

Effect of Natural Factors on Geopolitics of Persian Gulf

Dr. Mostafa Khabazi*¹, Hossein Baghainiya²

¹Assistant professor in department of Geography, University of Shahid Bahonar, Kerman

²M.A Student of Politic-Geographical Field, Tehran University

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ABSTRACT

Persian Gulf with 226000km² in size contains 62% water of the whole world, and the Gulf includes almost 60% of oil resources, namely 750 billion of barrels (Hafezniya, 2014: 61). It is geopolitically considered as one of the most sensitive regions in the world. It has been investigated more politically than strategically, economically, commercially, over resources of energy, oil, aquatics..., but some researchers have just examined effect of natural factors on geopolitical equations of the region. Thus, the study tries to investigate the natural factors to determine and analyze geopolitical reasons and its effect on diplomacy of the region, as well as, to know geopolitical reasons of Persian Gulf. The study uses documentary and descriptive analysis method and library. The important and influential natural effects were defined in the region. Arc 2, ENVE 4, GIS software were used to analyzed and draw maps. The results show that natural locations limited to Persian Gulf and conditions of climate, topography and sea are the main factors to impact on the geopolitical region, especially attracting trans-regional powers and international disputes.

KEYWORDS: Persian Gulf, natural factors, geopolitical, geo-economy

INTRODUCTION

Persian Gulf including 8 politic unites- Iran, Iraq, Arabic Saudi, Qatar, the united Arab Emirates , Kuwait, Bahrain, and Oman –can considered as one geopolitical unite and region in the world because the unites have the similar and different qualities forming an interactive regional pattern (Ibrahimi Far, 2007:21) and (Ibrahimi Far, 1989) .Geopolitically, the region is important, and its individual situation has been remarked in the geographical views during the last century. According to Mackinder's view, the Gulf is thought to be the "confrontation place of powers"; Sparkman's view in "Rim land focus", and Sorsoki's view in "decision region" (Hafezniya, 2014:146).Not only does Persian Gulf communicate with internal-parts regionally and internally, but also The Gulf as sub-system deals with international system because it is considered as an individual geographical and geopolitical region .It can be said that the system of Persian Gulf as one of the international systems and its intense relation with the international system as well as its structural qualities in control domain cause a specifically complexity in order of the region. Disorderliness in the region proceeds involvement of trans-regional systems (Salehi and Ghasemi, 2008:54).

With geographical factors of power, the Gulf provides the suitable geographical position for marginal countries. Because of lack of putting into the operation by the countries, foreigners have enjoyed the strategic location, but geographic,natural, physical phenomena play the main role in appearance, evolution, and decline of superpowers. Persian Gulf andMesopotamiaCivilization having been the most obvious Empires and the great canals in the world have shown the glorious historical and political events. Therefore, the study tries to investigate effect of natural-physic factors on geopolitics of Persian Gulf.

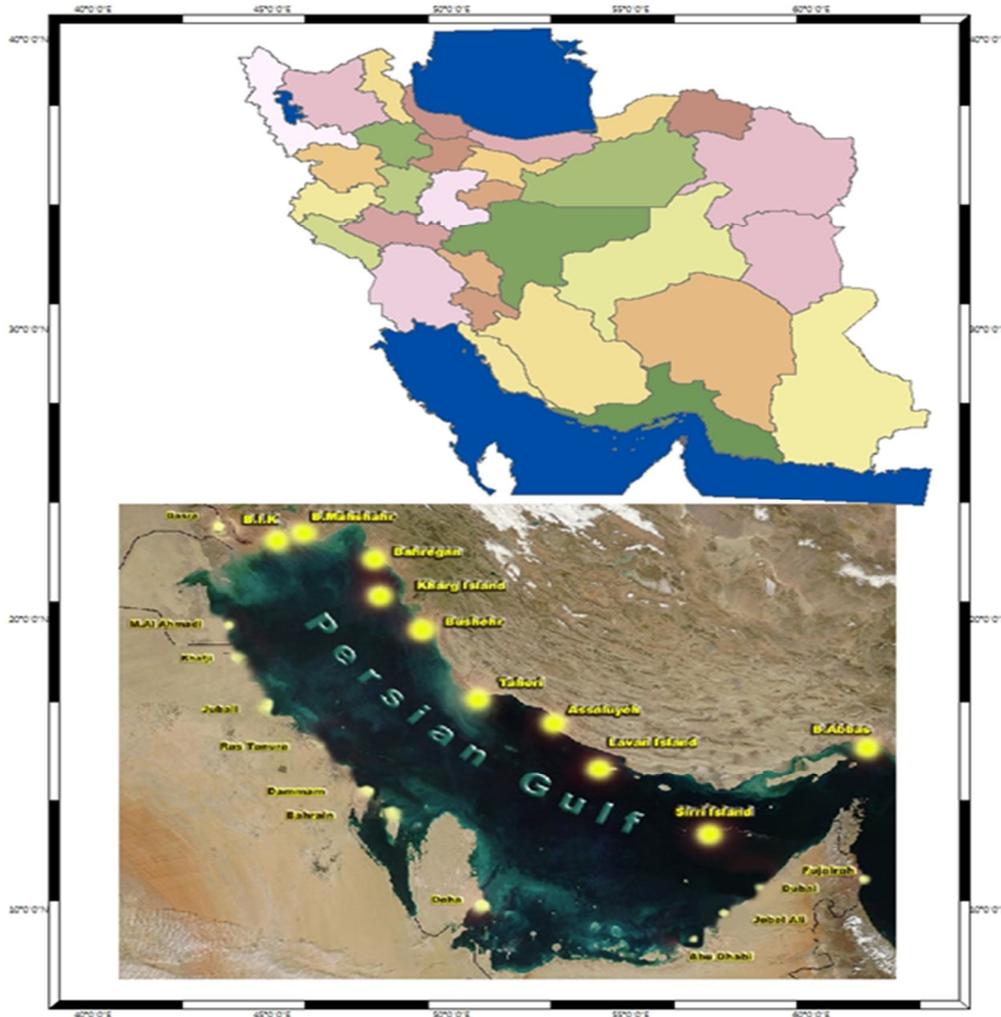
Geographical location and the importance of studies

Persian Gulf, having split Arabic Saudi, is a semi-open sea in the eastern south. The Gulf has located 23⁰ to 30⁰ in the northern latitude and 48⁰ to 56⁰ in the eastern longitude. Strait of Hormuz joins space between two supposed lines (on one hand, Ras Aldabe and Damaghe Alkoh in the Oman Sea; on other hand, Rasalsham and Sheykh Masodand Hengam Island in the beginning of the Gulf). The international canal has the strategic value and is 187 km in longitude along separation strip The Gulf is changeable between 185 to 333 km (100 to 180 knots) in altitude and 1375km in coast longitude from Fav entrance to Bandar Abbas. Its depth rarely passes 73.2 to 91.5 m. The depth is between 25 to 35 m on average; in entrance of Hormuz strait more than 100 m .For this reason, such stretch in the Gulf forms a continent (Hafezniya, 2014:46).

The world powers have turned to geographical values and qualities in the Gulf so far because the balance of strategy and power will be changed by domination of the region. Viewers have recognized the strategic problems in the region (Hafezniya, 2014:50). George Tavan University, David D. Newsom – the present foreign minister assistant of America in 1989- said if the world is a flat circle and one wants to find its center, it will be said to be the Gulf. There is not an important place as the region that the whole of the world turns attention to it. At the present, economic security and the world stability don't depend on the region (Newsom, 1980:59)

* **Corresponding Author:** Dr. Mostafa Khabazi, Assistant professor in department of Geography, University of Shahid Bahonar, Kerman, Mostafakhabazi@uk.ac.ir

Persian Gulf (as a canal) follows Mexico Gulf and Hadson Gulf, as the third great Gulf in the world. It has access to Arabic Sea and Iranian ocean through Hormuz strait and Oman Sea in East. It arrives to Arvand River Delta resulted from combining Dijlah and Forat to Karun River. The neighboring countries in Persian Gulf consist of Iran, Oman, Iraq, Arabic Saudi, Kuwait, the united Arabic Emirates, Qatar, and Bahrain. Iran and Oman have independently ruled in Persian Gulf region for a long time. Two powers, namely Arabic Saudi and Iraq, have developed since 1930. The other countries in the region have established since 1970 (Hafezniya 2014:150). Iran dominates the northern coasts of the Gulf. Because of gas and oil resources in the Gulf and its coasts, it is internationally considered as important and strategic region.



Map 1. Geographical location of Persian Gulf

METHOD

Constancy and security of every country rely on national power. A glance at 200 countries in the whole world, we understand that the countries possessing more national power become ponderous in geopolitics. They do utilize their potentials of environment, nature, society, policy, economics, culture and military perfectly. Although Iran has a lot of potentials in ground resources (oil and gas.....), human resources, geopolitical location, geo-strategy, communication, it faces some challenges in the atmosphere. If Iran enjoys correctly the opportunity and acts properly against the challenges, it can increase international power, geopolitical weight in the region. Consequently, it can play a main role in the trans-region. The study decided to investigate one of the national power aspects, namely the natural factors (climate, rain, topography, marine borderline and islands) how to have effect on geopolitics of the region, by descriptive-analysis method. It is necessary to know some of

data is obtained by library especially internet database. Tools used in the study include software of Arc 2, ENVE 4, and GIS.

Effect of natural factors on geopolitics of Persian Gulf

A. Physic qualities

The Gulf is 99 km in longitude and 60 km in altitude in Hormuz strait. It is changeable in the other locations. The widest location is equal to 338 km. it is 36 m in depth on average. The deepest location is 100 m. The maximal borderline is located in the north of the Gulf placed in Iran; equal to 1295 km. it is an area of 239000. Water volume in middle depth is equal to:

$$V=A*H$$

$$23000*0.036=86000 \text{ km}^2$$

V= volume of water

A=Area



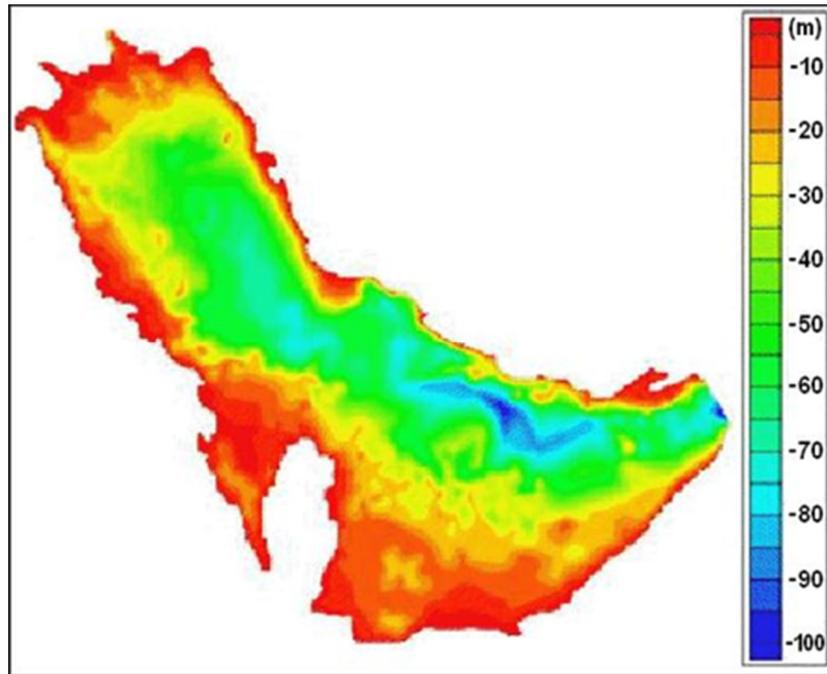
Map 2: effect of physic qualities on geopolitics of Persian Gulf

Regarding expanding the marine ways, using the coastlines, and emphasizing the importance of the Gulf and Hormuz strait as a transit of oil tankers, superpowers of the world have challenges to the vast energy resources in the Gulf during the past decades. The foreign observers notice increasingly to the influential role of Iran in the region. Each of political changes of Iran affects the world. On the other hand, discovery of the enormous fossil fuel in the bed of the Gulf and the depth of the regional countries as well as need of the industrial countries in the whole world cause traffic of a number of the fuel tankers in the Gulf and Hormuz strait, so the geopolitical location of Iran has been changed a geo-strategic location in the world. The perfect geopolitical and geo-strategic locations of Iran coincided and interacted in the region have transformed Iran to an important region in the world. The most costal longitude is geographically located in Iran and its northern coast is completely controlled by Iran. Oil and gas resources of Khuzestan are considered as an economic power for Iran. Throughout the northern coast line of the Gulf (the green lines in figure 2), a part of Iran, has ability militarily to be supervised and led, and troops are gotten off and moved. Even, the northern coasts rule naturally over the Southern coast and Arabic countries.

B. The regional waters and its depth

The waters of the territorial sea are called as border of sea nearby a coast (the first article of the Geneva Convention in 1958 about the territorial sea). This part of a sea with upward space, the sea bed, and sub-bed are dominated by the coastal country (the second article of the Geneva in 1958 about the territorial sea). The waters beyond the territorial sea are usually called international waters.

According to the 1982 convention about rights of seas, the territorial waters are limited maximally to 12 marine miles (every marine mile is almost 1852) computed from the origin sea line that is supposed to be the minimum ebb tide. The rule to determine 12 miles as the territorial sea has been accepted as a rule in an international common law. (Zamaniet.al, 2004:168). On the other hand, the land depth is regarded as an important parameter in the Gulf Geopolitics. As shown in map 3, we find that northern and southern coasts considered as the territorial sea including Iran, Qatar, Oman, Kuwait have the minimum depth about 20 m . As we depart the coast of the countries (mentioned above) to the center of the Gulf, the depth will be increased. The parts nearby Iran coast must increasingly be about 90 m in depth. It causes transport of commercial and martial ships in the region. The Gulf as a vital center is politically and economically considered very important and known as a sensitive geopolitical region (referred to map 3).



Map3: a map of the marine depth from the geographical region of the Gulf

C. Economic factors of ports and wharfs- geo-economy

Economics has always been a factor of determiner in domestic and foreign policy. The factor is used to analyze relation of human and atmosphere around him, that is, it plays a main role in geopolitical analysis (Louver and Toval, 2003:2-101). After following ideology in the geopolitical competition in the world, the present changeable world steps into a new episode with a flexible geographical structure based on role of infrastructure and economized potential (Mojtahed zade,2006:1-130). It is called as geo-economy episode in the world changeable system.

The main purpose of geo-economy not only is to control geography and to gain the physic power but also wants to access o the commercial –economic hegemony (Ezati, 2002: 112) .Geo-economy is a skill to obtain economic profits in foreign policy and strategic action in geo-economy atmosphere that is accompanied with determination and use of the full code patterns and locations to assure share and cooperation of national economics in area of production and income issue in the world (Prohnitchi, 2003)

Geo-economy will raise the benefits of investors and costumers and talk proprieties of communicative networks and speed in movement.in spite of an internationally-focused policy, geo-economy concentrates unity to reach a security against the assumed enemies. In fact, geo-economy is important to develop an international participation against supposed menace of political radicalism and anarchism to increase homogeneity, competence, economic power and development of countries (Lawson, 2004)

Iran has a high potential to be transformed a geo-economy power in the region due to ports and strategic islands (such as Shahid Rajae port and Qeshm island). With development of a bridge to provide landing (ships 250 tons in weight) in ports of Jabal Ali and Fajireh, Emirates has overtaken Iran. Now, the southern ports in Iran can be suffered to land ships with a capacity of 100 thousand tons. In spite of landing in Sothern port in Iran, the foreign ships carrying goods to a destination of Iran, lands in Emirates' wharf to be reloaded and sent by small ships to Iran .Export goods of Iran to load onto ships with capacity of 100 thousand tons must be sent Emirates, and then they are reloaded and sent the different locations in the world.

Many geo-politicians believe if we can establish Persian Gulf Bridge, there will be a ground relation between Qeshm and the southern coasts of Iran, and Qeshm Island is converted a tourist and commercial center in entrance of Persian Gulf and Hormuz strait. On the other hand, the project increases 40% of speed of goods transfer to Iran and from Iran to the free location of Qeshm and economizes 30% in importing goods to Iran, for the project imports loaded burden (in Qeshm) to rail and road transportation. Export productions (goods) of Iran will be exported to the varied locations of the world (the economic world newspaper, 2011)

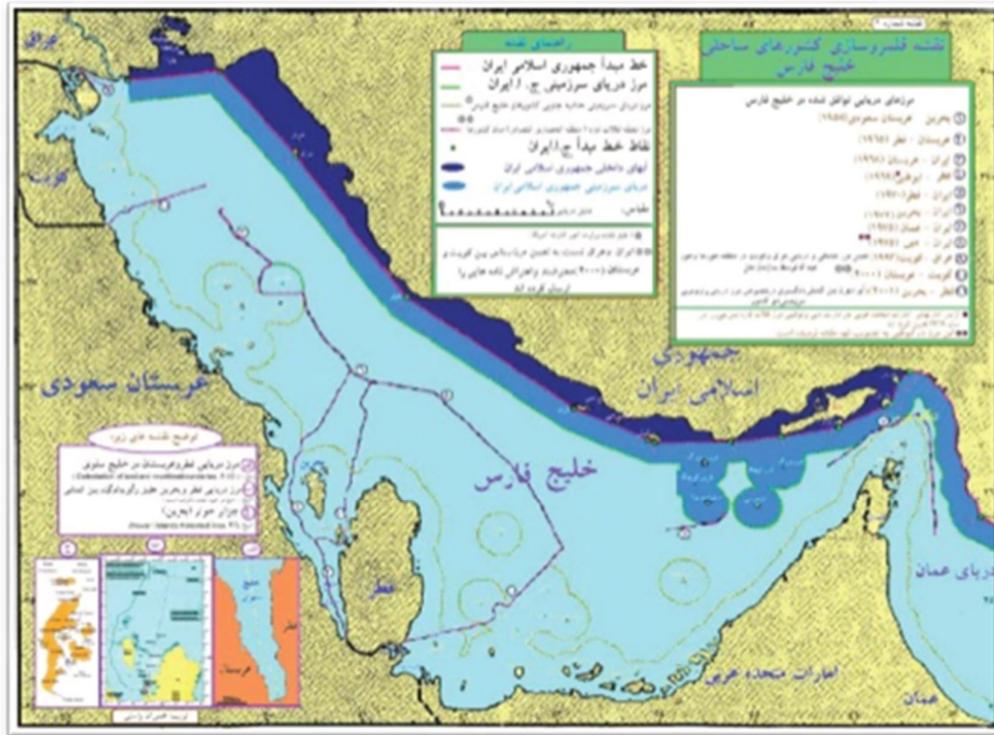
D. Geopolitics of marine areas

Borderlines are politically limited and contracted in the sea and land. The limitation and registration relate to national profits directly. This part of the world has concernedly been challenged in the concept of borderline, the precise limitation of border is located by valuable resource of Hydrocarbon, so every country tries to obtain more share. According to lawful issues, and limitation of the coastal countries will be investigated in the Gulf. The part wants to determine territory of the countries.

Territorialization is defined as a process that a person or a group can access to legal monopolistic rights of spatial-local limitation. The process of Territorialization results in appearance of a series of the defined space and border marked physically in a map. Acting power or supervising the limitation and or protection of the territory involves use of the legal tool including appearance of police, army, and legal and indirect threats. Process of Territorialization in the sea is difference from Territorialization in a land. Bordering and Territorialization in the seas were faces some problems by fluid nature of waters, elements of the water, marine factors, bounding to principles ruled on relations among governments in territory of the seas. The established canals of international navigation are regarded as the great obstacles in bordering countries at sea. Common and continental, laws about waters, geography, power, and ocean are factors that influences on governments' claims to marine territory.

In the marine territory, Iran was the first of the Gulf governments that approved some laws about exploitation and enjoyment of the natural resources. When Arabic Saudi and Bahrain were under protection of Bahrain, they decided to determine marine border between two countries to solve disputes over oil square of Abo Saefeh and give oil square to Arabic Saudi. It is considered as the first border among two countries in the southern edge of the Gulf. There is a continental border between Iran and Arabic Saudi that is the most precise marine border determined by marine convention during 5 years, 1963 to 1968. Because the main motivation was to exploit oil resources from the bed and sub-bed, the oil foreign companies forced the related countries to contract. There were problems including sovereignty of Iran and Arabic Saudi over two Farsi and Arabic islands and lack of agreeing origin line of Iran by Arabic Saudi. Arabic Saudi agreed middle line as borderline between Arabic Saudi and Qatar in Solovi Gulf; meantime, borderline of Iran continent with Arabic Saudi was determined.

The next borderline was set due to oil Albandogh square between Qatar and Abozabi in 1969. Finally, they shared the exploitation. From 1969 to 1975, On one hand continental borders into Iran, but on the other hand borders of Qatar, Bahrain, Oman were marked were drawn in the map with characteristics, but challenges and disputes between Kuwait, Qatar, and Bahrain Continued at end of 1990. Today (2007), borderlines between Iran, Iraq and Kuwait and Iraq, Iran and Emirates haven't been marked in the bed of sea yet. Three marine borders have just assigned in the Gulf during 30 last years. Two of them were set by international organizations such as international justice to solve challenges. The map 4 has shown the territory of countries in the Gulf. It presents marine borders, marine border of Iran, and the other countries, origin line locations, origin line of Islamic revolution of Iran, continental border among countries, the internal water and sea of Islamic revolution of Iran. There are 3 small maps including Solovi Gulf, imaged line among Arabic Saudi, Qatar, and Bahrain and a map of Havar islands in the corner of the map (Mirheydar et.al 2009:17-16-3)



Map 4: the present territory of the Gulf countries

E. Geographical situation

The Gulf is an axis of the relation among Europe, Africa, the Southern Asia, and the eastern south of Asia. It is strategically is considered as a connection center among three continents in the Middle East. The Gulf is supposed as operational region in the military strategy, for Persian Gulf and Hormuz strait link the neighboring countries to Indian Ocean.

F. Climate (temperature, rain, vaporization)

The unique monsoon conditions of the north of Indian Ocean have considerably effect on temperature of the sea in the region. The monsoon phenomenon causes cool weather in the summer in the north of Indian Ocean, but the Gulf takes continental advantages and less under monsoon conditions. According to the current data, temperature of the Gulf is 27.5 in winter, 21.5 in summer, 24 in spring, and 30 in fall. Because temperature limited changes and little –shifted temperature average in different season, the region is warm with inflexible condition that plays a main role in the region geopolitics. The inflexibility of climate in the region is the other factor insisting on the individual importance of the region and attracting trans-regional powers. Studies show that the temperature changes are rarely occurred in the region, and it is limited 22.5 to 831.6. In addition to time-limited temperature changes, there are local-limited temperature changes in different surface and depth for less-depth and water and marine stream (Mozafar et.al 2010, 183).

Rain is little in the Gulf coasts. It is observed more in the Iranian coasts than in the southern coasts of the Gulf. It is about 12.2cm on average in Kuwait, 16 cm in Muscat, and 24 cm in Boshehr. The relative moisture is very high in all parts of the Gulf, for example 84% in Boshehr, 8% in Bahrain, and the same amount in the other parts (Norbakhsh, 1984:21-25). The water rained in the Gulf is less than the vaporized water. Although the water flowing into the Gulf is 300 m² per second, leave of water is 1500 m² per second. Finally, the water steaming from The Oman Sea to the Gulf must be 1200 m² per second. Because of salinity and density, the Gulf is more salty than the other sea in the world. The salt is 38 to 70 per thousand in less deep regions. The salt of the Hormuz strait and the extent part of the northern coasts are about 40 per thousand (Afshar1999:24). The high amount of salt increases speed of transferring sound and voice waves in the sea. Consequently, ships at sea can recognize movement of submarine through sonar tracer set (Hajari, 1990:218)

Conclusion

The geopolitical domain of the Gulf has individual geopolitical weight, so the Gulf is placed in the top location among the Red sea, Eastern Mediterranean, and the Middle East. The Gulf is considered as the central and focal situation in the Arabic and Islamic world because of 8 politic unites, namely 50% of politic unites of

Arabic Middle East, high capacity in producing energy , Hormuz strait and The domain links economic interactions of seven powerful politic unites in energy resources to the economic world system. On the other hand, superpowers try to decrease role of Iran in Arabic region, for example is forced to limit activities in whether the Gulf or the southern part. The Gulf is not only economically but also natural-physically and strategically distinguished. The study wanted to investigate unique qualifications, physic characteristics, geographical situation, climate (temperature, rain, and vaporization), factors of territory waters, and depth of water, economic factors, wharfs and ports, geo-economy, geopolitics of the sea territories. All of them were shown on the maps to be obtained more real qualities, and they were comprehensively analyzed. The results indicated impact of geopolitical and natural situations of the canal on the world politic equations and development of geopolitical weight in the world. Trans-regional powers pay attention to eh region due to unchanged temperature during four seasons, so commercial ships transport continually in the region because of weather forecast with minimum cost. The optimal temperature of troops iscontinuously changed. Their navy and army soundly adapt to the environment. A glance at the map of the Gulf depth, we recognize that depth will gradually be increased raised from the northern and southern coasts located in the territorial sea of Iran, Qatar, Oman, Kuwait to the sea center, so the coast of Iran is 90m in depth. It causes traffic of commercial and military ships in the region and improves strategic importance.

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