caspian sector of Azerbaijan. The partnership to exploit the field was set in June 1996. The ownership structure of the gas field is shared by BP Amoco (25.5percent), Statoil (25.5 percent), Socar (10 percent), OIEC of Iran (10 percent), Lukoil (10 percent), TotalFinaElf (10 percent) and TPAO (9 percent). With reserves originally put at 1.5 billion barrels of oil and condensates and 4 TCM of gas, development and infrastructural costs were estimated at $4 bn. The US companies were not involved in the agreement because of the participation of the Iranian oil entity OIEC in the agreement. OIEC, partly owned by NIOC, was brought into the venture in 1996 by Baku as a compensation for the

exclusion of NIOC from the AIOC (Shammas and Nagata 2000: 486). Chirag-1 platform was upgraded in accordance with the international standards in 1995, within the framework of the Early Oil Project. Production of oil at the Chirag field began in 1997. Production of early oil puts forward an issue of its export to the world markets. The Steering Committee of the Azerbaijan International Operating Company (AIOC) in 1995, took decision about the selection of two routes for the early oil transportation via the territories of Russia and Georgia. (Huseynzade and Aliyev 2015: 176-177). The early oil was transported through the Baku-Novorossiysk pipeline. The Western countries and Azerbaijan did not want to rely on Russia. The Western countries and Azerbaijan with the cooperation of Turkey and Georgia planned the BTC pipeline. The State Oil Fund of the Azerbaijan Republic (SOFAZ) established in the late 1999 oversees the oil and gas sector of Azerbaijan (Ibid, 182).

Pie-chart 4.2: Share of oil and natural gas Companies in Shah Deniz Gas Field



Source: R. Huseynzade, R. and A. Aliyev (2015), ***Experience of Azerbaijan in Construction of Main Oil and Gas Pipelines in the Caspian Sea Region" in Oil and Gas Pipelines in the Black-Caspian Seas Region,*** **London: Springer.**

Pie-chart 4.2 shows the Share of various IOCs engaged in the production of Shah Deniz Gas Field. The presence of Russian, American, European, Iranian and Azerbaijani companies signifies that balance of various powers in the oil and natural gas sector of Azerbaijan. The presence of western company and Iranian company oil

Industries Engineering and Construction (IEC). Azerbaijan tries to follow a balance policy in the Caspian Sea region by giving importance to each country.

The pipeline contracts of the Caspian sector of Azerbaijan were successful even after the ambiguity on the legal status of the Caspian Sea, as most of the hydrocarbon fields were located near the coast of the Caspian Sea. Azerbaijan has been providing energy security to the EU, Turkey and Georgia. The current President of Azerbaijan, Ilham Aliyev, adhered to the policy of diversification. He underlined the importance of, and adherence to, the principle of diversification of energy transportation links. The diversification of energy supply provides energy security to the EU, Turkey, and Georgia and at the same time meets the economic requirement of Azerbaijan (Ilgar 2010: 61-62). The policy of energy diversification of Azerbaijan is able to lower the Russian influence in the Caspian Sea region. In the post-soviet period, Azerbaijan focused on balancing the political and economic situation in the Caspian Sea region by building partnerships with the West and Russia. Azerbaijan cooperates with the West and Russia both in the energy sector and creates balance between both the powers rather than endangering its own relations with Russia (Jamalov and Alizada 2015: 11). The contract of the century agreement was a strategy to create a geopolitical balance in the region. Vafa Gulizade, Foreign Policy Advisor of Heydar Aliyev stated that "Oil is our strategy, it is our defense, and it is our independence". Azerbaijan invited the whole world to watch the development of oil resources of Azerbaijan. The energy policies of Aliyev were to gain support of several countries of the world including the United States of America (Ipek 2009: 233).

Securing multiple pipelines in the region is one of the major energy policies of Azerbaijan. The geographical situation of Azerbaijan makes the pipelines very risky as the conflict-ridden Nagorno-Karabakh zone can risk the pipeline infrastructure going through Azerbaijan. This can impede the future projects developments with western partners and hamper the foreign investments in the energy sector. Stability and efficiency of energy resources are some of the main parts of the energy policy of Azerbaijan. The modernization of the oil and gas sector and the petrochemical industry is also one of the major energy objectives of Azerbaijan (Jamalov and Alizada 2015: 11). The philosophy of the energy policy of Azerbaijan is that energy should unite, not divide people. The National security concept of Azerbaijan,

approved by the President, Ilham Aliyev on May 23, 2007, focuses on the advancement and utilisation of the oil and gas reserves, ensuring the security of energy transportation. The energy policy objectives of Azerbaijan include a wide range of issues and have economic, social, political and geostrategic dimensions. Some of the significant ones include the advance development of the oil industry of Azerbaijan, the openness to the world economy, the integration of the economy of Azerbaijan into the world economy, the openness to foreign investments, the diversification of energy transportation and to contribute to the energy security of Europe (Ilgar 2010: 60-62). Azerbaijan focuses on balancing Russia and the West in the Caspian Sea region as the AIOC shares are shared by the European IOCs and the Russian energy firm Lukoil. The energy policies of Azerbaijan are pragmatic and very balanced which lead to the development of the country.

The state controls the energy policies of the Caspian littoral countries. Azerbaijan, Kazakhstan and Turkmenistan are landlocked, and initially, after the independence of the NIS severe they faced challenge to export their oil and natural gas. They focused on getting foreign investment. They also keen to get investment from the U.S energy firms, European, Chinese and Russian energy firms in the exploration and production of the hydrocarbon field. They try to balance the Russian influence with western presence. The Russian policies are mainly concerned to develop hydrocarbon field in the Caspian Sea region. Another Russian concern is to maintain the safety of the pipelines from the political unstable Caucasus region. Iran has very fewer hydrocarbon reserves in the Caspian Sea region, so it mainly focuses on developing the advanced technology to drill the deepwater hydrocarbon fields.

CHAPTER 5

PIPELINE POLITICS AND CHALLENGES

Pipelines politics in the Caspian Sea region engage several global players[29] and regional players[30]. The countries often utilise the pipeline as a tool to exhibit their dominance over other players in the region. What are the challenges in the construction of the pipeline in the Caspian Sea region? There are several challenges which create hurdles in the accomplishment of a pipeline such as the complex mountainous terrain, ethnic conflict, secessionist movement, terrorism, lack of cooperation among the regional and global players. Why the global and regional players prefer particular direction pipeline routes? The European Union and the United States of America prefer the western route which crosses the Caucasus region as it reduces its dependence on the Russian gas and increases its energy security by diversifying the supply routes. The eastern pipeline route is preferred by China as it shares land boundary with Kazakhstan, and integrated with Turkmenistan by well-developed pipeline infrastructure. The northern route is preferred by Russia as the line has the existing Soviet era pipeline infrastructure. The strained bilateral and multilateral relations among the countries create complexity in the development of the pipeline. The geostrategic position of Iran makes it competent for transiting the Caspian oil and natural gas successfully through the southern route, but the economic sanctions implemented by the U.S. impaired the Iranian involvement in the pipeline politics.

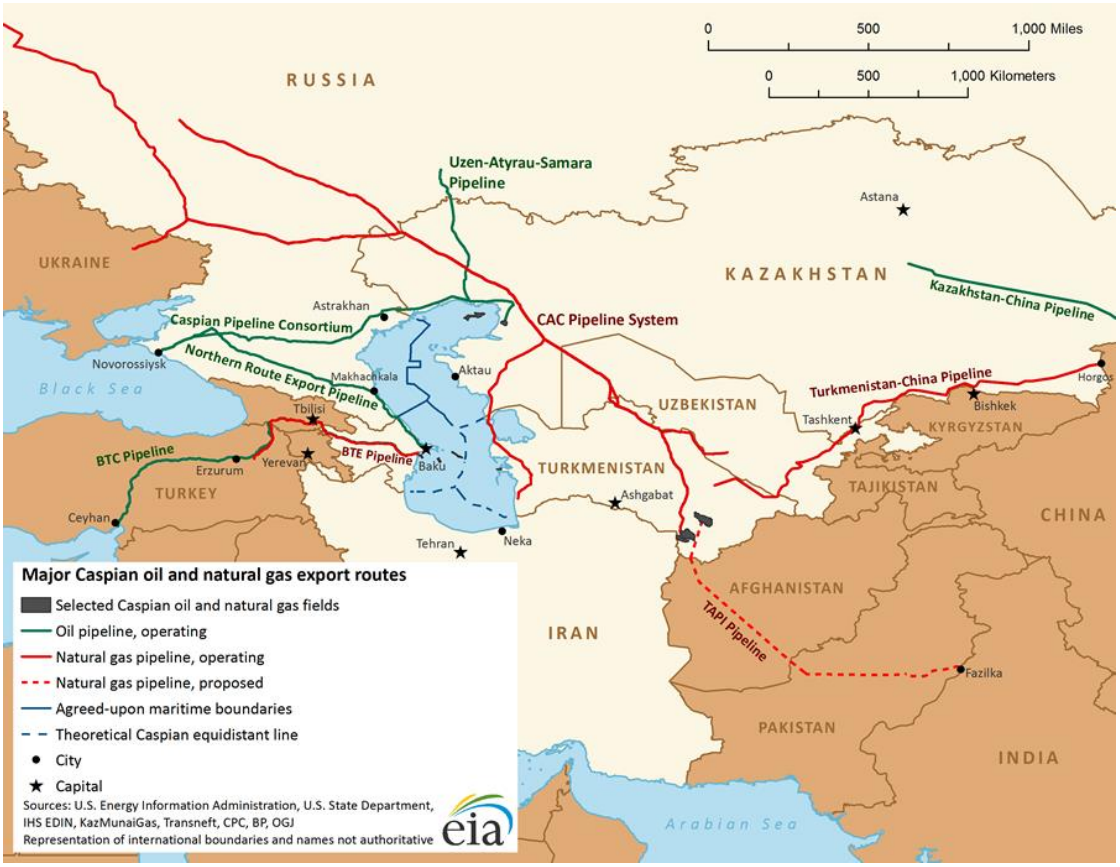
The disintegration of the Soviet Union exposed the vast energy resources[31] of the Caspian Sea region to the world. Several global and regional powers wanted to import the energy resources of the Caspian Sea and for that they needed to construct pipelines as the three Caspian littoral countries, rich in oil and natural gas reserves, are landlocked. The geostrategic position of Russia and Iran as compared to other three littoral states is better as they have access to the sea. Even, the landlocked littoral states faced problems as the pipeline constructed during the Soviet period was

[29] The global players are Russia, the United States of America (the U.S.A), the European Union (the EU) and China.
[30] The regional players are Kazakhstan, Turkmenistan, Azerbaijan, Iran, Turkey, Afghanistan, India, Pakistan, Ukraine, Georgia, and Japan.
[31] Energy resources mean oil and natural gas.

directed toward the Russian territory for transiting the Caspian oil and natural gas (World Bank 2008: 52).Transporting the energy resources of the Caspian means to build new pipelines. So, there is immense rivalry among the global and regional players to implement their preferred pipeline routes which augment their energy security and concurrently decreasing the power of the opponents in the pipeline politics of the Caspian Sea region. After the disintegration, Kazakhstan was not equipped with its own pipeline networks and had to utilise the Russian pipeline to transit oil and natural gas. It also transported oil via roads and railways which were more expensive (Alam 2002: 9). Turkmenistan also faced problems to access the foreign markets, whose gas complex was attached to a unified pipeline system during the Soviet period. Another problem faced by Turkmenistan was when high transit tariff cost was asked by Uzbekistan, Kazakhstan, and Russia which made the Turkmen gas noncompetitive and reduced the export of Turkmen gas after few years of independence (Zonn 2015: 76). The geographical location of Azerbaijan and proximity to the European markets proved to be lucrative for the country.

The EU and U.S.A manifested great interest in building the Baku-Tbilisi-Ceyhan pipeline. The cooperation of Georgia and Turkey, in the development of the BTC led to the quick realization of the pipeline. The formation of the BTC was a great geopolitical event as it was the first pipeline in the Caspian Sea region supported by the western countries. The focus of Russia after the Soviet disintegration was on successfully operating the existing Soviet era pipeline. It also focused on the successful completion of the under-construction oil pipeline projects through which the Kazak, Azeri and Turkmen hydrocarbon was to be transported. The extensive Soviet pipeline network gave the geopolitical leverage to Russia (Huseynzade and Aliyev 2015: 77). Even after the Soviet disintegration, the Newly Independent Caspian littoral countries which were cooperating with the western oil companies, had to rely on the Russian infrastructure that were constructed in the Soviet period to transit oil from these countries (Chow and Hendrix 2010: 31). The hydrocarbon sector and pipeline network of the Caspian sector of Iran are not very developed as those contain traceable amount of oil and natural gas which is located in deep water.

Map 5.1: Oil and Natural gas Pipelines of Caspian region



Source: U.S. Energy Information Administration (2013), "Overview of oil and natural gas in the Caspian Sea region", [Online: web] Accessed 16 June 2017, URL: https://www.eia.gov/beta/international/regions-topics.cfm?RegionTopicID=CSR

The above map shows the existing and proposed pipelines of the Caspian Sea region.

There are several countries which get benefits from their geographical location. Russia, Iran, Turkey, Georgia, Ukraine, and China get advantage of their lucrative geostrategic location and compete with each other to transit the Caspian oil and natural gas to the world market. The transit countries gain revenue and gain geopolitical importance in the region. The countries like the U.S., Russia, China, Iran, the EU, and Turkey seek to strengthen their position in the Caspian Sea region, and to utilise the platform for promoting their interests in other strategically important regions of the world (Kaliyeva 2004: 2). The US presence in the region also strengthens its stand on the Afghanistan issue. The presence of China in the region is because it wanted to keep a check on the Islamic radicalization of Uyghur in Xinjiang. Kazakhstan and Azerbaijan are most successful in transiting the Caspian oil and natural gas to the world markets through the CPC and the BTC pipelines respectively.

Russia is successfully utilising its Soviet era pipelines to transit oil and natural gas to the world markets. The eastern Caspian countries, Kazakhstan and Turkmenistan also transport its oil and natural gas to China and Iran engages itself in oil swaps (Energy Information Administration 2013: 3). Russia with its Soviet era pipeline plays a major role in the pipeline politics of the region. The west has also shaped the regional politics by constructing its own pipeline that is, the BTC and the SCP. China, in recent decades has proved itself to be eminent player in the pipeline politics of the Caspian Sea region. The involvement of several players has made the pipeline politics more complex.

The Caspian region has several pipelines proceeding into several directions. These are the Northern route, East-west route, Southern route, South-eastern route and Eastern route. The northern pipeline route is favoured by Russia and is geopolitically very significant as it transits the Caspian oil to the European markets. The significance of the Northern route pipeline is not diminished even after the formation of the East-West route. The route is acceptable to Iran but is not favoured by the U.S. The U.S and EU favour the East-West pipeline route which carries the Caspian oil and natural gas from Kazakhstan and Azerbaijan while transiting through Turkey and Georgia through the Black Sea and the Mediterranean Sea to reach the European markets. The Southern route is the route which transits energy resources of the Caspian through the Iranian territory. The pipeline route was not favoured by most of the Caspian Littoral States to transit their hydrocarbon resources because of the U.S. sanctions. As the sanctions are lifted, Iran can play a greater role in exporting the Caspian hydrocarbon to the world markets. The South-eastern route comprised of the proposed Turkmenistan-Afghanistan-Pakistan-India (TAPI) pipeline which will transport the Caspian oil and natural gas to the South Asian States of Afghanistan, Pakistan, and India. The pipeline is geopolitically very difficult to accomplish due to political instability in Afghanistan. The Eastern route is the route which connects the Caspian oil and natural gas to the Eastern Asian markets (Mousavi 2010: 162).

The Northern or European/Russian Direction Route

This route transports oil and natural gas from Kazakhstan, Turkmenistan, and Azerbaijan via the Russian territory. It collects oil from the Tengiz field in Kazakhstan, gas from the Dauletabad field in Turkmenistan and oil from Azerbaijan

to Novorossiysk in Russia (Zonn 2015: 79). There are several pipelines which are categorised under the Russian direction route. These are the Caspian Pipeline Consortium (CPC), the Uzen-Atyrau-Samara, the Baku-Novorossiysk and the Central Asia-Center gas pipeline system (CAC). The major portion of the pipeline system was constructed in the Soviet era and acquired a central position in the Soviet pipeline network. The route is favourable for the Newly Independent States (NIS) because it is politically stable and more reliable (International Energy Agency 2008: 14).

The Caspian littoral States were not in a hurry to develop pipelines infrastructure just after the Soviet disintegration. The Newly Independent States were not economically strong enough to build their own pipeline network. They had relied upon the existing northern route pipeline infrastructure that was constructed during the Soviet period. The construction of new pipeline infrastructure was their long term agenda. During the first decade of the independence, Kazakhstan transited its oil through the northern pipeline route (Roberts 2004: 70). This route was used to transport the early oil from the Caspian through the Baku-Novorossiysk pipeline. Azerbaijan started to export crude oil to the world markets on 12 December 1997 through the upgraded Northern pipeline route, which passes through the border of Dagestan in Russia (Ruban and Kalyuzhny 2011: 102-103). This pipeline route, even today is lucrative for Russia as it works as a major foreign policy tool for the country to maintain its presence in its so-called near abroad (Heinrich and Pleines 2015: 109). Several incidents in the past have proved that it has used pipeline as a foreign policy and for its own benefits. In one incident, Russia stopped the supply of gas to Ukraine over the price dispute. The second incident was after the Soviet disintegration, Russia declined to transit the Turkmen gas from its pipeline because it wanted to sell its own natural gas to the European markets (Zhiltsov 2018). The northern route is suitable for Russia and other littoral countries because of the existing Soviet pipeline infrastructure (International Energy Agency 2008: 15).

The Northern or the European/Russian direction route pipeline transports the Caspian oil and natural gas to Russia.

Table 5.1: Pipelines route of Northern or the European/Russian

PIPELINE	TRANSIT ROUTE/ DESTINATION	HYDROCARBON FIELDS	OWNER
Caspian Pipeline Consortium (CPC)	Kazakhstan-Russia	Tengiz	Transneft, Chevron Caspian Pipeline Consortium, LukArco ExxonMobil, Rosneft/Shell, Agip, Oryx, BG, KazMunaiGas, BP
Uzen-Atyrau-Samara	Kazakhstan-Russia	Tengiz	Transneft
Baku-Novorossiysk	Azerbaijan-Russia	Sangachal	Transneft
Central Asia-Center gas pipeline system (CAC)	Turkmenistan-Uzbekistan-Kazakhstan-Russia	Dauletabad	Gazprom, Turkmengaz, Uzbekneftegas, KazMunaiGas
Pre-Caspian pipeline (proposed)	Turkmenistan-Kazakhstan-Russia		

Source: U.S Energy Information Administration (2013), "Overview of oil and natural gas in the Caspian Sea region", [Online: web] Accessed on 16 June 2017, URL: https://www.eia.gov/beta/international/regions-topics.cfm?RegionTopicID=CSR

Caspian Pipeline Consortium (CPC) is a major pipeline transporting oil from Kazakhstan to Novorossiysk in the Black Sea port of Russia. The length of the pipeline is approximately 1511 km. The construction of the pipeline started on 12 May 1999. The CPC loaded its first tanker at the Marine Terminal near Novorossiysk (CPC) on 13 October, 2001. The consortium is a joint venture started by the governments of the Russian Federation, Kazakhstan, and the Sultanate of Oman with ten international and national oil companies and seven countries. It consists of two

entities (CPC-R in Russia and CPC-K in Kazakhstan), but it works as a unitary enterprise. Kazakhstan and Oman signed the original pipeline consortium agreement on June 17, 1992 (UNDP/World Bank, Esmap 2003: 94-95). Russia and Kazakhstan provided CPC the stretches of pipelines within their territories. Their total cost of the pipeline project was estimated to be US$525 million in which the share of Russia was US$310 million and the share of Kazakhstan was US$215 million.

Russia and Kazakhstan provided the CPC with the labour force, materials, equipment and land for the development of the pipeline. Oman represented by the Oman Oil Company (OOC) ensured the financing of the project: design works, preparation of the feasibility report, and development of investment mechanisms and Kazakhstan was assigned to supply oil. All the CPC participants acquired equal rights in its management and sharing of profit to be accrued from oil transit tariffs (Zhiltsov 2015: 87). The pipeline also exports oil from the Korolev and Karachaganak fields in Kazakhstan. CPC was the main export pipeline to transit oil from Tengiz to Novorossiysk (International Energy Agency 2008: 6). The CPC transported 706,000 bopd in 2013 from Atyrau, Kazakhstan, to Novorossiysk (Chevron). The equity interest in the CPC is dominated by the Russian Federation which holds 31 percent and 20.75 percent is held by the Republic of Kazakhstan. Other entities like Chevron CPC holds 15 percent, Lukarco BV holds 12.5 percent, Rosneft-Shell Caspian Ventures (7.5 percent), Mobil Caspian Pipeline Company (7.5 percent), BG Overseas Holdings (2 percent), ENI International (2 percent), and Oryx Caspian Pipeline (1.75 percent) (Hydrocarbons Technology)[32].

The formation of the route was possible because of the amalgamation of several reasons. Firstly, the existing Soviet era pipeline infrastructure in Russia. The second reason was the proactive negotiations between the Russian and Kazak governments and lastly, the proactive measures taken by Kazakhstan to transit its oil. Kazakhstan successfully accelerated the oilfields development and new pipelines construction in the Caspian region by proving itself to be very efficient. For Russia, the CPC enhanced its geopolitical position in the Caspian Sea region as it secured the right to

[32]Hydrocarbons Technology "Caspian Pipeline", [Online: web] Accessed 20 Jan. 2017 URL: https://www.hydrocarbons-technology.com/projects/caspian/

transport Kazakhstan's oil. The construction of the terminal on the Black Sea was prominent energy investment in the region which further strengthens the position of Russia in the Caspian Sea region. The successful implementation of the CPC proved to be lucrative for the country, as it remains an important pipeline for transiting the Caspian oil and gas (Zhiltsov 2018). The energy cooperation of Kazakhstan with Russia resulted into the fast launch of oil deliveries to the world markets. The energy integration between the countries is a strategic choice made by their respective governments which reflects stable relationship in the Caspian Sea region (Cohen 2008: 134).

Map 5.2: The Caspian Pipeline Consortium (CPC) Route

Source: "Chevron Corporation", [Online: web] Accessed 15 June 2016, URL: https://www.sec.gov/Archives/edgar/data/93410/000095014906000076/f16935e10vk.htm

Uzen-Atyrau-Samara is 1500 km in length. The length and diameter of the Uzen-atyrau section is 683 km and 1000 mm respectively and the length of the Atyaru-Samara section is approximately 680 km and the diameter is 700 mm. The throughput capacity of the Uzen-Atyrau section is 40 million ton/year and for the Atyrau-Samara section is 17 million ton/year. Kazakhstan and Russia signed an intergovernmental agreement in June 2002 stating that Kazakhstan will export oil to the Russian ports of Primorsk, Ust-Luga, and Novorossiysk (Kostianoy et al. 2015: 88). The pipeline is owned by Transneft. The pipeline supplied 15.4 million tons of oil in 2013. Kostianoy (2015) stated that an increase in the production of the Kazak oil and the optimum

utilisation of the Samara route will further increase the productivity of the pipeline to 25 million tons per year.

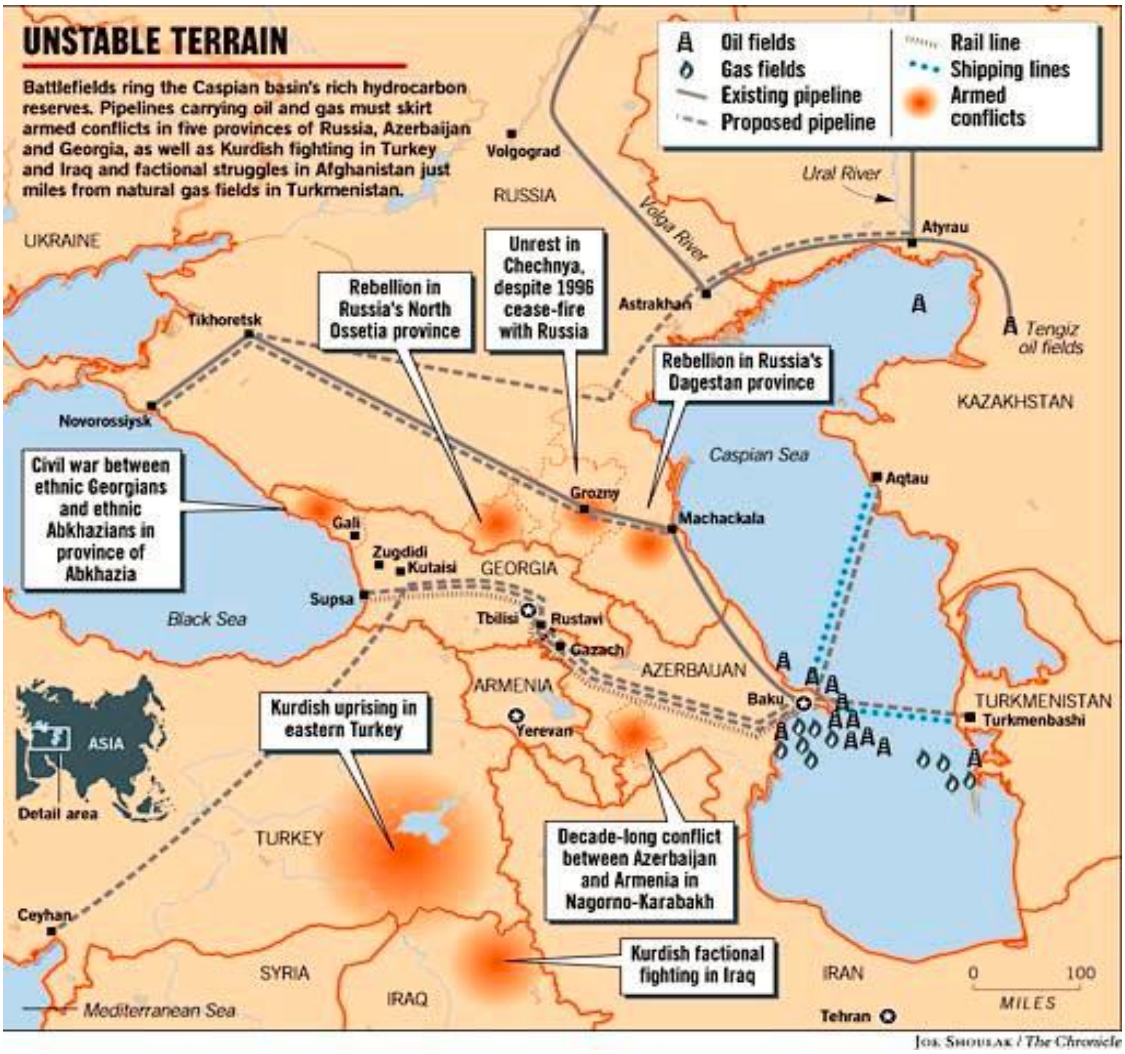
Baku-Novorossiysk Oil pipeline is 1500 km in length and 530 mm in diameter. The length of the Azerbaijan section of the pipeline is 235 km and the length of the Russian section pipeline is 1300 km. The pipeline runs from the Sangachal Terminal to Novorossiysk (U.S. Energy Information Administration 2013: 21). The governments of Russia and Azerbaijan, Transneft, Azerbaijan International Oil Consortium (AIOC) and SOCAR signed the interstate and interdepartmental Russian-Azerbaijan agreements in 1996 regarding the transportation of the Azeri oil through the pipeline. According to the agreement, Azerbaijan had to supply 5 million tons of oil every year. The first oil was pumped in October 1997. The pipeline transports oil from the Azeri, Chirag, and Gyuneshli hydrocarbon fields (Zhiltsov et al. 2015: 89).

The pipeline is geopolitically very significant for Russia and was completed after several hurdles. The separatist movement in the Caucasus region was a challenge to the pipeline. The region is crucial as it is the energy hub of Russia and its proximity to the Black Sea and the Mediterranean Sea which further connect the country to the international markets (Safi and Aslanli 2017: 4). The Chechens declared independence from Russia in September 1991 and a war between the two took place. The pipeline was passed through the Chechen capital of Grozny which was also an armed conflict zone (1994-1997). The pipeline was again a subject of contention between them when the Russian forces withdrew Chechnya in November 1996. The new de facto independent government demanded a share of transit fees along their section of pipeline, which was declined by the Russian government. The Russian government does not want the pipeline to traverse through the hostile state of Chechnya (Paluello and Marriott 2012: 101). The Russian government bypassed the route of the pipeline. It redirected the route from Chechnya to Dagestan on 25 October 1997. The new route was known as the Chechen bypass which traversed through Dagestan to Novorossiysk (Ruban and Kalyuzhny 2011: 102-103). Gerber (2004) stated that even the Chechen bypass route is volatile, and can be attacked by the Chechen fighters, but it is the only way to reach Novorossiysk. The pumping of oil was stopped when the fight between Chechnya and Russia took place in 1999 and the oil from the AIOC was transported by rail to Novorossiysk (Paluello and Marriott

2012: 101). Even in Dagestan the pipeline had to travel through 150 km of unstable region (Alam 2002: 12).

The functioning of the Baku-Novorossiysk pipeline has always been interrupted since its inception. The oil flow to Europe through the pipeline was interrupted in 2006. This interruption led to severe implication, as the AIOC, which is a consortium made of the SOCAR and the European oil and natural gas companies, took decision to stop transporting oil through the pipeline. However, the SOCAR which is a stated owned oil and natural gas Company continued to transport oil through the pipeline. The main reason that the SOCAR chose to transport oil was because it wanted to balance its relation with Russia and the western countries (Energy Information Administration: 2013). In the agreement, the SOCAR committed to transit 5 million tons of oil through the pipeline but was not able to deliver the said amount. The SOCAR exported 1.99 millions of oil in 2011 and 2.06 million tons in 2012 which further decreased to 1.75 million tons in 2013 (Azernews 2013). The delivery of less oil than as mentioned in the agreement forced Russia to cancel the import of oil through the pipeline. Russian Prime Minister D. Medvedev in May 2013 signed the order on the cancellation of oil pumping through the pipeline, but the order was revoked soon (Azernews 2014). The Baku- Novorossiysk pipeline is one of the important pipelines of the Caspian Sea region which connects Azerbaijan to Russia.

Map 5.3: The unstable Caucasus region



Source: Barnes, A.J. and Briggs N.S (2003), The Caspian Oil Reserves The political, economic and environmental implications of "Black Gold" in the world market, EDGE Winter, [Online: web] Accessed 15 June 2016, URL: file:///C:/Users/admin/Desktop/Caspian%20Oil%20Reserves.pdf**.**

The map shows the conflict ridden Caucasus region. It shows the Chechnya, Dagetsan, South Ossetia, and Kurdish uprising through which the pipeline to Europe has to be passed.

The Central Asia-Center gas pipeline system (CAC) was built between 1960 and 1988 in the USSR. It carries gas from the Dauletabad gas field and the Caspian Sea Coast fields in Turkmenistan via Uzbekistan and Kazakhstan to Russia where it links with the Russian gas pipeline network (Zhiltsov et al. 2015: 10). Gazprom is accountable for transiting and exporting gas from Central Asia to Russia and operate the Turkmen gas transit across Uzbekistan and Kazakhstan (International Energy Agency2018: 17). The system consists of four main export pipelines (SATS-1, 2, 4

and 5), running in parallel to join the Russian pipeline network at AlexandrovGai. SATS-1 was commissioned in 1967, SATS-2 in 1969, SATS-3 and 4 in 1972, and SATS-5 in 1985. The gas flow of SATS-3 was 400 mcm in 2006 (International Energy Agency 2008: 61). The CAC carried on average about 35-40 bcm of gas annually. The capacity of the CAC in 2008 was estimated to be around 47 bcm (Yenikeyeff 2008: 35). The pipeline because of the lack of investment and maintenance has underperformed than its capacity. To increase the Turkmen exports to 80bcm every year and also from Kazakhstan, Russia needs to renovate and expand the pipeline system. In April 2004, the meeting between Gazprom CEO, Alexei Miller, and the then Turkmenistan President, Niyazov discussed about the refurbishment and expansion of the pipeline system. The pipeline system proved to be lucrative for Russia as it provides existing infrastructure which brings the Caspian energy to the international markets. The plan of Russia to modernise the CAC pipeline system reflects the determination of Russia to ensure that routes through the country remain the main export for the Caspian gas (International Energy Agency 2008: 20).

Caspian Coastal Pipeline was a proposed pipeline that was to be constructed parallel to the CAC 3 pipeline. The talks between Gazprom CEO, Alexei Miller, and the then Turkmenistan President, Niyazov in 2014, raised the idea of a new pipeline construction within the framework which also deals with the CAC refurbishment and expansion. In May 2007, the Presidents of Russia, Kazakhstan and Turkmenistan signed a Declaration on the Construction of the pipeline, supplemented in December of the same year by a Trilateral Agreement on Cooperation in the Construction of the Caspian Coastal Pipeline. It was to bring gas from the western Turkmenistan and from Kazakhstan northwards to join the CAC lines in Kazakhstan. After a meeting in Ashgabat in July 2008, Gazprom decided to expand the capacity of the line to 30bcm every year. The pipeline was to be built by Turkmengaz, KazMunaiGaz and Gazprom (International Energy Agency 2008: 18). The construction of the pipeline started in 2009 but, in 2010, Russia declared to call off the pipeline.

The East-West Route or Central or Caucasian Route

This Route/direction includes soil and natural gas transit from Azerbaijan to the Black Sea coast via Georgia and Turkey to the Mediterranean Sea. This route also includes

oil coming from Kazakhstan via tankers across the Caspian Sea (Zonn 2015: 79). The western route is primarily favoured by the US in order to lower the Russian influence in the Caspian Sea region. This route is also preferred by Europe, Azerbaijan, Georgia, and Turkey. The pipeline route bypasses Iran and Russia (Alam 2002: 13). After the Soviet disintegration, Russia was not in a position to deliver financial benefits to the Newly Independent States of the Caspian region. The NIS states were nascent and the sudden independence was a shock to them and a power vacuum was created in the region. It gave a perfect opportunity to the US to enter the region, by providing financial support to the regional Caspian States. The US was also in dire need to achieve supply security for the West by diversifying the energy sources. It persuaded the countries to adapt its own type of democracy, independence, and security through energy projects and pipeline infrastructure (Shaffer 2010: 7210).

The high tariff rate combined with the security issues along the northern pipeline route gave an opportunity to the US to endorse the East-West pipeline route. Again, most of the segment of the northern route pipeline was constructed during the Soviet period and were inefficient and unable to deliver future oil and gas effectively. It was also short and terminated on the Black Sea. Another problem was that to access the Mediterranean Sea and the world markets, it had to transit through the congested Bosphorus Strait which is ecologically and politically sensitive (World Bank 2008: 51-52). The low transportation rates of the western route as compared to the northern route gave it a competitive edge. The pipeline route is also environmentally safe and secure, as it avoided the congested Bosporus Strait which was already overloaded with oil tankers. The commissioning of the western export pipeline gave a boost to other signed agreements to carry out hydrocarbon developments in the Caspian Sea (Huseynzade and Aliyev 2015: 178). Earlier the route seemed to be impractical and expensive, but with the US perseverance, extensive studies and excellent policy formation it became successful. The route comprises of the Baku-Supsa pipeline, the Baku Tbilisi Ceyhan pipeline, and the Baku-Tbilisi-Erzurum pipeline. The Trans-Caspian pipeline is the proposed pipeline under the route.

The East-West route or Central or Caucasian direction route, which transports the Caspian oil and natural gas passing through the Caucasus region, goes to Turkey, Georgia and Europe.

Table 5.2: Pipelines route of East-West or Central or Caucasian Region

PIPELINE	TRANSIT ROUTE/ DESTINATION	HYDROCARBON FIELDS	OWNER
Baku-Supsa pipeline	Azerbaijan-Georgia	ACG	AIOC
Baku-Tbilisi-Ceyhan (BTC)	Kazakhstan-Azerbaijan-Georgia-Turkey	ACG, Shah Deniz,Tengiz	BTC Pipeline Co.
Baku-Tbilisi - Erzurum	Azerbaijan-Georgia-Turkey	Shah Deniz	BP, Statoil, SOCAR, LUKOil,Total, NaftiranIntertrade, TPAO
Trans Caspian Oil Pipeline (proposed)	Kazakhstan-Azerbaijan-Turkey	Tengiz, Karachaganak Shah Deniz	Total
Trans Caspian Gas Pipeline (proposed)	Turkmenistan- Azerbaijan-Turkey	Dauletabad	MNCs, States oil and natural gas entities of the concerned governments

Source: U.S Energy Information Administration (2013), "Overview of oil and natural gas in the Caspian Sea region", [web online] Accessed on 16 June 2017, URL: https://www.eia.gov/beta/international/regions-topics.cfm?RegionTopicID=CSR

The geostrategic location and proximity of countries of the Caucasus region to Europe plays a significant role in transiting the Caspian oil and natural gas. The Caucasus region countries of Azerbaijan, Armenia, and Georgia because of their geostrategic location and role as transiting the Caspian Oil and natural gas, they are considered important regional players in the Caspian geopolitics (Gachechiladze 2002: 114). The region is important as it connects the Caspian Sea to the Black Sea and further to the world markets. The region because of its geographical location was also subjected to the British occupation in 1918. The oil and natural gas pipelines reconfigure the geopolitics between the Caspian and the Black Sea. The new economic and political forces were created as Russia, France, Britain, Austro-Hungry, and a number of companies redefined the region as an export corridor in which they held substantial economic interests. During the Soviet occupation of the region, Baku to the Batumi

pipeline was opened in 1929. The crude was supplied to the Batumi refinery and produced petroleum was sold in the European markets by the Soviet Union. After a decade the pipeline was dismantled. The new pipelines of the region are orientated towards the Western Europe (Marriott and Paluello 2012: 99). The East-West pipeline route is beneficial for the Caucasus countries of Azerbaijan and Georgia as it provided them with foreign revenue which accelerated their economic development. It also strengthened their position in the South Caucasus as the conjoining point where Central Asia and Europe merge (Huseynzade and Aliyev 2015: 178).

The Baku-Supsa pipeline/Western Route Export Pipeline/Western Early Oil Pipeline transports Oil from the ACG Oil field of Azerbaijan to Supsa in Georgia which is near Batumi along the Black Sea Coast. It also exports oil products from the Russian Port of Tuapse located on the Black Sea Coast. The construction of the pipeline was started in January 1999 by the Azerbaijan International Operating Company (AIOC) and in April of the same year the first oil was pumped through the pipeline (Zhiltsov et al. 2015: 10). It was built by restoring the partially constructed pipeline in Azerbaijan and connecting it to a disused crude oil pipeline running from northwest of Tbilisi to Batumi. This was also refurbished as far as Supsa, where an offshore loading facility was constructed. The length of the pipeline is 920 km and the diameter is 530 mm with a capacity of 7 million tpa (World Bank 2008: 55). An intergovernmental agreement between Azerbaijan Republic and Georgia was signed on 8 March 1996, to transit oil through the Georgian territory. The construction of the pipeline was completed in 1988 and on 10 December of the same year the early oil was send through the pipeline within the framework of Contract of the Century. The President of Azerbaijan, Heydar Aliyev, stated that the pipeline is a spectacular example of friendship and cooperation between Azerbaijan and Georgia which enhances the peace and stability of the Caucasus region. The pipeline cemented the geopolitical position of the countries in the Caucasus and the Caspian regions. It had a significant impact on the economy of Azerbaijan and Georgia. The East-West route played a significant role in attracting investments and political stability in the region (Huseynzade and Aliyev 2015: 177-178). The geographical location of Georgia and the willingness of the country to transit the Caspian oil and natural gas gave it a key position in the region (Zonn 2015: 82).

The establishment of the East-West route was possible by considering every geopolitical aspect carefully. The BP had two options to transit the ACG oil. Firstly, through the existing Baku-Novorossiysk pipeline route and secondly, to link Sangachal to the Iranian pipeline system. The northern route is short and viable and the Southern route or the Iranian route pipeline had not aligned with the US policy (Marriott and Paluello 2012: 100-101). The US neither wanted to have Russia taking an advantage of its Soviet pipeline infrastructure (Patnaik 2016: 68). The US discouraged the Iranian involvement in the energy geopolitics of the Caspian. The involvement of the US in the Caspian Sea region was weak before 1995. The first tenure of President Clinton as the President focused on the "Russia-first" strategy and the peripheral countries received less attention (Gordadze 2008: 38). The then Deputy National Security Advisor to President Sandy Berger prepared a strategy to focus on the Caspian Sea region energy resources. He meet Terry Adams, the Executive of the British Petroleum running the AIOC, and planned a new line from Sangachal to Supsa instead of spending $50 million fixing up the existing pipeline. The major purpose of Terry was to bypass Russia and Iran. Finally, the pipeline was accomplished. It received financial support from the World Bank and other international financial institutions for the construction of the pipeline (Marriott and Paluello 2012: 100-101). Even after the careful assessment, the pipeline faced several challenges. The politically instability in the Caucasus region of Nagorno-Karabakh, South Ossetia, Abkhazia and Ajaria was a threat to the development of the pipeline. Turkey opposed the plans for the enlargement of the Baku-Supsa on environmental concerns as the Bosphorus Strait was congested with the oil tankers (Orazagaliyev 2017: 9). The route instead of several challenges is politically acceptable to the West as it bypasses Russia and Iran. Before the formation of the pipeline, oil tankers from Baku to Supsa went to the European markets via the Bosporus strait (Alam2002: 13). The pipeline proved to be economically beneficial for Azerbaijan and Georgia as they generated revenue by transiting oil. It was a successful geopolitical tool to lower the Russian and Iranian influence in the Caspian Sea region.

Baku-Tbilisi-Ceyhan (BTC) pipeline carries oil from the Azeri-Chirag-Guneshi hydrocarbon field in Azerbaijan to the European markets. Kazakhstan also transports oil by tankers across the Caspian Sea. The pipeline transits through Georgia and Turkey. Crude from Turkmenistan and the Tengiz field is also pumped through the

pipeline. It links the Sangachal terminal in Baku to the Ceyhan marine terminal on the Turkish Mediterranean coast. It is built by the BP and it became operational in June 2006. The total length of the pipeline is 1768 km, with 443 km in Azerbaijan, 249 km in Georgia, and 1076 km in Turkey (British Petroleum)[33]. It links the Caspian Sea to the Mediterranean Sea. In October 1988, the Presidents of Turkey, Azerbaijan, Georgia, Kazakhstan, Uzbekistan and the US Minister of Energy signed the Ankara Declaration in support of the route Baku-Tbilisi-Ceyhan. After one year at the Istanbul OSCE Summit, all the participants signed the agreement on the construction of the pipeline and transit of the Caspian Oil through the BTC (Zonn 2015: 81-82). The area of influence of the pipeline goes much beyond the energy resources as it helps the region to flourish economically and socially and plays a strategic role in connecting Asia to the Euro-Atlantic world (Starr 2005: 10). The pipeline has accelerated the western involvement in the energy sector of the Caspian region. The pipeline plays a strategic role in the post Soviet Eurasia as it exposed South Caucasus in the European and world politics. The BTC pipeline connects Azerbaijan and Georgia to Europe. The pipeline plays a significant role in lowering the Russian influence in the region (Cornell et al. 2005: 17).

The genesis of the pipeline started in 1994 during the meeting of the Contract of the Century between the Turkish President Suleiman Demirel and the President of Azerbaijan, Heydar Aliyev (Emerson 2002: 115). The pipeline was promptly supported by the US as it secured energy supply to Europe and at the same time lowered the Russian influence and removed Iran from the Caspian energy geopolitics (Roberts 2004:73). The US persuaded the projects by helping negotiations among the Presidents of Azerbaijan, Georgia, and Turkey, international energy companies and international financial institutions. Additionally, the participants of the Baku-Tibilisi-Ceyhan (BTC) project received financial support from the US governmental agencies the Overseas Private Investment Corporation (OPIC) and the Export-Import Development Bank (Nanay and Stegen 2012: 347-348). Energy security was the major agenda of the George W. Bush administration. He created National Energy Policy Development Group (NEPD) that is also known as Cheney Energy Task Force.

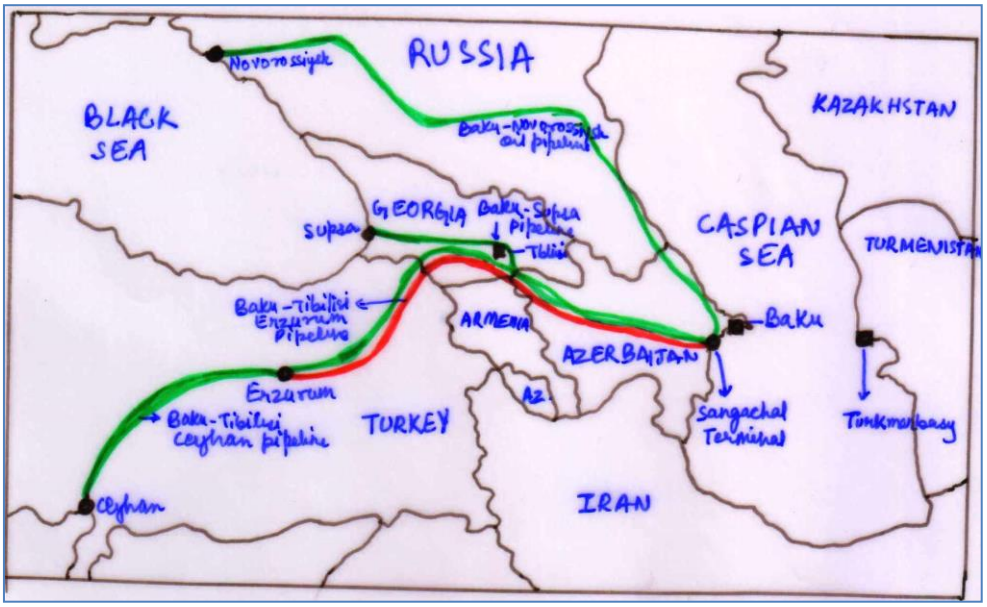
[33]*British Petroleum (BP), "Baku-Tibilisi-Ceyhan pipeline", [online web] Accessed on 14 March 2018, URL: **https://www.bp.com/en_az/caspian/operationsprojects/pipelines/BTC.html**

The report in May 2001 recommended for the procurement of the Kazak oil through the Baku-Tibilisi-Ceyhan. According to the US Senator Conrad Burns, Kazakhstan can insure energy security and supply diversification of the EU. He further stated that the Caspian hydrocarbon can ensure world energy stability (Iseri 2009: 37-38). At the Arthur Andersen's annual London Oil & Gas Symposium, John Wolf, special adviser to the US President and Secretary of State for the Caspian Basin Energy Diplomacy at the Department of State and Iran's Oil minister, Hossein Kazempour Ardebili in 2000 discussed about the policies of the US and Iran in the Caspian Sea region. Wolf emphasized that the US will continue to patronising the East-West corridor as the Main Export Pipeline (MEP) as it provides energy security,; independence and prosperity to the Newly Independent States. The pipeline received financial and diplomatic support from the US. He further asserted that the policy of the US has not changed towards Iran in the energy sector and it is against the Iranian involvement in the Caspian energy geopolitics (Petroleum Economist 2000: 2).

European Commission (EC) launched the program of Technical Assistance to the Community of Independent States in 1991, which was aimed for economic development of the former Soviet countries, but, it only provided technical support and assistance to the countries involved in the BTC pipeline. The EU was more cautious than the U.S while encroaching the near abroad of Russia. The reason is because it is dependent upon Russia for its gas imports (Nanay and Stegen 2012: 347-348). The natural gas dependency of the EU on Russia made the EU participation docile as compared to the active participation of the US in the pipeline politics of the Caspian Sea region. The creation of the Interstate Oil and Gas Transport to Europe program (Inogate), in 1995, was formulated to promote regional pipelines to deliver oil and gas to Europe. Another EU proposal named the "Baku Initiative" paved the way for energy security in Europe through ensuring the Caspian oil and gas flow towards the EU (Belkin 2008: 14). It was implemented in 2004 and aimed at integrating the Caspian region energy markets with the EU market. The major aim of the plan was to bypass Russia and also to gain an upper hand in negotiating transit fee via the Russian infrastructure (Bučka and Zechowska 2011: 74).The EU received the support of the Black Sea and the Caspian littoral states in its energy security programs and policies. Another major concern of the EU was to ensure regional stability in the region which led to an uninterrupted energy flow to the EU. The purpose of the EU

and US was to ensure that the region should remain stable. It wanted to resolve the Nagorno-Karabakh conflict and internal political strife in Georgia as it hindered the energy flow to Europe through the pipeline (Belkin 2008: 16**).**

Map 5.4: The distribution of BTC and BTE pipelines across Azerbaijan, Georgia, and Turkey



Source:https://en.wikipedia.org/wiki/BakupercentE2percent80percent93TbilisipercentE2percent80percent93Ceyhan_pipeline#/media/File:Baku_pipelines.svg

The above Map shows the BTC and BTE pipelines running across the three countries of Azerbaijan, Georgia, and Turkey.

Initially, the construction of the pipeline seemed to be a daunting task due to several factors such as long pipeline route, exorbitant cost of construction, high transit fees, regional conflict, uncertainty about the Caspian reserves and unpredictable market saturation in Europe. Because of this, ExxonMobil and Shell was reluctant to construct the pipeline. Eventually, the British Petroleum became the chief operator and the main stakeholder in the pipeline (Nourzhanov 2006: 61-62). The presence of the Caucasus Mountains in the western side of the Caspian Sea region creates obstacles to build the pipelines. The southern Caspian region is also prone to earthquakes which can hinder the formation of the pipelines (Kostianoy et al. 2015: 22-24). The ethnic conflict of Nagorno-Karabakh in the South Caucasus region poses a great challenge to the BTC (Jaffee and Manning 1998: 114-115). The pipeline had

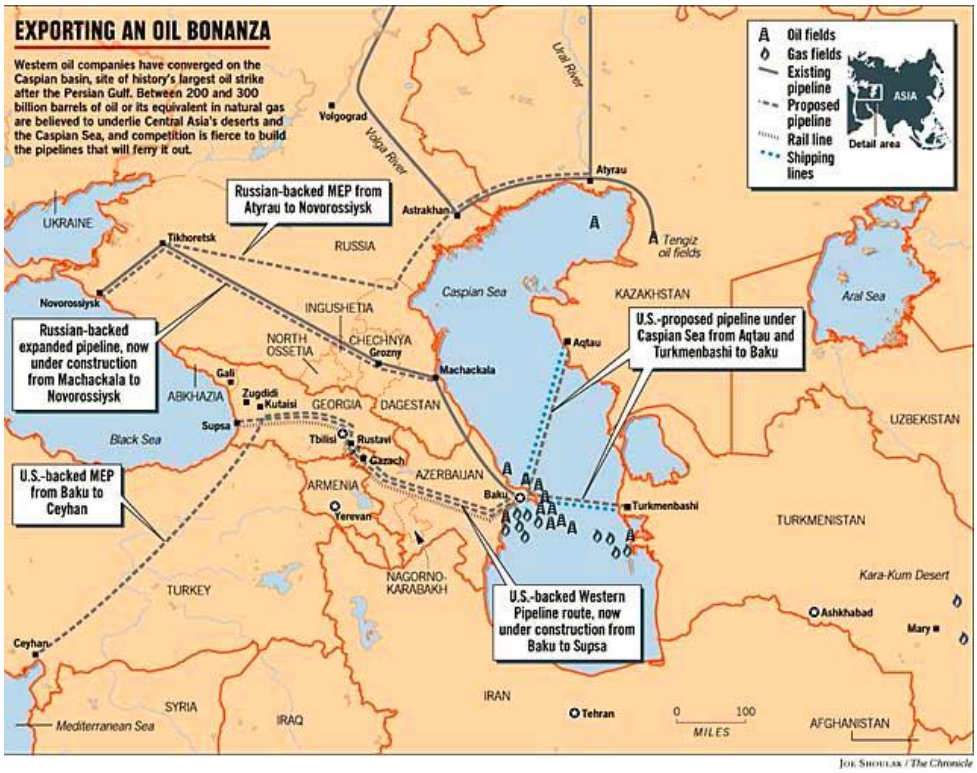
to traverse through the unstable areas of Georgia and restive Kurdish territories in Turkey (Nourzhanov 2006: 61-62). Prior to the development of the BTC, the territory of Armenia was considered for transiting the Caspian oil as it was dubbed as the "pipeline for peace", which was considered to improve the bilateral relations between Armenia and Azerbaijan. But, this prospect was discarded and the Georgian territory was considered to be relatively more peaceful (Hill 2004: 18-19).

The Georgian route is more convenient for Azerbaijan as it maintains close bilateral relations with Georgia (Gachechiladze 2002: 120).The instability in the neighbouring region or attack on the pipeline or in the Sangachal Terminal can complicate the regional geopolitics. The escalation in the Nagorno-Karabakh conflict can tense the relation between Armenia and Azerbaijan, which and can further drag Russia and the USA into the matter, resulting into the formation of the power blocs. The first bloc will consist of Azerbaijan getting the US support and the second bloc will consist of Armenia supported by Russia. This can create a cold war situation or may be a full conflict in the region which can be dangerous for the energy development of the region. Occurrence of any conflict can lead to an interruption in oil supply which can cripple Georgia and Turkey as both the countries are totally dependent upon Azerbaijan for its energy needs (Cavanaugh 2017: 3). Azerbaijan, Turkey, and Georgia seemed to be the perfect route for the BTC as the respective governments of the countries are cooperative and the Georgian route region is less conflict ridden as compared to the Nagorno-Karabakh conflict ridden zone.

Turkey and Georgia play a great role in the development of the Baku Tbilisi Ceyhan pipeline and in transiting the Caspian oil to the European markets. The US, with the help of Turkey wanted to retain its influence in the Caspian Sea region (Alam2002: 13). Turkey supported the BTC pipeline for several reasons as the pipeline is able to fulfil its domestic energy shortages. Secondly, it was able to generate revenue through transiting oil. Finally, the pipeline acted as a geopolitical bridge between the Caspian region and Europe (Nanay and Stegen 2012: 347-348). Turkey is seen as a window to the West by virtue of its geographic location and strategic partnership with the United States (Hill 2004: 19). The pipeline proved to be lucrative for Georgia. The government of Georgia is committed to transit the Caspian oil as it provides revenue to the country. The pipeline has put Georgia into limelight, since, and then many

foreign direct investments poured in the country. The Baku-Tbilisi-Ceyhan pipeline has also helped the country to balance the Russian influence and to maintain economic relations with the U.S. and the EU (Sovacool 2012: 214).

Map 5.5: Oil and Gas Pipeline supported by Global and Regional Power in Caspian Sea Region



Source: Barnes, A.J. and Briggs N.S (2003), The Caspian Oil Reserves The political, economic and environmental implications of "Black Gold" in the world market, EDGE Winter, [Online: web] Accessed 15 June 2016, URL: file:///C:/Users/admin/Desktop/Caspian%20Oil%20Reserves.pdf**.**

Map 5.5 shows Baku-Novorossiysk pipeline supported by Russia and Baku-Supsa pipeline supported by the U.S.

The Baku-Tbilisi-Ceyhan pipeline proved to be lucrative for Azerbaijan, as it accelerated the economic development of the country. It helped the country to balance the presence of global powers i.e. Russia and the U.S in the region. Azerbaijan has always adapted a pragmatic and balanced approach while keeping own benefits intact. Even after the Russia-Georgia hostilities it sent oil to the West and Russia (Yenikeyeff 2008: 18). Azerbaijan has cooperated with the West and Russia by exporting oil to both of them. In the first decade of independence most of the oil of the country crossed through the Russian territory which occasionally led to some

problem over the tariff cost (Pomfret2003: 18). However, after the establishment of the Baku-Tbilisi-Ceyhan pipeline, Azerbaijan has gained more bargaining power with Russia. It is independent and secured its energy markets destination. Azerbaijan and Kazakhstan have been proved to be reliable partners for the EU and the US and were the main building blocs in the formation of alternative energy routes bypassing Russia. The first stage of the EU-US backed 'fourth corridor' is successful with the construction of the Baku-Tbilisi-Ceyhan pipeline and the Baku-Tbilisi-Erzurum pipeline and with the modernization of the Baku-Supsa oil pipeline (Yenikeyeff 2008: 13).

Russia has an ambivalent reaction on BTC pipeline. Some Russian companies were interested either in joining the project directly or building a line connecting it to Novorossiysk. But the Russian policy makers were not enthusiastic about the pipeline. In the words of the Russian Minister of Foreign Affairs Igor Ivanov, the country was deliberately removed from the project (Nanay and Stegen 2012: 347-348). The Newly Independent States were independent to take their decisions and they were blithe to join the BTC pipeline project. The polarisation in the region after the construction of the BTC was problematic as it created power blocs in the region. The first bloc was the Baku-Ceyhan bloc consisting of Azerbaijan, Georgia, the European Union, Turkey and the United States and the opposing bloc consists of Russia, Iran, and Armenia. The polarisation saw another tussle in the post-cold war period led by the US on one side and Russia, on the other side. But, the power blocs in the Caspian Sea region do not upscale in a war or conflict because Azerbaijan and Kazakhstan balance its relation with both the power blocs. The major reason which thwarted the conflict between the power blocs was that Kazakhstan and Azerbaijan were exporting oil to Russia. Even though, they started energy export with the West but they gave equal emphasis to their old partner, Russia. Initially, the pipeline policy of the US was to support and promote multiple pipelines in the Caspian Sea region, but after 1997, the pipeline policy of the US changed and it adhered to the single pipeline policy in the Caspian Sea region and only the BTC pipeline was given priority.

The BTC has proved to be a geopolitical tool for the West to engage in the Eurasian geopolitics and served as the first non-Russian energy bridge across the Caspian, providing market access for the trans-Caspian tankers carrying the Kazakh oil (112th

Congress Session 2012: 6). It also created an East-West energy corridor instead of utilising the North-South transport route that circumvented Iran, given the opportunity to Turkey to act as the new bridge between Europe and the Caspian countries, and break dependence on Russia. The pipeline is able to diversify and secure the energy resources for the West at the same time giving economic benefits to the Newly Independent Countries. The government of the Caspian states transformed the pipelines into means which can achieve political and social objectives. Local people view the BTC as a sole guarantor for development which can improve the country economically. The regional elites have enriched themselves through related business deals (Hill 2004: 18-19). The BTC pipeline was successful in engaging regional and global super powers who were willing to utilise the hydrocarbon resources of the Caspian Sea region. The BTC pipeline is strategically important as it links Asia to Europe and furthermore, it has given a wider perspective to the energy transportation. The major policy of the West was to balance Russia, isolate Iran, and support Turkey.

Baku-Tbilisi-Erzurum Gas Pipeline or the South Caucasus pipeline transports gas from the Shah Deniz gas field in Azerbaijan to Georgia and Turkey. The total length of the pipeline is 691km, with 443 km in Azerbaijan and 248 km in Georgia and the diameter is a 42 inch. The Baku-Tbilisi-Erzurum Gas Pipeline follows the route of the Baku-Tbilisi-Ceyhan pipeline. The pipeline has been operational since late 2006. The daily average throughput of the pipeline in 2018was more than 23 million cubic meters of gas per day. The South Caucasus Pipeline Expansion involves the laying of new pipeline across Azerbaijan and the construction of two new compressor stations in Georgia and the development of the Shah Deniz 2 field. This will triple the gas volumes exported through the pipeline to over 20 billion cubic meters per year. The pipeline is owned by several oil and gas companies in which the share of the British Petroleum is the largest. The British Petroleum (BP) has 28.8 percent share, AzSCP (10.0 percent), TPAO (19 percent), Petronas (15.5 percent), Lukoil (10 percent), NICO (10 percent) and SGC Midstream (6.7 percent) (British Petroleum Azerbaijan)[34].The BTE pipeline is the only successful gas pipeline till date which carries the Caspian gas to the European markets and was only accomplished due to the diligent endeavours of the European Union (Brill 2010: 259). The EU focused on diversifying its gas supply

[34] *British Petroleum (BP), "South Caucasus pipeline", [online web] Accessed 15 March 2018, URL: https://www.bp.com/en_az/caspian/operationsprojects/pipelines/SCP.html

destination. The EU wanted to lessen the overdependence on the Russian gas, so it moved to the Caspian littoral countries for its gas needs. The EU was keen to import gas from the landlocked Caspian littoral countries that were over dependent on Russia for transporting their gas through the northern pipeline route to the European Union via the Russian pipeline system. The foremost purpose of the European Union was to lessen the Russian dependency and monopoly over the gas transit (Bučka and Zechowska 2011: 71). The Pipeline plays a major role in the energy security of the European Union and is geopolitically very significant as it connects the Caspian Sea region to the European Union.

Southern Gas Corridor is a momentous project that is to establish pipeline corridor which will combine the South Caucasus Pipeline expansion through Azerbaijan and Georgia with the new Trans Adriatic Pipeline (TAP) and Trans Anatolian Pipeline (TANAP). It will deliver natural gas from the Shah Deniz field of Azerbaijan to Turkey and the Southeast Europe (Coote2017: 1). The southern Gas corridor stretches over 3,500 Km, crossing seven countries and involving more than a dozen major energy companies (Trans-Adriatic Pipeline)[35]. It will culminate in Italy and supply 10 bcm per year of Azerbaijani gas to Southern Europe. The Trans Adriatic Pipeline and the Trans-Anatolian Pipeline have been recently connected on the Turkish-Greek border (Ibrahimzade: 2019). The Trans Adriatic Pipeline project was initiated in January 2003 and gained the status of "common interest" in the European Union in 2006. The Trans Adriatic Pipeline and Trans Anatolian Pipeline and South Caucasus pipeline projects gained political support from the European Union in the wake of the gas supplies cut off of Russia to Ukraine. The EU focuses on the development of the pipelines as to diversify gas supplies to Europe by creating a fourth energy corridor (Coote 2017: 11-12). The southern Gas corridor is one of the ambitious pipeline projects of the EU.

The European Union firmly believes that the diversification of routes and gas sources might bring more competitive prices as it pays more gas prices as compared to other trading partners (Trans Adriatic Pipeline)[36].The supply diversification is also a major

[35] *Trans Adriatic Pipeline, "Southern Gas Corridor", [online web] Accessed 17 March 2018, URL: https://www.tap-ag.com/the-pipeline/the-big-picture/southern-gas-corridor

[36] * *Trans Adriatic Pipeline, "Southern Gas Corridor", [online web]Accessed on 17 March 2018, URL: https://www.tap-ag.com/the-pipeline/the-big-picture/southern-gas-corridor

aim of the European Union as it is excessively reliant on the Russian natural gas. Earlier Russia and previously the Soviet Union used to be a reliable supplier to the European Union member states, but that equation has changed in recent years. The Russian-Ukrainian disputes over gas prices in 2006 and 2009 led to the formulation of policies regarding energy security (Woertz et al. 2016: 39). The European Union Energy Diplomacy Action Plan stresses the importance of the diversification of sources, suppliers and routes in which the Southern Gas Corridor was emphasised (Ibid: 43). The major purpose of the EU behind the establishment of the Southern Gas Corridor was to ensure supply diversification. The efforts of the European Union and the United States led to the planning and impeccable implementation of the Southern Gas Corridor. Azerbaijan is playing a prominent role in energy diversification of the EU by cooperating in the implementation of the Trans Adriatic Pipeline, Trans Anatolian Pipeline and Southern Gas Corridor pipelines. The Trans Adriatic Pipeline will transport only 2-4percent of the European Union total gas imports. Azerbaijan can contribute even additional energy security to the European Union energy if the Trans Caspian pipeline will be operational (Woertz et al. 2016: 58).

Map 5.6: Southern Gas Corridor

Source: Trans Adriatic Pipeline, "Southern Gas Corridor", [Online: web] Accessed 17 March 2018, URL: https://www.tap-ag.com/the-pipeline/the-big-picture/southern-gas-corridor

The above map shows the Southern Gas Corridor with the South Caucasus Pipeline, Trans-Anatolian Pipeline (TAP) and Trans-Adriatic Pipeline (TANAP).

The lucrative geographical positioning of Azerbaijan gives it the opportunity to transit the trans-Caspian supplies from Turkmenistan and Kazakhstan. The geostrategic

location combined with the diligent leadership of the country established it as a reliable European Union partner. The then President of Azerbaijan, Heydar Aliyev took a very pragmatic step by coordinating with the International Oil Companies to establish development rights in the offshore hydrocarbon field of the Caspian Sea. He further invited the Iranian and Russian companies to actively participate in the energy projects (Coote 2017:6). The leadership of Heydar Aliyev proved to be lucrative for Azerbaijan as the deal opened more prospect of energy cooperation between the country and the European Union. The leadership of the present President of Azerbaijan, Ilham Aliyevis also proved to be very cooperative with the West and Russia to maintain balance in the region. In the last two decades it has forged close ties with the West, despite geopolitical pressures from Iran and Russia. The British Petroleum has become the largest foreign investor in energy sector in Azerbaijan. It operates several key offshore fields, terminals, and pipelines in the country. One of the major US ambitions in the region was to link the Caspian Sea region with the European and global markets. The development of the Southern Gas Corridor and connecting it to the energy rich Caspian Sea region was an early element of the US strategy. The US vehemently abhors its North Atlantic Treaty Organization (NATO) allies to be dependent upon Russia for energy imports, as it can hamper their independent policy making. Another US ambition in the Caspian Sea region is to embolden former Soviet states in building strategic energy decisions. The European Union, the United States of America and Turkey have a key role to play in building an international political and commercial coalition in favour of the trans-Caspian natural gas flows. The US wants to ensure that the Turkmen gas should be transported to Turkey for its domestic use through small sub Caspian connections through Azerbaijan (112th Congress Session 2012: 4-7).

The appended benefit of the Southern Gas Corridor will be double when the development of the Trans-Caspian Pipeline will be realised. The participation of Turkmenistan to the Southern Gas Corridor seems to be difficult because of the Russian pressure and unfriendly investment climate in Turkmenistan. According to the US, the President of Turkmenistan is not willing to take measures to get out of the ambit of Russia and make the Trans-Caspian pipeline a reality (112th Congress Session 2012: 4). After the implementation of the Southern Gas Corridor of the European Union, Russia became competitive in the energy geopolitics of the Caspian

Sea region and took measures to direct the Turkmen gas to its own territory (Woertz et al. 2016: 58). Russian Prime Minister, Vladimir Putin in May 2007 signed an agreement with Turkmenistan and Kazakhstan to upgrade the Central Asia-Center gas pipeline system. The pipeline deal aimed to direct the Turkmen gas to Russia rather than moving West to the European Union or to east to China. The Russian Gas firm, Gazprom signed a deal to buy 50 bcm of the Turkmen gas equal to the European Union prices which was $300 per tcm, which was double as compared to 2008. The deal failed when the demand of the European Union gas dropped in 2009 and an explosion in the pipeline of Turkmenistan happened on April 9, 2009. The explosion led to the disruption in the Central Asia-Center gas pipeline system which further led to the confrontation between Russia and Turkmenistan regarding the cause of the explosion. The pipeline was repaired, but Russia denied to the pay the contracted gas of remaining 40 bcm in 2009. Because of the unwillingness of Russia to pay for the gas price, Turkmenistan believed that the explosion was a deliberate attempt of Russia. The split between Russia and Turkmenistan proved to beneficial for China as Turkmenistan started to export its gas to China. Russia again approached Azerbaijan to buy the Shah Deniz's gas and to pay by the European Union prices, minus transport costs, but Baku and the Shah Deniz consortium declined the offer (Coote 2017: 13).

The Russian competing strategy was seen as a setback to the ambitious Southern Gas Corridor which was to transport the Turkmen gas. Turkmenistan can transport its gas to Europe through the Southern Gas Corridor and through the Trans-Caspian Pipeline. The gas production in Turkmenistan is increasing in recent times and it seeks to diversify its export partner rather than solely depending on China. Another player in the region is Iran which can play a significant role in the Southern Gas Corridor by swapping the Turkmen gas. The geostrategic positioning of Iran makes it a regional player with the calibre of possessing tremendous future prospect in the Caspian Sea region. The export of natural gas provides Iran the economic benefits and political leverage in the region. Iran has stake in the Shah Deniz field and was exempted of the US sanctions. (112th Congress Session 2012: 4-7). The managing director of the National Iranian Gas Company (NIGS), Hamidreza Araqi highlighted that Turkmenistan was hoping to strike more swap deals to supply Azerbaijan via the Iranian pipelines. Turkmenistan was sending nearly six million cubic meters of gas to Azerbaijan in 2018 through Iran on a daily basis. Iranian President Hassan Rouhani

during the official visit to Turkmenistan in 2017confirmed that Iran wants to increase gas swap transactions with Turkmenistan (Gotev2018: 3). The collaboration of Turkmenistan and Iran to the Southern Gas Corridor can further boost the energy security of the European Union, but it will be not acceptable by Russia as the Southern Gas Corridor will remove Russia from the energy export system.

Trans-Caspian Oil Transport System is a proposed subsea pipeline with 739 kilometre length from Kuryk near Aqtau port to Baku. The oil from Kazakhstan was to reach Baku through the subsea pipeline and from there it was to be loaded to the BTC to reach the European markets (Cutler 2016: 1). The pipeline is supported by the United States of America and the European Union. The United States and Azerbaijan signed an agreement to conduct a feasibility study for the establishment of the Trans-Caspian pipeline. The U.S. Trade and Development Agency (USTDA) provided $1.7 million to State Oil Company of Azerbaijan to carry out the feasibility test (Radio Free Europe/Radio Liberty 2007). Karbuz expressed that the Trans Caspian Energy Pipeline was a vision of Clinton as the East-West trans-Caspian energy transport corridor. Kazakhstan was keen to transport oil to the European Union through the Trans Caspian Pipeline. To pump more amount of oil, Kazakhstan planned to build the Kazakh Caspian Transport System (KCTS). The agreement constructing the transport system was held in January 2007. State owned Kazakhstan oil and gas company, Kazmunaigaz, State oil Company of Azerbaijan Republic (SOCAR) with International companies Inpex, EniSpA, Total SA and ConocoPhillips took the responsibility to construct the Kazakh Caspian Transport System. From Eskene to Kuryk the oil would be loaded through the KCTS and reach Baku and then supplied to Europe through the Baku-Tibilisi-Ceyhan pipeline. Earlier, the amount of oil transportation through the transport system was to be 25 million tons per year but later on increased to 38 million tons (Brill 2010: 263).

Map 5.7: Undersea oil pipeline plan of Kazakhstan and Azerbaijan

Source: Cutler M.R (2016), "Kazakhstan and Azerbaijan plan an undersea trans-Caspian oil pipeline",*Central Asia Caucasus analysts*[Online:web] accessed 18 March 2018, URL: https://www.cacianalyst.org/publications/analytical-articles/item/13407-kazakhstan-and-azerbaijan-plan-an-undersea-trans-caspian-oil-pipeline.html

The above map shows the proposed Kazakhstan Caspian Oil Transport System (KCTS) which will transport oil from Kazakhstan to Baku and then to the European markets through the Baku-Tibilisi-Ceyhan pipeline.

Trans Caspian Gas Pipeline (TCGP) The Presidents of Azerbaijan and Turkmenistan signed a framework agreement to create the Trans Caspian Gas pipeline project on 16 June 2006. Turkey and Turkmenistan signed a 30 year agreement in 1999 to export gas from Turkmenistan to Turkey. Again in 1999, Azerbaijan, Georgia, Turkey, and Turkmenistan signed an Intergovernmental Declaration on laying the legal framework of the construction of the TCGP (Brill 2010: 263).The dispute between Azerbaijan and Turkmenistan over the claim of Kapez/Serdar hydrocarbon field (Oğuzhan 2014: 69) and over their gas share in the proposed pipeline made the pipeline difficult to attain. However, in May 2001, they tried to clear their differences but the unclear status of the Caspian Sea became hurdle in the establishment of the TCGP (Yenikeyeff 2008: 68). The idea of the pipeline resurfaced after the Russia-Ukraine gas dispute as the EU wanted to diversify its gas supply routes and sources. The new President of Turkmenistan Berdymukhammedov expressed the desire to develop the pipeline as the country was aiming for multiple export routes. Azerbaijan and Turkey also expressed support for the pipeline

(International Energy Agency 2008: 34). Again in 2015, the Energy Commissioner of the European Union visited Turkmenistan to reconsider the development of the TCGP (Aminjonov 2016: 1). Earlier before the Southern Gas Corridor, the proposed Nabucco gas pipeline which was initiated in 2002 by the EU and U.S was planned to get connected with the Tran-Caspian Gas pipeline to transport the Turkmen gas to the European markets through the Baku-Tbilisi-Erzurum Pipeline (Yenikeyeff 2008: 69).

Cutler argues that the TCGP is the east-west pipeline route which is a deliberate attempt to exclude Russia and that is why the pipeline is opposed by Russia. Russia tried to convince the EU that the proposed TCGP is an unnecessary move and to establish that Russia doubled its gas delivery to the EU through the Caspian Pipeline Consortium (Cutler 2016: 1). This move of Russia was mainly done because it wanted to utilise its own territory to transit oil and natural gas to Europe as it would generate revenue. Another profit of Russia was through transporting gas to the EU it would be able to be active in the energy geopolitics of the Caspian Sea region. The pipeline was not lucrative for Iran as it was eroding the role of Iran in the East-West transit trade. The pipeline if realised would further take away the opportunity from Iran to swap Caspian gas (International Energy Agency 2008: 34). If the pipeline will be a reality then Iran can lose its revenue which it gets natural gas swaps. Iran further discouraged the pipeline proposal because of the environmental concern and environmental grounds.

The TCGP is highly dependent upon the Turkmen gas. The problem with the pipeline is that if Turkmenistan exports its gas to China, Russia, India and Pakistan, then the development of the Trans-Caspian pipeline will be futile as there will be apprehension about the sufficient gas reserves in Turkmenistan (Oğuzhan 2014: 69). If the pipeline is delayed then, Gazprom could resume purchasing the Turkmen gas at low prices and resell it to the European markets (Gurbanov 2018: 1-2). Turkmenistan is already exporting gas to the European Union through tankers, and if the pipeline is developed it should transport extra gas as compared to the tankers, otherwise, it is idle to construct the pipeline. Azerbaijan and Turkmenistan cooperate with each other and desire to accomplish the TCGP as it will be economically beneficial for them as well as consolidate their position in the energy geopolitics of the Caspian Sea region. The gas export to the European Union will endow Turkmenistan with revenue, which can

be utilised by the government to accelerate the economic development of the country (Coffey and Nifti 2019: 2). The TCGP will secure the energy needs of the European Union as it will reduce its dependence on the Russian gas. The proposed pipeline is also a prime objective of the United States of America as the east-west pipeline system will remove Russia and Iran from the pipeline politics of the Caspian Sea region.

The major hurdle in the realisation of the TCGP was the unclear legal status of the Caspian Sea. The Aktau agreement that held in August 2018 cleared the perplexity on the legal status of the Caspian Sea and cleared the way for the construction of the subsea pipelines. The Caspian littoral countries signed an agreement in Akatu, which allows the establishment of the pipelines only by the consent of the countries from whose territories the pipelines are to be traversed. Earlier, the pipelines needed the consent of each littoral state but now only Turkmenistan and Azerbaijan can successfully implement the pipelines. According to the new Aktau agreement, Iran and Russia cannot discourage the TCGP on the legal ground. The development of the pipelines can be beneficial for Turkmenistan as it has already constructed the East-West link that is 483 mile long natural gas pipeline which connects Mary province of the country in the east with the Caspian coast of Turkmenistan (Coffey and Nifti 2019: 2). The pipeline connects the Galkynysh field and other fields in the eastern part of the country to the Caspian coast (Reuters 2015). Turkmenistan can transport gas from the eastern part of the country through the established east-west link and from there the gas can be transported to Baku through the TCGP and further to Europe by the Baku-Tbilisi-Erzurum Pipeline.

LeVine (2007) argues that the former President of Kazakhstan, Nursultan Nazarbayev and the former President Saparmurat Atayevich Niyazovand the current President of Turkmenistan Gurbanguly Berdimuhammedov in Turkmenistan is responsible for the delay in the TCGP as they are not able to take a stand. Basically, they agree to the construction of pipeline formulated by the West and Russia both but they lack the perseverance to put efforts to accomplish the pipeline. He further asserted that the successful realisation of the BTC pipeline was possible because of the vigorous and punctual decision of the President of Azerbaijan Heydar Aliyev, and the President of Georgia Eduard Shevardnadze and the President of Turkey Suleyman Demirel.

Turkmenistan and Azerbaijan signed a Memorandum of Understanding in August 2017 pledging to expand energy cooperation through joint projects. Again on 15 February 2018, the Turkmen delegation for the first time participated in the SCG advisory council meeting in Baku, where they discussed with the European Union representative about the export of the Turkmen gas to the EU via the SCG and TCGP. The working group of Azerbaijan and Turkmenistan in February 2018 discussed about cooperation in the energy projects. But the problem in the realisation of the pipeline is that Turkmenistan and Kazakhstan are very cautious about the proposed TCOP and TCGP. Turkmenistan does not make a commitment to the pipeline nor does it grant IOCs a Production Sharing Agreement (Gurbanov 2018: 1-2).

The 2018 Caspian agreement has again resurfaced the possibility for the development of the Trans Caspian Oil Pipeline and the Tran-Caspian gas pipeline. After the convention on the legal status of the Caspian Sea in Aktau on 12 August 2018, the President of the United states of America, Donald Trump wrote to his Turkmen counterpart Gurbanguly Berdimuhammedov that Turkmenistan should be able to seize new opportunities for exporting gas to the West as the recent determination of the legal status of the Caspian Sea is cleared. The new agreement have paved the way for the accomplishment of the TCOP and the TCGP and can further put some strong measures by the US and the EU to convince the countries for the development of the subsea oil and gas pipelines. President Gurbanguly Berdymukhamedov stated that the implementation will require lots of work and firstly the pipeline route should be determined. He further added that the participants have to settle the legal, claim over the hydrocarbon fields, seabed's and its oil and natural gas reserves, commercial, technical and organisational issue before commencing the pipeline (Eurasia net 2019: 2-4). The geopolitical role of the European Union in the pipeline politics of the Caspian Sea region will be enhanced if the TCGP will be accomplished and integrated with the SCG.

The Pre-Caspian pipeline or Caspian littoral pipeline was a proposed pipeline that was routed via Turkmenistan for about 360 kilometers and another 150 kilometers via Kazakhstan before connecting with the existing Central Asia-Centre gas pipeline network on the Russia-Kazakhstan border. The pipeline was proposed after the talks of the Tran-Caspian gas pipeline and considered to be the competitor of the Tran-

Caspian gas pipeline. Russia signed an agreement of the Pre-Caspian pipeline with Kazakhstan and Turkmenistan. The pipeline was to run along the eastern coast of the Caspian Sea and was designed to transport gas from Kazakhstan and Turkmenistan via northern route through the Russian territory to the European markets. President Putin said that the pipeline would provide gas supplies to Europe. The agreement was supposed to be signed in September 2007, but the three countries then failed to reach a consensus on prices. The pipeline if established was about to transport 20 billion cubic meters of gas per year. The project under the administration of Putin was keen to develop closer relationships with Turkmenistan and Kazakhstan. The pre-Caspian pipeline, if realised could have bolstered the presence of Russia in Kazakhstan and Turkmenistan and helped it to regain its decreased power which Russia experienced in the twentieth century (Russian Today 2007). If the pipeline would have realised then the probability of the Tran-Caspian pipeline would have been minimized because the major amount of gas must have exported to the Russian supported pre-Caspian pipeline. The interest of Turkmenistan decreased in the pipeline project because it signed an agreement with China to construct the Turkmen-Chinese gas pipeline in summer 2007.

The major challenges in the realisation of the pre-Caspian pipeline was the availability of gas reserves in Kazakhstan and Turkmenistan as both the countries were planning to export gas through the Trans-Caspian Gas pipeline. The President of Turkmenistan, Gurbanguly Berdymukhamedov and the President of Kazakhstan, Nursultan Nazarbayev assured Russia, that they have sufficient gas reserves to export its northern ally. They further stated that they are ready to export gas through both the pipelines i.e. the TCGP and the Pre-Caspian pipeline (Yenikeyeff 2008: 60). The Presidents of both the countries were optimistic about the pipeline projects as exporting gas would generate revenue which would boost the economic development of their countries. According to LeVine (2007) the pipeline project initiated by Russia was taken lightly by the United States of America. It considered the pipeline was formulated in vacuum. He further added that as the US was less assertive which gave way to the active participation and presence of Russia in the Caspian Sea region. The agreement that was signed for the construction of the Pre-Caspian pipeline in May 2007 was futile as the countries terminated the plan to build the pipeline (Zhiltsov 2015: 93). Basically, Turkmenistan and Kazakhstan are the Newly Independent States

and didn't want to take very strong step against the global powers[37], mainly with Russia and the United States of America; so; they are always following the policies which balance the global power in the Caspian Sea region.

Eastern or Asian or Chinese Direction

This is the pipeline route that transits oil and gas to the eastern direction from the Caspian Sea region to the Chinese markets. The oil consumption in China has increased; the country has begun investing in the Caspian oil and natural gas production (U.S Energy Information Administration 2013: 16-17). China became the largest energy importer in the world at the end of the 1990s. The disintegration of the Soviet Union, has paved the way for China to access the oil and natural gas of the Caspian Sea region. The land border between China with Kazakhstan makes the transit of oil and natural gas easy without having the complications of the involvement of the transit country. China invested heavily in the Kazakh oil and gas industry and it is also the first major power which became involved in the gas production of Turkmenistan. China has given the opportunity to Turkmenistan and Kazakhstan to diversify their pipeline routes (Heinrich and Pleines 2015: 109). The presence of China after the collapse of the Soviet Union counter balanced the Russian influence upon the national energy assets of Kazakhstan and Turkmenistan. The Chinese investments in the pipeline infrastructure provided less dependence on Russian transport routes as well (Bucka and Zechowska2011: 71).

Table 5.3: Eastern Route Pipelines

PIPELINE	TRANSIT ROUTE/DESTINATION	HYDROCARBON FIELDS	OWNER
Kazakhstan-China Pipeline	Kazakhstan-China	Tengiz, Zhanazhol	Kazakh-Chinese Pipeline Co (KCPC)
Turkmenistan-China Gas Pipeline	Turkmenistan-Uzbekistan-Kazakhstan-China	South Yolotan (Galkynysh),Karachaganak, Tengiz, Kashagan, Samandepe gas field	KazMunayGas, CNPC, Uzbekneftegas, Turkmengaz

[37] Global powers here refer to United States of America and Russia.

Source: U.S Energy Information Administration (2013), "Overview of oil and natural gas in the Caspian Sea region", [Online: web] Accessed on 16 June 2017, URL: https://www.eia.gov/beta/international/regions-topics.cfm?RegionTopicID=CSR

Kazakhstan-China Pipeline or Western Kazakhstan-Western China pipeline or Atasu-Alashankou pipeline transports the Caspian oil to the Chinese market. The pipeline is 2,798km in length that carries crude oil from western Kazakhstan to the Dushanzi refinery located in the Xinjiang Province of China. The pipeline is jointly established by the Chinese National Petroleum Corporation and KazMunaiGaz. The total cost of building the pipeline is estimated at $3bn. The 813mm diameter pipeline has a capacity to transport 10 million tons a year. The pipeline was commenced in 2006 and since then it has transported more than 30mt of crude oil. The construction of the pipeline was divided into three segments and carried out in two phases. The first phase included the 448 km long first section which starts at Atyrau near the Caspian Sea and ends at Kenkiyak. This section became operational at the end of 2003. The second phase included the construction of the Atasu to Alashankou and Kenkiyak to Kumkol sections. The 962 km long Atasu-Alashankou section starts from Atasu in Kazakhstan and passes through three regions that are Karaganda, East Kazakhstan and Almaty, before terminating at Alashankou in China. The construction of this section was commenced in September 2004 and finished in December 2005. The section became commercially operational in July 2006. Crude oil from Kazakhstan enters China at Alashankou. The second stage of phase II of the pipeline included the Kenkiyak to the Kumkol section in central Kazakhstan. The construction of the 761km long section started in December 2007. The section became operational in July 2009. The pipeline travels through the high seismic areas and harsh climatic conditions (Hydrocarbons Technology)[38].

The President of China Li Peng during the official visit to Kazakhstan in September 1997, discussed about importing oil from Kazakhstan. Two intergovernmental agreements "On Cooperation in oil and gas Industry" and "On Construction of two oil pipelines from Western Kazakhstan to Western China and Iran" were signed. China planned to construct the 3000 km long Western Kazakhstan-Western China oil pipeline by 2004. The oil from the Uzen and Aktobe field was to be pumped through

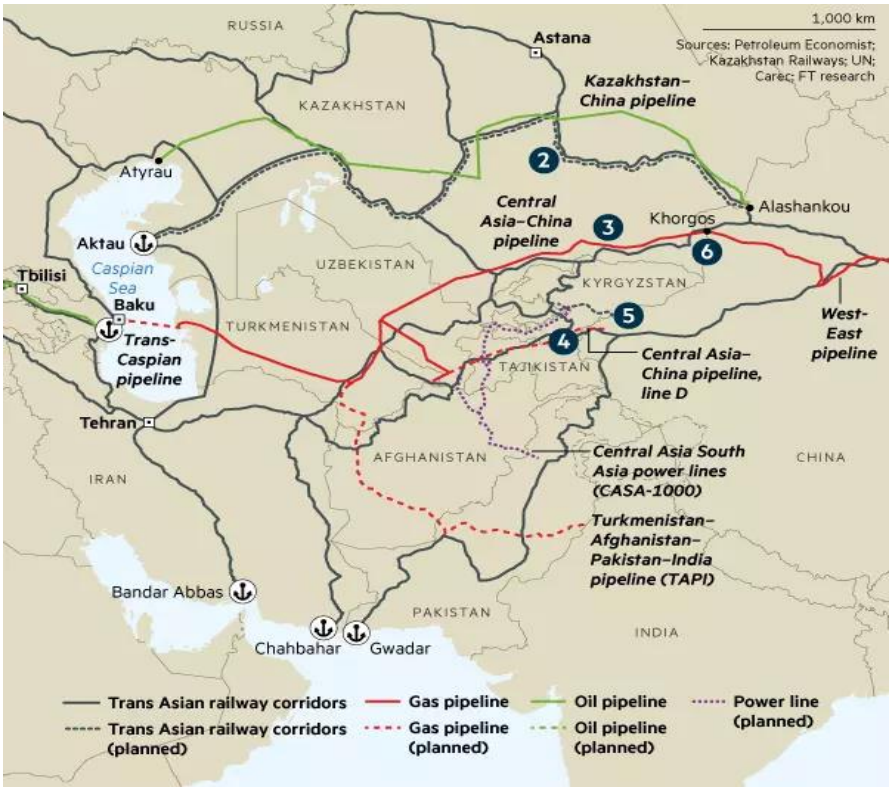
[38]*Hydrocarbons Technology "Kazakhstan-China Crude Oil Pipeline", [Online: web] Accessed 27 Jan. 2017, URL: Https://Www.Hydrocarbons-Technology.Com/Projects/Kazakhstan-China-Crude-Oil-Pipeline/

the pipeline. The complicated internal political processes in Kazakhstan created problems in the construction of the pipeline. Another challenge in the realisation of the pipeline were the political factors. The agreement between China and Kazakhstan was not going well with the U.S whose bilateral relation was strengthening with Kazakhstan in late 1990s. There were several consultations and talks between Kazakhstan and China till 2000 regarding the construction of the pipeline. The President of Kazakhstan Nursultan Nazarbayev and Premier of the State Council of the People's Republic of China Hu Jintao showed keenness to enlarge political support to accomplish the Western Kazakhstan-Western China oil line project. The memorandum on construction of this line was signed in 1997. The Kazak President Nazarbayev, during his visit to Beijing in December 2002, talked about the energy cooperation and construction of pipeline with China. Both the countries prepared strategy to construct the pipeline in October 2003. Finally on May 2004 the agreement on the construction of the oil pipeline Atasu-Alashankou was signed. The joint company "Kazakhstan-China Pipeline" was established by the founders Joint Stock Company (JSC) "KaztransOil" and Chinese National Corporation on oil and gas Exploration and Development (Zhiltsov and Grishicheva 2015: 107-110).

China stressed on the diversification and security of oil and gas supplies as there were physical disruptions in the oil supplies from the West Asia region. It desired to form multiple oil import destinations and the Caspian littoral countries seemed to be the suitable partners for importing oil. The Western Kazakhstan-Western China pipeline was an economic need for China more than the geopolitical ambitions. It wanted to have an influence in Kazakhstan but the immediate concern of the country was to fuel its growing economic development by importing oil from Kazakhstan. The Chinese pipeline route provided Kazakhstan to balance the greater Russian influence (Stegen and Kusznir 2015: 95). One of the challenges in the construction of the pipeline was the commissioning of the Russian pipelines CPC and the rehabilitation of the Atyrau-Samara oil line which meant less oil or no oil to China. The construction of the pipeline was unprofitable if minimum of 20 million tons of oil was not pumped through the pipeline. China was only left with the option to develop the Caspian shelf of Kazakhstan but because of the unclear legal status of the Caspian Sea it was problematic to explore the region. China is focusing on the energy resources of the Caspian region of Kazakhstan as the visit of the Chinese President Xi Jinping to

Kazakhstan in September 2013, China signed an energy related agreements of US$30 billion. The long distance of the pipeline, mountain relief and seismic activity in the pipeline route were some of the major challenges in laying of the pipeline (Zhiltsov and Grishicheva2015: 107-110).

Map 5.8: Central Asia China Pipeline which goes from Caspian Sea region to China.



Source: Connecting central Asia, *Financial Times*, [Online: web] Accessed 29 Jan. 2017, URL: https://www.ft.com/content/ee5cf40a-15e5-11e6-9d98-00386a18e39d

Turkmenistan China Gas pipeline or Central Asia China gas pipeline is an eastern pipeline route with the total length of 1833 km which begins at Gedaim, on the Turkmenistan and Uzbekistan border, and ends at Horgos, in the Xinjiang region of China. Turkmenistan has 188 km of the pipeline in its territory, 530 km pipeline length is from Uzbekistan to Kazakhstan and the remaining 1,115 km runs from Kazakhstan to China. The CNPC began the construction of the pipeline in August 2007. The CNPC Exploration and Development Company, a subsidiary of the CNPC, executed the project. Natural gas from the Samandepe gas field in Turkmenistan is fed into the pipeline. The Karachaganak, Kashagan, and Tengiz, fields in Kazakhstan are connected to the pipeline. Gas fields in Uzbekistan also supply natural gas to the

pipeline (Hydrocarbons Technology)[39]. The first two lines of the Turkmen-Chinese gas pipeline were commissioned in 2009. The CNPC and the KazMunaiGas in September 2011signed an agreement for the construction of Line C of the pipeline in Uzbekistan. The Uzbekistan section of the line C runs parallel to the lines A and B. It increased the capacity of 25 bcm annually and increased the total transmission capacity of the Central Asia-China pipeline to 60 bcm annually. The pipeline transported 4.38 billion cubic meters (bcm) of natural gas to China in 2010. The CNPC signed a contract with Turkmenistan in April 2006, for supplying natural gas to China for 30 years (Zhiltsov and Grishicheva 2015: 114).

Kazakhstan and Turkmenistan were also interested to form political and economic ties with other countries of the world. The landlocked positioning of both the Caspian littoral countries impairs its accessibility to access international sea ports. This factor created a huge problem for both the eastern Caspian countries and has to be dependent upon the expensive pipelines and the neighbouring countries by paying high transit tariff (Karagiannis 2003: 156). But, the land boundary between Kazakhstan and China played a major role in developing energy ties between them. The pipelines were easily developed as there were no transit countries. Turkmenistan is also connected to China with well developed pipeline infrastructure. China was able to seize the opportunity effectively and approved energy agreements with the Caspian littoral countries. This move was crucial for the energy security of China as it was facing difficulties by the disruptions in the oil supply from the Gulf region through the chokepoints as most of the chokepoints of the world are controlled by the U.S. The naval power of the U.S being strong instilled fear in China that the U.S can manhandle the chokepoints during the Sino-American conflict which can disrupt the energy security of the country (Downs 2004: 32). Therefore, the country turned to the Caspian littoral countries i.e. Kazakhstan and Turkmenistan for the oil and natural gas security as it is more secure and there are no chokepoints involved in the energy transport. There were no transit countries involved in the pipeline route which further reduced the burden of paying high tariff to the transit states.

[39] *Hydrocarbons Technology "Hydrocarbons Technology Central Asia-China Gas Pipeline", [Online: web] Accessed on 27 Jan. 2017 URL: https://www.hydrocarbons-technology.com/projects/centralasiachinagasp/

Another reason for the pipeline development of China in its western region was to impede the ongoing secessionist movement by the Uyghur in the Xinjiang region. China wanted to maintain a stable and amicable relation with Kazakhstan and Turkmenistan because of the troubled Xinjiang region (Tazhin 2008: 64). Downs (2004) argues that China might have provided Kazakhstan with the non-Russian pipelines in exchange for curbing Uyghur separatist activities in Kazakhstan. China and Kazakhstan give an immense emphasise to the security of the region as it can hamper the security of state and disrupt the energy flow between the countries. The foreign policy of China gives priority to strengthen the trade and investment in the Caspian littoral states as the economic interdependence will be able to secure constant supply of oil to China (Downs 2004: 38). The investment of China in Kazakhstan and Turkmenistan is rising day by day. China (Sinopec) signed a US$1 billion agreement with Kazmunaigaz in October 2009 to modernise the Atyrau refinery (Brill 2010: 266). The period between 1995-2000 evidenced the greater involvement of Russia, the EU and the U.S in the pipeline politics of the Caspian Sea region. The entry of China in pipeline politics of the Caspian Sea region was commenced late around 2004 but soon it became a leading trade partner of Kazakhstan and Turkmenistan. According to several observers China is making a winning move in the region against the other global powers (Stegen and Kusznir 2015: 91).

Southern Route Pipeline or the Iranian Pipeline Route

This is the pipeline route that goes to the Southern direction from the Caspian Sea. It passes through the Iranian territory and terminates on the Persian Gulf. This route is supported by Iran. The geostrategic location of Iran and its proximity with the Caucasus countries, other Caspian littoral countries, the Central Asian countries, the Persian Gulf, the Gulf of Oman, Turkey, Iraq, Afghanistan, India and Pakistan allow it to engage in oil swaps. At the same time it gives an opportunity to the landlocked Caspian countries i.e. Turkmenistan, Kazakhstan, and Azerbaijan to export its oil to the world markets (Alam 2002: 14-16). Iran has numerous crude and product pipelines within 50 to 150 km of its ports on the Caspian Sea that can be used for the transportation of oil to its refineries. The extensive port facilities in the Persian Gulf further helps the swap arrangements (Ghorban 2000: 149). The Caspian oil is received in the Neka port and is sent to the refineries in Tehran and Tabriz and the equivalent

amount of oil is sent through the Persian Gulf (U.S. Energy Information Administration 2013: 17). The first step towards the planning of the southern routes was taken in July 1998 by Iran when the country officially submitted a proposal of an oil pipeline having the length of 392 km at public international bid in London. The project was estimated to cost around US$400 million (Zonn 2015: 120).

Table 5.4: Southern routes of Caspian Sea Region

PIPELINE	TRANSIT ROUTE/DESTINATION	HYDROCARBON FIELDS	OWNER
Iran Oil Swap	Kazakhstan-Turkmenistan-Azerbaijan-Iran	Oilfields near to the Caspian of the littoral countries	NIOC
Kazakhstan-Turkmenistan-Iran pipeline (Proposed)	Kazakhstan-Turkmenistan-Iran		

Source: U.S Energy Information Administration (2013), "Overview of oil and natural gas in the Caspian Sea region", [Online: web] Accessed on 16 June 2017, URL: https://www.eia.gov/beta/international/regions-topics.cfm?RegionTopicID=CSR

Oil swaps of Iran is considered to be economically viable for the Caspian states. Iran has already established a 272 km long pipeline in the northern Iran to transfer crude oil from the Neka Terminal on the Caspian Sea coast to a refinery in Tehran (The Iran Project 2017: 1). The trading firms Vitol, Select Energy, Litasco, Silk Road, and Ocean Energy were engaged in swap arrangements with Iran. The UAE-based Turkmenistan producer Dragon Oil sold most of its crude oil through the Iranian port of Neka until July 2010 (U.S. Energy Information Administration 2013: 17). The Russian-flagged VF Tanker-20 discharged around 6,000 tons of the Turkmen-origin crude oil at the port of Neka on August 3, 2017. The company moved about 80 percent of the crude it pumps from its 44,000-45,000 barrels per day field through a swap deal with Iran, with the remaining 20 percent marketed through Baku in Azerbaijan. When the Iranian route was closed Dragon diverted all export volumes to Europe via Azerbaijan and Russia which demanded high tariffs (Financial Tribune 2017: 1-2). Azerbaijan and Iran made an agreement in 1994 to utilise the Iranian territory for oil transportation to Turkey but it ended in an oil swap deal in 1995.

Azerbaijan and Iran agreed to build a pipeline from Azerbaijan to the Persian Gulf. Azerbaijan offered 5percent share to the AIOC as their bilateral relation was thriving. However, the US intervention and pressure to stop oil trading with Iran deteriorated the diplomatic relations between Baku and Tehran (Orazgaliyev 2017: 9).

Oil swap is the vital sources of revenue for Iran. The Oil Minister of Iran Bijan Namdar Zanganeh had expressed that the President Hassan Rouhani government is close to resume swap arrangements with its northern neighbours. He further stated that Iran is willing to start swapping oil and gas from the Caspian Sea littoral states, provided Russia, Azerbaijan, Kazakhstan, and Turkmenistan equally take measures and cooperate with Iran in this regard (Financial Tribune 2017). At the Arthur Andersen's annual London Oil & Gas Symposium, in 2000, John Wolf, special adviser to the US President and Secretary of State for the Caspian Basin Energy Diplomacy at the Department of State and the Oil minister of Iran, Hossein Kazempour Ardebili discussed about the policies of their respective countries in the Caspian Sea region. According to Ardebili, the Caspian Sea is politically and economically vital for the country and it is committed to develop the pipeline route in the region despite receiving or not receiving foreign assistance. He emphasised on the lucrative geographical position of Iran and stated that the political division would lead to ineffectiveness in the energy development of the region (Petroleum Economist 2000). The Iranian policy towards the Caspian littoral countries are amicable when the oil swaps are considered as it provides Iran revenue for transiting oil and natural gas of the Caspian. Iran has always engaged in the region, but the economic sanctions of the U.S on Iran have subdued Iran in the pipeline politics of the Caspian Sea region.

Iran was an active participant in swap operations, which began in 1997 on the basis of signed contracts. From 1997 to 2009, the total profit of Iran from the swap transactions was US$880 million. Tehran stopped the swap arrangement with Kazakhstan, Turkmenistan, and Azerbaijan in 2010 to demand for the raise in the swap price. The Hague International Court of Justice fined the NIOC $5.5 million for stopping the oil swap with its international partners. Iran tried to revive the old swap deals in 2012. However, the Iranian oil sector had been subjected to the EU and the U.S sanctions inflicted severe repercussions on Iran. NaftiranIntertrade Company

(NICO) was put on the list of the blacklisted company. This meant that any direct trade, even by the non-US companies, with NICO would lead to penalties by the US (Iran Daily 2017). The US sanctions on Iran has taken a toll on its economic and political sphere. Because of the sanctions Iran was not allowed to develop its energy and pipeline sector and even the foreign investors were not allowed to participate in the energy economic activities of the country. The Iranian oil and gas industry suffered a lot of setbacks because of the sanctions.

Iran needs to attract foreign investment and expertise to increase its energy productivity (Woertz et al. 2016: 58). But, the oil and natural gas companies are heavily levied by the U.S. if they invest in the oil and gas sector of Iran. So, the IOCs are discouraged to invest in the Caspian sector of Iran. Some IOCs also considered the Iranian transportation options in defiance of the U.S. sanctions. With its highly developed energy sector and existing domestic network of pipelines, Iran is considered by many investors the cheapest and most secure export route. Total, a French company in 1998 conducted a feasibility study for a pipeline from the Caspian to the ports of Iran on the Persian Gulf. Two American companies, Mobil and Conoco, lobbied the U.S. government to ease the Iran and Libya Sanctions Act (ILSA) restrictions and allow oil swaps with Iran but the U.S. government resisted these pipeline and oil swap projects (Hill 2004: 21). Several IOCs were in favour of the Iranian route and in support of swap arrangement as it is not only short but also have the availability of existing infrastructure which will reduce the expenditure of the IOCs to construct the new pipeline network. Oil swaps deals carried by Iran always aid the Caspian littoral countries. Azerbaijan entered into oil swap arrangement with Tehran when oil export was stopped because of the disruptions in the Baku-Batumi rail link (International Energy Agency 2008: 35). Kazakhstan and Turkmenistan engage in oil swaps with Iran through the Neka port. Even when the BTC was shut-down and the conflict in the South Caucasus erupted, Azerbaijan carried the oil swaps through Iran (Yenikeyeff 2008: 18). Despite all positive points, these routes are firmly opposed by the US due to estranged relations between the US and Iran (Alam 2002: 15).

Kazakhstan-Turkmenistan-Iran (KTI) pipeline is a proposed 2500 km long pipeline originating from the western part of Kazakhstan to Iran. The pipeline was

planned to connect already existing section of the Turkmenbashi-Okarem in Turkmenistan to the Neka-Tehran pipeline in the Iranian territory. If realized, the pipeline would have carried 500,000 barrels oil per day. The pipeline further planned to transport oil from Kazakhstan and to integrate Azerbaijan and Turkmenistan (Zonn and Semenov 2015: 121). Kazakhstan and Iran in 2007 expressed their interest in building the pipeline. The pipeline if realised will be the north-south export route through Iran (Yenikeyeff 2008: 18). The President of Kazakhstan, Nursultan Nazarbayev, talked about the proposed pipeline in June 2004 through which the Kazakh oil could have reached to the Persian Gulf and finally, to the world market. But, the energy cooperation between Kazakhstan with Iran was not going well with the Bush administration and the U.S put immense pressure on Kazakhstan to decline the pipeline project (Nourzhanov 2006: 62-63). Turkmenistan also terminated the pipeline in the wake of not aggravating its relation with the U.S. (Zonn and Semenov 2015: 121). The proposed pipeline was lucrative for Iran as it claimed that the transportation of the Turkmen gas through Iran to Turkey instead of the Trans Caspian project will be economical. But, the sanctions make it difficult to opt for the Iranian route despite it being the shortest, economical, and environmentally safe (Oğuzhan 2014: 73-74).

Korpezhe-Kurt-kui pipeline is a natural gas pipeline originating from the Korpezhe field in the western Turkmenistan to Kurt-kui in Iran. The pipeline was commenced in 1997 and is the first non-Russian gas pipeline transit route originating from the Caspian Sea. The Turkmengaz and NIOC operate the pipeline. The total length of the pipeline is 200 km with 135 km in Turkmenistan and the remaining pipeline of 65 km in length is established in Iran. The same amount of gas which Iran received in the northern part of the country is exported to the Turkmen gas importer in the Persian Gulf. Iran proposed the pipeline proposal to Turkmenistan in August 1994 and it was finalised in January 1995. Kurt-kui was a first step to establish the 1400 km long pipeline which was to traverse from Turkmenistan to Turkey through Iran. Turkmenistan withdraws from the larger pipeline as the international aid for the pipeline was impossible because of the U.S. sanctions on Iran. The disintegration of the Soviet Union gave an opportunity to Iran to establish cordial bilateral relations with Turkmenistan through establishing the larger Turkmenistan-Iran-Turkey pipeline which could help it to be a major gas player in the world. However, only the small

section of the pipeline i.e. the Kurt-kui pipeline was accomplished because of the ILSA sanctions. The smaller kurt-kui pipeline is a good initiative to boost the energy between Iran and Turkmenistan (Brill 2004: 11-12).

South-eastern Pipeline Route

The South-eastern route is favoured by Turkmenistan, Pakistan, Afghanistan, and the U.S. (Alam 2001: 15). The pipeline is supported by the USA as it wants to integrate Turkmenistan to the South Asian region. The U.S. also supports the south-eastern route because it bypasses Russia and Iran. The south-eastern pipeline comprised of the Turkmenistan Afghanistan Pakistan India pipeline (TAPI). The political instability, terrorism, unfriendly bilateral relations between the countries has made the realisation of the pipeline difficult. Condoleezza Rice (2008), the United States Secretary of State's argues that the TAPI pipeline is the north-south corridor which will boost the regional integration and will be beneficial for the development of Afghanistan. The energy needs of Afghanistan, Pakistan, and India have been increasing and the gas export can play a major role in the development of the countries.

Table 5.5: South-eastern Pipeline Route of the Caspian Sea Region

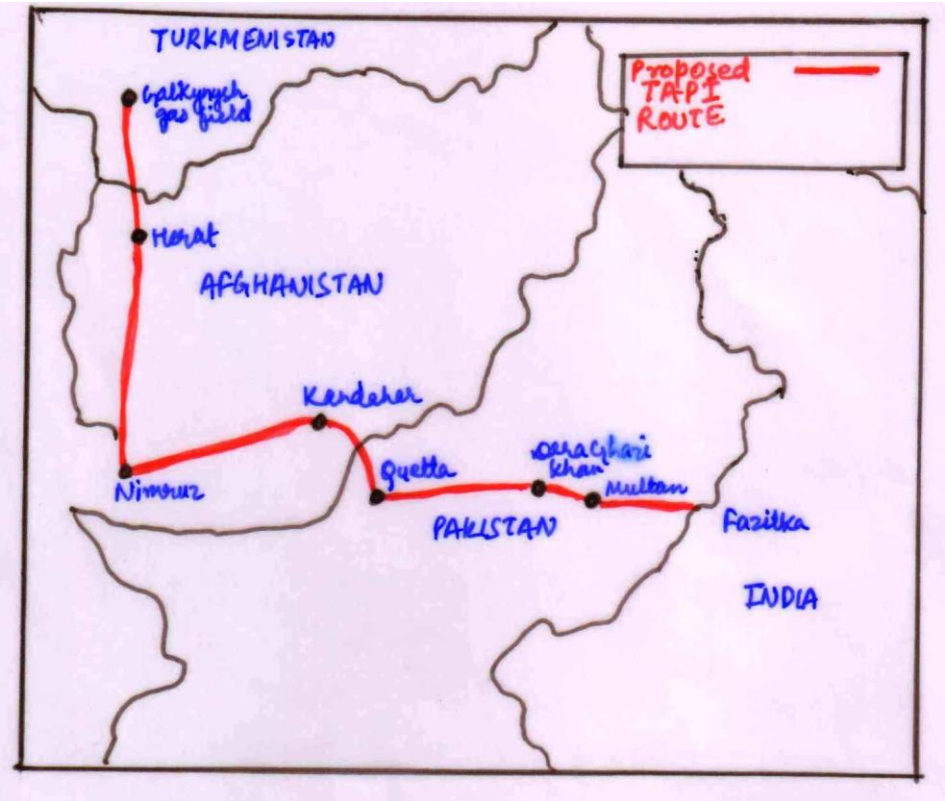
PIPELINE	TRANSIT ROUTE/DESTINATION	HYDROCARBON FIELDS	OWNER
Turkmenistan-Afghanistan-Pakistan-India Pipeline (TAPI) (Proposed)	Turkmenistan-Afghanistan-Pakistan-India	South Yolotan (Galkynysh), Dauletabad	Pipeline is not realized, so there is no ownership

Source: U.S. Energy Information Administration (2013), "Overview of oil and natural gas in the Caspian Sea region", [Online: web] Accessed on 16 June 2017, URL: https://www.eia.gov/beta/international/regions-topics.cfm?RegionTopicID=CSR

Turkmenistan-Afghanistan-Pakistan-India Pipeline (TAPI) is a proposed gas pipeline from the Galkynysh gas fields in Turkmenistan which will traverse through Herat, Nimruz, and Kandahar in Afghanistan, Quetta, Dera Ghazi Khan, and Multan in Pakistan and will terminate at Fazilka in India. The pipeline was proposed in 1990s by the then Taliban regime in Afghanistan. The Taliban government started to

negotiate with the U.S. firm, Unocal as well as an Argentinean company, Bridas regarding the development of the pipeline and transit rights. The allotted gas volume to Afghanistan was planned to be 5 billion cubic meters per year and 14 billion cubic meters each for India and Pakistan. Pakistan and Afghanistan by transiting the gas to India would have generated US $200–$250 million (Huda and Ali 2017: 203). The proposed pipeline was terminated when there were two explosions in the US embassies in Kenya and Tanzania and after missile attacks led by the U.S. in Afghanistan and Sudan. The relationship between the countries terminated and the pipeline was shelved. Sengaz, one of the members of the consortium refused to participate in the pipeline. The constant assurance of Turkmenistan to the U.S. regarding the security of the pipeline went in vain. The plan of the pipeline was revived in 1999 when the Taliban government came into power. The project is lucrative for their consolidated geopolitical power in the region (Zonn et al. 2015: 132). India joined the pipeline in 2008. The pipeline is not favoured by Russia and China as the pipeline route excludes these global powers (Brill 2010: 269).

Map 5.9: Proposed Natural Gas Pipeline - TAPI.



Source: "TAPI", [Online: web] Accessed 16 June 2017, URL: https://ars.els-cdn.com/content/image/1-s2.0-S2214629617302372-gr1.jpg

The geostrategic location combined with the huge oil and natural gas in the Caspian region plays an important role in the involvement of several global and regional powers. These powers thrive to utilise the energy resources of the region. The pipelines are the major tool of the global and regional powers to demonstrate their geopolitical influence in the Caspian Sea region. There is a fierce competition among the regional and global players to access the oil and natural gas of the Caspian Sea region. The three Caspian littoral countries i.e. Azerbaijan, Kazakhstan, and Turkmenistan are landlocked and need pipeline infrastructure to export their oil and natural gas. Russia preferred the northern pipeline route which was constructed in the Soviet period. Alam argues that the U.S. and the EU with the East-West pipeline infrastructure desire to be present in the Caspian Sea region. The BTC lowers the Russian and Iranian influence in the Caspian Sea region by bypassing them. The east-west pipeline route also allows the Caspian littoral countries to diversify its energy market and get the non-transit Russian routes. The eastern route pipeline infrastructure export oil and gas to China. The southern route passes through the Iranian territory but the U.S. sanctions on Iran stopped the development of the pipeline route. The south-eastern route comprised of the TAPI pipeline but the political instability in the South Asian region disabled the development of the pipeline.

The Caspian littoral countries are not just a spectacle in the pipeline politics of the Caspian Sea region but they are actively involved in the decision making of the pipeline routes. They sought for the transit route which is economically viable for them and generate maximum profit. The geopolitical concerns are a major factor combined with profit maximization. The Caspian littoral states emphasise on the diversification of export routes which highlights that these countries are not just objects in geopolitical power struggles of more influential states but they are able to create a niche for themselves (Heinrich and Pleines 2015: 113). The decision of the littoral states to diversify the export routes have made them less vulnerable and excellent bargainers. The Caspian states since 1994 have welcomed numerous potential customers (International Energy Agency 2008: 14). The Caspian littoral countries cooperate and jointly develop pipeline to develop transport pipeline routes. The combination of foreign investment and rising energy prices allowed the coastal countries to develop their energy resources (Chow and Hendrix 2010: 31). After the

disintegration of the Soviet Union the Caspian littoral countries were left without pipeline infrastructure as most of the pipeline went to the Russian territory. Zhiltsov (2018) argues that the newly independent Caspian littoral countries were mainly dependent upon Russia for exporting its oil and gas and this consolidated the geopolitical position of Russia in the Caspian Sea region. Russia with the help of the northern route pipeline was able to maintain its superior geopolitical position in the region. But, soon the energy resources of the Caspian Sea region attracted the U.S. and the EU and they started to plan the import of the Caspian oil and gas through the east-west pipeline route. The east-west pipeline route was successful in balancing the Russian greater influence in the region. The pipeline route also gave greater autonomy to the Caspian littoral countries to diversify their pipeline routes. Ruban (2018) stated that the major change in the geopolitics of the Caspian Sea region occurred after the entry of China as the involvement of China is increasing in the Caspian Sea region. The involvement of China has given more bargaining power to Kazakhstan, even more than the involvement of the western countries through the BTC and the SCP (Brill 2010). Kazakhstan and Turkmenistan are benefitting from the competition between Russia, the EU and China in the Caspian Sea region (Yenikeyeff 2008: 43). Russia offered to pay higher price for the Turkmen gas after China signed a long-term gas purchase agreement with Turkmenistan. Iran is keen to play a greater role in the pipeline politics of the Caspian Sea region by exporting the oil and natural gas resources, but the U.S. sanctions had negatively impacted the country. The future detente between the U.S. and Iran can alter energy geopolitics of the Caspian Sea region. Their improved relationship can open the Iranian route which will to be beneficial for Iran as well as Europe.

CHAPTER 6

CONCLUSION

The Caspian Sea region acquires a significant geostrategic position in the heartland of Eurasia. The abundance of oil and natural gas in the Caspian Sea region further magnify its paramount significance in the present times. It is the oldest oil producing region in the world. The first oilmen in Baku used to dig oil from the land with shovels and bare hands. The inscriptions state that the oil history dates back to 1595. There are numerous oil and natural gas in the Caspian region. Tengiz, Shah Deniz, Azeri-Chirag-Guneshi, Kashagan are major hydrocarbon field in the region. The Soviet Union collapsed in 1991. Soon after the disintegration of the U.S.S.R the three Newly Independent States Azerbaijan, Turkmenistan and Kazakhstan came into existence. The abundance of oil and natural resources proved to be lucrative for the economic development of the littoral countries. Because of the lucrative geostrategic position and rich energy resources, the Caspian Sea region attracted the European Union, the U.S, and China. The presence of several countries has given a complex geopolitical structure to the region. Russia being the regional hegemony in the region for over two centuries is reluctant to share its undefeated power in the region.

The Caspian littoral countries are rich in oil and natural gas. The economy of Azerbaijan, Turkmenistan and Kazakhstan are totally dependent upon the energy resources. So they formulate policies which are most lucrative for them. Kazakhstan is energy export driven economy. The landlocked geographical position of Kazakhstan makes it dependent upon its neighbouring countries to export its oil resources. The dependency makes it difficult to follow independent energy policies. The then President of Kazakhstan, Nursultan Nazarbayev was aware of the importance of Kazak oil to the world. He soon liberalized the economy of Kazakhstan by accepting the invitation of the International Oil Companies to engage in the oil production of Kazakhstan. The country shares land boundaries with two large countries of Asia that are Russia and China and apprehend being dominated by them. So, the country welcomed all the global and regional powers to engage in the energy sector of Kazakhstan. The idea behind this policy was to maintain equilibrium by welcoming the U.S, European, Chinese energy firms in the Kazakhstan. The energy

sector policies of Kazakhstan are highly driven by its Multi-vector foreign policy. The country wanted to maintain balance through the presence of several players in the energy sector. Kazakhstan pursued privatization, but the government have regulation over the private firms. It involved private foreign ownership in oil sector by selling off the majority of shares of Kazakhstan's state oil company. Kazakhstan follows the Soviet centralised system of governance which has strong control over the energy sector.

The energy policy of Turkmenistan is highly determined by its foreign policy. The first President of the country, Saparmurat Niyazov was in strong favour of neutrality. The neutrality policy was applied to the energy sector of the country as well. By adopting neutrality in the energy sector the country opened its energy sector for the foreign multinational oil and gas companies. Turkmenistan was under the Soviet rule over a long period, so after getting independence, it formulated the policy of neutrality. The neutrality policy provided the country to limit its relationship with foreign countries, which reduced the probability of the country to again being subject of any foreign domination. The country formulated the policies which were totally formulated and governed by the state. It welcomed the U.S, EU, Russian and Chinese energy firms to participate in the hydrocarbon exploration and exploitation in its Caspian sector. The energy policies of the country is centralized and mainly influenced by Soviet style of governance. After the stagnant growth of the economy, the country opens its economy to foreign investors. The open door policy was implemented and delivered some benefits. Turkmenistan focuses on the diversification of the energy supply route. It has negotiated with EU regarding the Southern Gas Corridor. Turkmenistan was also ready for the establishment of TAPI (Turkmenistan-Afghanistan-Pakistan-India) pipeline. The geographical location of the country also plays an important role in determining the energy policies of the country. It is surrounded by two large and powerful countries that are Russia and China and it doesn't want to be overpowered by them. The unstable neighbourhood of Afghanistan and Pakistan can be a market of Turkmen gas. However, the instability thwarted the development of TAPI pipeline. China has emerged as a great player in the energy sector of Turkmenistan by engaging in the exploration and production of natural gas in the country. The large Chinese investment in the country accelerated the development of Turkmenistan and provided energy security to China.

The geostrategic location of Iran plays a significant role in determining its energy policies. The Iranian sector of Caspian has very less hydrocarbon deposit which too is located in the deep waters which further makes it difficult to drill. The energy development of Iran in the Caspian is severely hampered by the U.S sanctions. Many International Oil Companies (IOCs) does not want to invest in the Iranian sector of the Caspian because of the heavy fine imposed by the US. The establishment of Kazakhstan-Turkmenistan-Iran (KTI) pipeline was blocked because of the sanctions. Iran being the shortest, economical and environmentally secured is favoured by many IOCs, but the US commitment to remove Iran from the geopolitics of the Caspian Sea has led to passive engagement of Iran. Now as the sanctions are lifted, Iran can formulate a comprehensive energy policy in the region. Iran can play greater role as it has already joined International North South Transport Corridor (INSTC) and India-Kazakhstan-Iran-Turkmenistan Quadrilateral.

In the aftermath of the disintegration of the Soviet Union, Azerbaijan followed a very independent energy policy by embracing privatisation. Azerbaijan welcomed the IOCs for the development of hydrocarbon field in its Caspian Sector. The FDI in the energy sector generated revenue which accelerated the economic development of Azerbaijan. The geostrategic positioning of Azerbaijan as it is located in the Caucasus region makes it convenient to trade with the European countries. Azerbaijan focused on the balancing policy in the Caspian region as it is engaged with the western countries and Russia. Azerbaijan International Operating Company (AIOC) is consortium which comprises of State Oil Company of the Azerbaijan Republic (SOCAR) and American and British energy firm BP Amoco and Russian oil firm Lukoil. Azerbaijan focuses on the diversification of energy routes. It developed Baku-Tbilisi-Ceyhan (BTC) pipeline, Baku-Tbilisi-Erzurum (BTE) pipeline and now it is cooperating with the western countries to construct the Southern Gas Corridor (SGC). Azerbaijan export oil to Russia by the Baku-Novorossiysk pipeline. The competent leadership of Heyder Aliyev has been one of the most determining factors in the development of excellent energy policy of the country. He formulated energy policies which were very pragmatic and need of the moment. He thoroughly analysed the offer made by the foreign energy firms. Finally, he formulated the policies which were very balancing by accepting the western energy firms and by inviting the Russian energy firms. He signed the Contract of the Century with thirteen major oil companies from

eight countries for the development of the Azeri-Chirag-Gunashli hydrocarbon field in the Caspian sector of Azerbaijan.

The energy policy of Russia in the Caspian Sea Region focuses on several aspects. The Russia sector of Caspian has less oil and natural gas reserves as compared to its former Soviet Republics. The major energy policy of Russia is to export the oil and natural gas of Caspian through the Russian pipelines. Russian policies are focused to maximise energy revenue by transiting Caspian oil and gas. The energy policy of Russia in the Caspian Sea Region was mainly focused on the security of the pipeline, as it as severely affected by the Chechen Secessionist Movement. With the election of the new president of Russia, Vladimir Putin the control of the state over the oil and gas sector of the country increased. His policies are focused on cooperating with the western energy firms rather than confronting with them. The new policies are economically driven and non-confrontational.

The pipeline politics in the Caspian Sea Region involved several global and regional players. The United States of America, European Union, Russia and China are the global players involved in the energy sector of the Caspian Sea Region. Turkey, Georgia, Afghanistan, Pakistan and India are the regional players. The three Caspian countries Azerbaijan, Turkmenistan and Kazakhstan are landlocked and heavily rely upon the pipeline infrastructure to transit oil and natural gas. Russia and Iran have access to international ports and are less dependent upon the neighbouring countries for transiting its oil and natural gas. There are several factors which create hurdle in the construction of the pipeline infrastructure. The mountains range in the surrounding region of the Caspian Sea makes it difficult to construct pipelines. The western side of the Caspian Sea is surrounded by Caucasus mountain range which proved to be a prominent challenge in the construction of the BTC pipeline. However, with the advanced technology, it was possible to construct the pipeline. Another challenge in the construction of the pipeline is the seismic activities in the nearby region of the Caspian Sea. The Iranian region and the Caucasus region are the earthquake-prone which make the development of the pipeline infrastructure difficult.

The secessionist movement in the vicinity of the Caspian Sea region is another challenge in the development of the pipeline infrastructure. The Nagorno-Karabakh conflict, the instability in Dagestan region, Uyghur separatist movement, and political

instability in Afghanistan has created hurdles in the construction of the pipelines. The Chechen separatist movement led to bypass the Chechnya region for the Baku-Novorossiysk pipeline. The pipeline was earlier passing through the capital of Chechnya i.e. Grozny. But, during the period of conflict, it was getting severely affected by the secessionist movement of Chechens. The de-factor Chechen government demanded shares of the transit fee of the pipeline. The pipeline is strategically and economically crucial to Russia so it planned to bypass Chechnya and choose Dagestan region for transiting the Caspian oil. The Dagestan region was less volatile compared to the Chechnya and the only transit route to transport oil from Baku to Novorossiysk. Finally, even after facing several problems Russia and Azerbaijan built the Baku-Novorossiysk pipeline. The political instability in Afghanistan also created problem in the construction of TAPI pipeline. The Armenian territory was rejected because of the Nagorno-Karabakh conflict. The transatlantic community chooses the stable and secure Georgian territory for transiting Caspian oil even though it is long as compared to Armenian territory. The Uygur secessionist movement in the Xinjiang region proved to be a challenge in the construction of the Kazakhstan-China pipeline. However, China was successful in constructing the pipeline by taking developmental measures in the Xinjiang province by integrating the energy infrastructure of Xinjiang into the mainland energy infrastructure of China.

The unfriendly bilateral relations between the countries have hampered the construction of several pipelines. The U.S perseverance to construct the BTC pipeline was to lower the Russian influence in the Caspian Sea region. The appalling relation between the U.S and Iran thwarted the realization of the Kazakhstan-Turkmenistan-Iran (KTI) pipeline and Turkmenistan-Iran-Turkey pipeline. The TAPI pipeline was not accomplished because of the unfriendly relation between India and Pakistan.

The U.S does not want its NATO partner to rely on Russia for its natural gas, which can affect their independent foreign policy making. The Ukraine gas crisis further bolstered the US sponsored Trans Caspian pipeline which is a part of the East-West pipeline route. TCP is a proposed subsea pipeline that will bring Caspian oil and gas from Kazakhstan and Turkmenistan respectively. But the unclear legal status of the Caspian Sea has hampered the development of the Trans-Caspian oil and gas pipeline. Russia and Iran has challenged the development of the subsea pipeline on the basis of legality of the Caspian Sea and on environmental grounds. The convention on the

legal status of Caspian Sea that held on 12 August 2018 in Aktau, Kazakhstan cleared the way for the development of the Trans-Caspian Oil Pipeline and Trans-Caspian Gas Pipeline. According to the new Convention consent from only those countries are mandatory from whose territory the pipeline is to be passed.

The Iranian route is economical, short, environmentally secure, but the US sanctions of Iran has hampered its role in the pipeline politics of Caspian Sea. Iran with its lucrative geostrategic location can transit the Caspian oil and natural gas to South Asia, Europe and Turkey. The lifting of sanctions on Iran in 2016 paved way for the country to achieve greater role in the Caspian Sea region. The pipeline politics of the Caspian Sea changed after the entry of China. The geographical position of China is also favourable for establishing itself as a prominent player in the pipeline politics in the region. The land boundary between China and Kazakhstan further made their energy cooperation strong as there was no involvement of the transit countries.

Finally, it can be said that the Caspian littoral states plays an important role in pipeline politics. Azerbaijan, Turkmenistan and Kazakhstan are actively taking part in determining pipeline routes. The Caspian Sea region because of the abundance of energy resources are the playground for the New Great Game. The U.S, Russia, China, Turkey, Georgia, Afghanistan, Pakistan, India all vie for accessing the oil and natural gas of the Caspian Sea region. The intense competition and rivalry among the littoral states has led to the revival of the Great Game which happened in the 19th Century between the Russian Empire and British Empire. However, the emergence of China has changed the game. The eastern giant has taken advantage of its geographic positioning and established a closed energy network with Kazakhstan and Turkmenistan. China is increasing its role in the Caspian Sea region by pouring finances in both countries. Azerbaijan tries to balance its relationship with the western countries and Russia. The New Great Game has four active players the U.S, EU, Russia and China. The involvement of several players in the geopolitics of the Caspian Sea region maintains balance and gives bargaining power to the littoral states. The New Great Game is not a zero-sum game for the Newly Independent countries; rather it is rewarding for the Caspian littoral States.

From the beginning of the research, it highlights the two hypotheses as to the basis of the present work. The first hypothesis is “the ambiguity on the legal status of the

Caspian Sea has led to dispute among Caspian littoral countries". The hypothesis is proved. The disintegration of the Soviet Union gave genesis to three Newly Independent states namely Azerbaijan, Kazakhstan and Turkmenistan. The new states knowing the economic benefits of the Caspian Sea wanted to exploit the hydrocarbon resources of the Caspian Sea. The emergence of new states gave twist to the legal status of the Caspian Sea. They started formulating domestic laws to determine the status of the Caspian Sea which can allow them to exploit the oil and natural gas resources of the Caspian Sea. The Caspian countries always had clash of interest while determining the status of the Caspian Sea. They determined the status of Caspian by considering the maximum share of oil and gas in the Caspian. Azerbaijan considered Caspian to be an international lake or Boundary Lake as it would be helpful for the country to have complete jurisdiction over the seabed resources and surface waters. Kazakhstan proposed Caspian to be a close sea as it would help it to access the international energy markets through the Volga-Don canal. Turkmenistan stand was always changing; sometimes it considered Caspian to be a lake and sometimes to be a Sea. Russia opposed Caspian as a Sea because this was opening its Volga-don canal for international usage which can lead to environmental and security issues. Iran considered Caspian to be a lake and always asked for 20 percent share.

The ambiguity on the legal status is prevailed because of several reasons as Caspian being very distinct in geography and jurisdiction. The international law such as the UNCLOS, United Nations Convention on the territorial sea and continental shelf fails to determine the legal status of the Caspian Sea. The width of the Caspian is less than 200 nautical miles which creates an overlap in the sector of Azerbaijani and Turkmenistan. The condominium approach will equally divide the Caspian Sea but the approach was rejected by the Newly Independent States. However, the Convention on the legal status of the Caspian Sea which held in Aktau in 2018 gave Caspian a "Special legal Status" and considered it neither Sea nor a lake. In the Convention the surface water of the Caspian Sea is considered to be a Sea and rest of the water is left for common usage.

The unclear status of Caspian led to the dispute over the Kyapaz/Serder oilfield deposit. The oilfield is located in the median line of Turkmenistan and Kazkahstan. Socar, Lukoil and Gazprom signed an agreement to explore the oilfield. But, Turkmenistan caution Russia and threatened to deliver gas, if it chooses to explore the

oilfield. Azerbaijan gave invitation to Turkmenistan for joint exploration of the oilfield but the latter rejected the proposal. Another major dispute over the oilfield of Caspian is Araz-Alov-Shraq field which is known as Alborz in Iran. Azerbaijan and British petroleum Amoco was taking exploration activities in the Alov field. Iran opposed and asked to discontinue the exploration activity. There was a continuous spat between the two until two military aircraft and warship threatened two Azerbaijani vessels on 23rd July 2001. Another dispute because of the legal status was the realization of Trans-Caspian oil pipeline and Trans-Caspian gas pipeline. Turkmenistan and Azerbaijan wanted to export their oil and natural gas to Europe. But the unclear legal status has led to complication as Iran and Russia opposed the pipeline on environmental basis. However, the Convention on the legal status on the Caspian Sea which held in Aktau in 2018 resolved the pipeline issue. According to new convention, the consent of only those countries are needed by whose territory the pipeline has to be passed.

The second hypothesis is the "internal division and conflict among the Caspian littoral states has led to the militarization of the region". The second hypothesis is proved as the unclear legal status gave rise to internal division. The northern Caspian countries that are Azerbaijan, Kazakhstan and Russia have bilaterally divided their seabed. However, the southern Caspian Sea was not divided because of the Iranian demand of dividing Caspian into 20 percent each to every littoral state, but in the new Aktau agreement Iran has cooperated and discarded the idea of dividing Caspian into sectorial division. The militarization of Caspian is an old affair. In the Tsarist Russia and during the Soviet Union Caspian had navy fleets. Soviet exercised naval fleet in Caspian. The 1921 treaty of friendship between the Soviet Union and Iran gave the power to Iran to exercise naval fleet in the Caspian Sea. The militarization in the Caspian was restarted in 2001 when Iran threatened the vessels of Azerbaijan. The internal conflict arises in the Caspian to protect its hydrocarbon field. Azerbaijan had the most powerful navy to protect the Baku-Tibilisi-Ceyhan pipeline and South Caucasus pipeline which is supported by the transatlantic community. The internal division paved the way for global power like the U.S and China in the Caspian which further threatened Russian power and hegemony in the region. In the beginning of 2000 Russia undertook the first attempt to strengthen its fleet in the Caspian Sea. The militarization to protect the claimed hydrocarbon fields led to disastrous affect and

boomed the militarization in the Caspian Sea. The 2018, Aktau agreement stressed upon the reduction in naval power and debarred the foreign navy in the Caspian Sea region.

The Geopolitics of the Caspian Sea region has changed after the entry of the U.S and EU. They cooperated with Azerbaijan, Kazakhstan and Turkmenistan and gave more bargaining power to them. However, the penetration of China into the geopolitics of Caspian Sea region has again changed the game for Kazakhstan and Turkmenistan. Now, they are more independent to take their energy decisions. Russia and Iran are juggling to maintain their dominance in the Caspian Sea region. The involvement of several players in the region can escalate the militarization in the Caspian Sea as the littoral states backed by the powerful actors can further led to formation of the power blocs in the Caspian Sea region and can further tangle the geopolitics of the region. Azerbaijan backed by the U.S and EU. Kazakhstan and Turkmenistan backed by China will antagonize Russia and Iran. However, Azerbaijan, Kazakhstan and Turkmenistan effectively balance their relationship with each player. The Caspian Sea region because of the involvement of several players is balanced rather getting into actual conflict or war.

The seabed which contains significant amount of hydrocarbon deposits can be a major contentious issue in the future. The northern Caspian Sea is delimited but the southern Caspian Sea is not delimited which can create conflict among the littoral countries. Even after the Aktau Convention the dispute regarding the ownership of the Kyapaz/Serdar and Araz-Alov-Sharg hydrocarbon fields are not determined. The ownership of the hydrocarbon field can again reignite the militarization in the Caspian Sea region.

The seabed of the Caspian Sea should be delimited according to the equidistant lines. The littoral countries should be given the share of Caspian according to the length of their coast and delimited according to the median line approach. The systematic division of the Caspian Sea can prove to be non-contentious in the future as it will demarcate national zones which will help to efficiently carry out exploration and production activities without having any conflict. The overlapping area in which the hydrocarbon field are located and claimed by Iran, Azerbaijan and Turkmenistan should be jointly explored by them. Kyapaz/Serdar hydrocarbon field should be

explored jointly by Azerbaijan and Turkmenistan. Iran and Azerbaijan should explore the Araz-Alov-Sharg hydrocarbon fields jointly. The agreed legal status of the Caspian Sea will lead to the development of the hydrocarbon fields, deter the military confrontation in the future and further boost the economy of Caspian littoral countries. The harmonious relationship among the Caspian littoral countries can stop the militarization in the region. The development of the oil and natural gas field can provide energy security to the U.S, EU, China, Turkey, Georgia, Afghanistan, Pakistan and India.

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