Geopolitics and Environmental Issues in the Caspian Sea

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ABSTRACT
Nowadays, a noticeable part of the relations among the states turn around the environment protection. Therefore, the right for ever-creasing use of the existing resources of this inland sea cannot be exclusive to any Caspian State and the aftermath involves all countries of this basin. In this respect, agreement on political border and boundaries with the Caspian Sea’s ecosystem is a difficult issue. The unstable resources of fish reserves, underground oil pools, migratory animals and instability of resources that so often seem to be harmful, particularly for their potential power of passing through borders, are the subject of geopolitical disputes among the states of this basin. According to the above-mentioned points, the basic question in the present article is: “What is the role of the environmental issues in geopolitical relations of the Caspian States?” Therefore, it is supposed that a consideration of environmental issues in exploiting different resources of the Caspian Sea can set up peace among the Caspian countries.

Keywords: Geopolitics, Caspian Sea, Environment, Ecology, Pollution

INTRODUCTION
Nowadays, there is no spot on the earth to be safe against environmental crises and no country by itself is able to take measures to avoid these widespread problems. Thus, the duty of states and nations is not limited to preserve the land and environment within their own territories; they should think of preserving the earth in the very concern because the environmental issues of the countries have been met with those of geopolitical ones and overshadowed their ties and relations. The Caspian area, as one of the unique ecosystems of the world, enjoying great sources of energy, rare living species and long historical and cultural backgrounds especially after the fall of the Soviet Union, has been of highly importance from the point of view of an environmental geopolitics among five littoral states. It has been the focus of attention both in agreements and disagreements of the very states as well. Therefore, in this paper, the issues of environmental geopolitics in the Caspian area are surveyed. We hope that it casts some light on factors causing environmental crises and on their effects on the geopolitics of the states in the Caspian area.

1. RESEARCH METHOD
Research Method in this article includes three steps. At first, scientific data were gathered from the libraries of universities and relevant institutions and network sites. Secondly, the data were classified and as it is impossible for all network data to be correct and exact then these data had to be tested with touchstone of science. That is why we are justified not to mention a site address as a reference in this article. However, because the article results from a M.A thesis under the title of "The Function of Guilan in the Geopolinomie of the Caspian Region" (Yahyapoor, 2008) as well as, a research project entitled "Geopolitical Understand ing of Environmental Issues as a New Phenomenon (Case Study: Caspian Sea)" (Zeinolabedin, 2008) it is impossible for some of the issues based on some data to be referenced to network sites at the thesis or
project. Finally, the authors came to analyze all the data critically to gain a scientific result. Briefly, the hypothesis to be tested in this paper is a descriptive analytical one, based on library gathering data supported by charts and tables for a better quality.

2. REVIEW OF LITERATURE

The term 'geopolitics' first arose in 1899 by the Swedish political scientist Rudolf Kjellén. In the Cold War period this science was applied by governors who wanted to be benefited by the power. In this way, they used "geopolitics" to provide their own national interests. But after the Soviet Union fragmentation, geopolitics faced with some other approaches such as: geoculture (based on the culture), geoeconomics (based on economics), and Environmental Geopolitics (based on environment). Therefore, in recent decades, researchers and politicians have come to use environmental geopolitics which studies the political behavior. Today, the common benefits of states and nations increasingly depend on their cooperative relations for protecting of the ecosystem of the Earth. In the meantime, due to political, economic and social characteristics, environmental geopolitics issues display a special image of the countries' common interests. Moreover, today, some nations are interested in and prepared for passing both regional and international environmental laws because it has been accepted that there is a relationship between environment on the one hand and security, development and national interests on the other hand. Thus, the governments prefer to prepare and execute the plans and policies that solves both local and international geopolitical disputes.

Then, some pioneers from different countries (including Iran) began to study the environmental issues in geopolitics. Below you find some examples:


2- Kathleen Braden and Fred M. shelly in chapter seven of their book, "Engaging Geopolitics" demonstrated environment in general and the challenging position of geopolitics and environmental issues particularly (Braden and Shelly, 2000).

3- Klaus Dodds in the chapter six of his book entitled "Geopolitics in the changing world", concentrated on the globalization of environmental issues (Dodds, 2000).

4- O'Tuathail and his colleagues in their book, "The Geopolitics Thoughts in Twentieth Century", studied various issues of the geopolitics of environment completely and set aside the section four that includes one introduction and seven chapters to explain environmental geopolitics (O'Tuathail and others, 2000: 405-555).

5- John Agnew in his book entitled "Making Political Geography" emphasized on politics of the environment in the subtitle of environmental security, green geopolitics and the end of British farming; in which he has in mind main concepts of pollution, security and a good strategy to face with those problems (Agnew, 2002: 157-163).

6 - Ronald John Johnston and his colleagues set aside one section, including an introduction and four chapters, to the environment geopolitics change in their book under the subject of "Geographies of Global change" (Johnston, Taylor and Watts, 2004).

7- Martin Glassner and Chuck Fahrer in their book under the subject of "Political Geography" indicated that they prefer the term "ecology" to "environment"; because, ecology is the study of the mutual relations between organisms and their environment. In this way, they believed although Marxism encourages the mankind to get extent profits from environment; but finally, most of the countries such as China in special are now ignoring Marxist doctoring and make some effort to reduce environmental degradation which were be appeared in water issues (including strip mining, irrigation agriculture, ocean fisheries and runoff water) land (involving waste disposal and wetlands) and animal issues (containing wildlife and feral animals) (Glassner and Fahrer, 2004: 554-562).


9- Ali Reza Molayi presented a good review of literature on environmental geopolitics in "A Survey on Geopolitics Reader" (Molayi, 2005: 256-274).

10- Barry Buzan and his colleagues (2007) in chapter four of their book entitled "Security:
A new framework for analysis concluded that there are two knowledgeable and political prescriptions that make secure environmental prescriptions. Therefore, states, local societies and big economical cooperations are the main players in providing security of environment (Buzan et al, 2007).

11- Yousef Zeinolabedin in a manuscript entitled "An Overview on Advanced Political Geography" declared the environmental policies concept and realm.

12- Yousef Zeinolabedin and Hamid Reza Paknejad in an article under the subject of "An Introduction to Environmental Geopolitics" came to this result that the states should think about the Earth Glob, and not about their own interests (Zeinolabedin and Paknejad, 2007).

13- Kevin R. Cox and his colleagues in their book entitled "The SAGE Handbook of Political Geography" noticed to the landscapes like: Forests, fields and territorialization. They classified the states to the seven groups of:

1- Network State: mediating soil, producers and capital;
2- The Parasitic States: building extractive ecology;
3- The Cooperative States: achieving commodity autonomy;
4- The Porous States: reforming amidst livelihood struggles;
5- The Crisis State: producing environmental narratives;
6- The Expert States: erasing environmental knowledge;
7- The Negotiating States: contesting environmental truth.

Finally, they referred to the states capacity such as: producing and erasing ecological knowledge and the relations between governance and the regulation of environmental knowledge (Cox and others, 2008: 205-230).

3. THE HISTORY OF THE CASPIAN GEOGRAPHY

The Caspian Sea has been extremely important throughout the history due to its geographical and economic conditions. Every tribe, nation or authority has examined it based on their needs and motivations (Nadsa, 2003: 13). The Caspian Sea has been called differently throughout the history and even in some periods of time it bears several names simultaneously (Afshar Sistani, 2003: 89-145; Ahmadi Lafouraki, 2004:13-14).

In ancient times, the Sea was called Hircani Ocean and Tities Sea but in recent centuries, names such as Caspian, Khazar, Astrakhan and Mazandaran have been used. To the writers, the name “Caspian” is suitable for the Sea based on the national interests of the Islamic Republic of Iran; since, in one hand, the Caspian is its internationally-known name and it is rooted in “Caspians” who were an Iranian tribe; on the other hand, Khazar was the name of a Jewish sect lived in the north-west of the Sea thousands years ago and all of them emigrated from the very region to Levant in Lebanon. Using the name “Khazar” would cause geopolitical problems for Iran.

3.1. PRECEDENT

The history of the Caspian Sea has indicated the fact that it has ever been a common issue between Iran and Russia. However, Iranians, unlike Russians, were not too successful to get any exploitation advantage of it (Vaezi, 2007: 297). Even in early 18th century, the Russian Emperor planned to seize the Sea under different pretexts due to weaknesses and vulnerability of the Iranian Central Government. What actually made Russians fail in their attempts was King Nader Afshar who came to throne in Iran while the Russian Empire was becoming less powerful. So King Nader could make Russian withdraw from the south of the Caspian Sea in accordance with two contracts drawn up one in Rasht (Januar 12th, 1732 A.D.) and another in Ganjeh (March 10th, 1735 A.D.). All these changes (between Iran and Russia) had direct or indirect relationship with the way and how Iranian and Russian governments use and exploit the Caspian Sea. However, there was no formal and written document bearing a legal status about the usage and exploitation of the Sea between the two governments until they signed the Golestan Pact (1813 A.D.).

Thirteen years later after signing the Golestan Pact, another pact called Torkamnchay was imposed on Iran in which the Russian banned Iran from any military presence and sailing warships along and/or down the Caspian Sea. As a result, the right
to sail freighters was also given to Russia because at that time Iranian government lacked facilities for shipbuilding and required technologies for cargo ships. The very condition between Iran and Russia continued until the pact of 1921 A.D. According to the mentioned Pact, the right to sail was granted to Iran. In 1940, since the Second World War broke out and Germany attacked Russia, it seemed necessary for Russia to appease Iran as its southern neighbor and signed the pact of 1940 which was an agreement on shipping and sailing in the Sea. The content of the pact, of course, was never put into practice due to Iran’s lack of facilities and Russia’s status of being a superpower in the region although the apparent structure was based on the equity and equality; in other words, despite the pact of 1940 emphasized the principles of Kameletol Vedad1 and Mosha2 in the case of the Caspian Sea, Iran had no role and activity beyond the line of Astara -Hosain Qoli Bay (Molaie, 2005: 343-353 & Safari, 2005: 127-129).

3.2. COMPARISON

The Caspian Sea is the largest lake of the world having no natural connection with oceans and open seas. Thus, it is considered to be a lake surrounded by some littoral states. There are a lot of lakes in the world enjoying the same specifications, i.e. surrounded by two or more countries; including:
1. Lake Bodensee (also Lake of Constance), bordered by Switzerland, Germany, and Austria;
2. Lake Geneva, straddling the border between Switzerland and France;
3. The Five Great Lakes (Lake Superior, Lake Huron, lake Erie, Lake Michigan and Lake Ontario) between Canada and the U.S.;
4. The Gulf of Fonseca, bounded on the northwest by El Salvador, on the northeast and east by Honduras, and on the south by Nicaragua;

Examining all the precedence of legal regimes governing the mentioned lakes, it is impossible to achieve a legal regime bearing the least similarity to the legal status of the Caspian Sea; since the Caspian Sea has got some special characteristics and conditions, especially its largest body of water, which cannot be comparable with other lakes of the world. However, what can be stated about the legal regime ruling the lakes surrounded by two or more countries is that the most important principle and common law about this issue would be the agreement of the littoral states based on the unanimity of votes (Dehghan, 2005: 131).

4. THE GEOPOLITICAL IMPORTANCE OF THE CASPIAN BASIN

The Caspian Sea is the communication link between Europe and Asia continents known as “Eurasian Pearl”. The Caspian is the largest inland body of “water” in the world enjoying 44% of the world inland water. The sea has 130 large and small tributaries mostly flowing from the northern and western coasts. These rivers mostly flow from the northern and western coasts. More than 90% of fresh water flowing into the Sea is provided by five large rivers in the region, that is, Volga, Kura, Terek, Ural and Sulak.

From the geopolitical point of view, the Caspian basin has always been linked with the Black Sea. These two basins are the same as two pointers of a scale in a way that if one of them suffers from conflict and tension, the other usually remains in peace and stability3 (Darabadi, 2003:275). Moreover, the Caspian Sea is a symbol of numerous opportunities both regionally and universally. These opportunities are as follows:
1. Its global reputation of fishing, the importance of protein in sea foods for a healthy diet and providing thousands of job opportunities in fisheries;
2. The delicious and unique caviar of the Caspian Sea, as a costly and luxury item, is a representation of glory and wealth.
3. The gas and oil resources of the Sea along with its enriched resources of fishing have established a new and powerful industry since the late 19th century.
4. The Caspian Sea can provide an opportunity for economic transportation of goods and passengers among the countries of the region.

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1. The pact friendship and cordiality among governments on Sea affairs
2. Held in undivided share, joint ownership
3. There exists the same relationship between the Geopolitical basin of the Persian Gulf and the Red Sea.
5. The strategic position of the Caspian being as a European transit route to Southwestern Asia has made it a trade highway for Europe, Saudi Arabian Peninsula, the south regions of The Caspian Sea and East Asia.

6. The unique ecology of the Caspian Sea has provided suitable conditions in turn for tourists especially for ecological tourism.

5. THE ECOCLOGICAL CRISES IN THE CASPIAN BASIN

The unique biodiversity of the Caspian Sea being universally symbolized along with its international lagoons, jungles, rivers, animal and plant species has gradually declined its ecological ability under the ever-increasing pressure of threats. The population of some of these species is rapidly decreasing and some have been in danger of extinction. The lagoon has been invaded and violated because of being irresponsibly used by humans. Deforestation and desertification are among the major problems of the region. The reserves of the Caspian fish are decreasing because of organized and unauthorized fishing which in turn have undergone a lot of losses, especially in case of Sturgeons (CEP, 2007:10). This negative process has been aggravated by the invasion of a non-native species called *Mnemiopsis leidyi*. This species had a significant role in collapsing the fishing industry of the Black Sea in 1990s. At present, it has some destructive effect on the population of the Caspian’s Clupeidaes.

In general the threatening factors of the environment in the Caspian Basin can be summarized as follows:

1. The centers located on land such as urban, industrial and agricultural swage.
2. The pollution results from the exploitation of gas and oil resources including the production and transition of gas and oil (Mostaqimi. 2005:57-65). Table 1 shows the pollutant resources of the Sea.

<table>
<thead>
<tr>
<th>The Republic of Turkmenistan</th>
<th>Republic of Russian Federation</th>
<th>The Republic of Kyrgyzstan</th>
<th>The Islamic Republic of Iran</th>
<th>The Republic of Azerbaijan</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Report</td>
<td>Astrakhan</td>
<td>Ural River Delta</td>
<td>Sefidrood</td>
<td>Baku Bay</td>
</tr>
<tr>
<td>Volga River Delta</td>
<td>Bautino</td>
<td>Fort Shevchenko</td>
<td>Anzali Port</td>
<td>Absheron</td>
</tr>
<tr>
<td>Lopatin</td>
<td></td>
<td></td>
<td>Chalous-Noshahr</td>
<td>Peninsula</td>
</tr>
<tr>
<td>Makhachkala</td>
<td>Aktau</td>
<td></td>
<td>Harbour</td>
<td>Sum gait</td>
</tr>
<tr>
<td>Derbent</td>
<td></td>
<td>Gorgan Lagoon</td>
<td>Kura River</td>
<td></td>
</tr>
</tbody>
</table>

6. DIFFERENT GEOPOLITICS AND COMMON ECOSYSTEM IN THE CASPIAN BASIN

6.1. The Geopolitical Characteristics of the Countries in the Caspian Basin

Throughout the history, the Caspian Basin has hosted several tribes and societies. The primitive inhabitants of the region including Medes, Turks, the Acousees, the Parsees, and Cossacks along with its temporary inhabitants like Arabs and Moguls thrives the ethnic varieties on the 7000 km coast of the Caspian. The mentioned tribes brought their ancestors’ cultures, religions, customs and beliefs to the very region. As a result, the cultural, religious and ethnic multiplicity and varieties of the Caspian had been strengthened. Nowadays, more than 12 millions people live on the coast of the Caspian Sea. This population consists of six millions Iranians on the south coastline, three millions in Baku and on the coastlines of Republic of Azerbaijan, and three millions in Kazakhstan, Russia and Turkmenistan. The population on the Turkmenistan coastline is fewer due to nomadic climate (Table 2).

It should be mentioned that in the above table the coastal length of countries is not based on a direct line, thus, the coastal length of the mentioned countries would be less than the numbers cited in the table if it were based on the direct line. It can be observed that 242.71 people directly and 12 millions indirectly are engaged in the geopolitical and environmental issues of the Caspian Basin. Among the countries, Iran and Azerbaijan, in spite of enjoying the least coastal length, have the most coastal population in the Caspian Basin.
Table 2- The population and the length of countries’ coast in the Caspian area.

<table>
<thead>
<tr>
<th>Countries</th>
<th>Population</th>
<th>Area(km)</th>
<th>Relative Density(sq.km)</th>
<th>Coastal Length(sq.km)</th>
<th>Coastal Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Republic of Azerbaijan</td>
<td>8.26</td>
<td>86600</td>
<td>92.2</td>
<td>825</td>
<td>3</td>
</tr>
<tr>
<td>Islamic Republic of Iran</td>
<td>69</td>
<td>1648000</td>
<td>38.8</td>
<td>1000</td>
<td>6</td>
</tr>
<tr>
<td>Republic of Kazakhstan</td>
<td>15.1</td>
<td>2717300</td>
<td>5.6</td>
<td>2320</td>
<td></td>
</tr>
<tr>
<td>Republic of Russian Federation</td>
<td>143.8</td>
<td>17075400</td>
<td>8.7</td>
<td>1460</td>
<td>3</td>
</tr>
<tr>
<td>Turkmenistan</td>
<td>6.55</td>
<td>491200</td>
<td>13.3</td>
<td>1200</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>242.71</td>
<td>22018500</td>
<td>158.6</td>
<td>6805</td>
<td>12</td>
</tr>
</tbody>
</table>

(CEP, 2005:5)

6.2. The Polluted Environment and the Geopolitical Risks in the Caspian Basin

The ever-increasing use of resources and destroying the earth planet are among the phenomena that are seldom lie within the international borders, therefore, the environmental issues can be discussed precisely within the geopolitical framework (Braden & Shelley, 2004:234). Because of this, diverse attitudes among littoral countries toward legal regime of the Caspian Sea are so complicated that ecologically the settlement of the geopolitical differences is difficult. The increase of littoral countries in number from two to five littoral states has governed a special relation over the basin and the political conditions of each littoral country face some challenges (Safavi, 2000:45-46). Although having the right to use natural resources within governments’ authorized territories is legal, the governments have not the same right in cases that the environmental pollution can be transferred to other countries (seas or rivers contamination pouring into other countries or open seas and destroying the Ozone layer, etc.) (Sands, 1994:189). In this regard, no legal system ruling the exploitation of under the seabed and water basin resources of the Caspian Sea has been written and basically no borders determined as national districts of littoral countries. Therefore, each of above mentioned countries started to overexploit resources hurriedly and without any environmental consideration. On the other hand, the ecosystem of the Caspian Basin faces the following environmental dangers:

6.2.1. The Sea Water-Level Fluctuations

The water-level of the Sea has been fluctuated in different periods of time. In some period this level has been very low and in others it has been high. This process, which has always been time-consuming, has caused environmental changes and diversity in economic activities in the Sea. This fluctuation has got a direct relationship with the execution of industrial and agricultural plans, the change in some river beds, creation of artificial lakes, dams, floodgates, and an increase in human activities around the Caspian Basin. Chart 1 shows the variations of the fluctuations through consecutive years.
6.2.2. Ecological Problems

In recent years, the amount of pollution has conformed with an increase in the water-level to a dangerous extent. The main reason is the contamination of the Caspian Sea and industrial sewages flowing into the Sea. The extensive increasing of hydro-carbon resources causes bigger problems, especially its production transferred into the Sea which causes decreasing and destroying living creatures of this ecosystem. As it has been mentioned in the report of the Caspian Sea environment program by the UN:

The Caspian Seals are found only in this Sea. They are the only mammals living in the most parts of the Caspian Sea. Their living places are changeable based on getting access to food and through changing seasons. The Caspian seal population has approximately decreased from 1,000,000 in early 20th century to 400,000 in the 1980s. To some experts, even the above figures are optimistic and the real number of the species is far fewer.

1- Unfortunately, the reserves of sturgeons have drastically been decreased in recent years. Caviar1 is the processed and salted fish eggs of sturgeon species. The best caviar of the world belongs to the Caspian Sea fished by the local fishermen. The high-quality kinds of caviar such as Beluga, Osteria and Sevruga are traded with higher prices in the world market. About 90% of the world caviar industry belongs to the Caspian Sea (Fig. 2).

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1. “Caviar” is from the Persian word of “Khagāvar” meaning “giving birth to fish eggs”.

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7. THE COOPERATION FRAMEWORK IN ENVIRONMENTAL ISSUE OF THE CASPIAN BASIN

Due to seriously environmental dangers, the UN Environment Program, called CEP\(^1\), came to existence to encourage the littoral states in providing the Caspian Sea environment convention whose coordinating centers have now opened and remained active in all five littoral countries in the Caspian Basin. The most significant achievement of the CEP is the participation in drafting the environment treaty of the Sea signed by all the Caspian littoral states in November 2003 in Tehran. One can briefly conclude that the CEP fulfilled the environment regional dialog of the Caspian and paved the way for regional cooperation. The fulfillment of the program caused that the international colleagues continue their support including a new project whose budget allocated by Global Environmental Facilities (GEF) through United Nations Development Program (UNDP) and United Nations Environment Program (UNEP) so that the countries of the region would be helped and supported in the implementation of Strategic Affairs Program (SAP) in the prioritized issues such as biodiversity, non-native invader species, pollution and also strengthen legal frameworks and environmental policy-making in the national and regional levels. The implementation of the program started in 2004. The European Union has also provided and implemented some projects to complement GEF in issues such as sustainable management of fishing reserves and sustainable development of littoral societies.

RESULTS AND DISCUSSION

Since the environmental issues are globally significant and overcoming the environmental crisis is beyond the capability of a country or nation alone, thus all countries and nations should participate and cooperate with one another in this regard. Therefore, in the relations among the countries, the environmental issues have joined with those of geopolitical ones playing a fundamental role in controversies and compromises of the countries. In this regard, after the fall of the former Soviet Union, explorations in the Caspian, oil and gas exploitation of the basin and the unsystematic use of its resources made the regional countries face new environmental dangers which have significantly affected their geopolitical relations. Thus, in recent years, there have been different environmental programs, especially the one called CEP developed by UN to make the regional countries join and cooperate with one another in an attempt to protect the Caspian Sea environment. The perspective of the very environmental program seemingly shows that the countries of the Caspian basin should respect the observation of the environmental regulations so that they could achieve a geopolitical convergence and sustainable development on the Caspian basin.

REFERENCES


CEP, (2005) Caspian Environment Program. UN. 5


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1. Caspian Environment Program

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