

# The Effects of Transportation Economics on Convergence of Iran and Central Asian Countries

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## Abstract

Transportation has a significant influence on macro economy and takes part in GNP, investment, employment and exchange income. Transportation industry applies 10% of countries total GNP, 48.8% of export and 54.1% of import in global business. Previous studies have shown that the countries that have an associated and advanced transportation system could take maximum advantage of their geographical and economical privilege; because using an appropriate transportation system increases cargo, capital and labors mobility and reduces manufacturing, export and import expenses.

Central Asian countries, surrounded with land and with no access to free seas are forced to cooperate with Black Sea's coastal countries or Iran in order to reach free seas. Unfortunately due to weak economical convergence among central Asian countries and Iran's inappropriate transportation system, a great part of international good and passenger business has been removed to Black Sea and Mediterranean region. Therefore, absence of economical interacts between these countries in regional economic activities and undefined transportation economy has resulted in ambiguity in further regional development.

Results from current study indicate that creating railway and highway networks between Iran and central Asian countries in order to develop regional cooperation, could reduce transportation expenses and increase trade changes balance and economical profits and relatively increase geographical convergence. According to reconnoitered massive reserves natural and mineral resources in this countries, through easing transportation of raw materials and work force specific economical-industrial areas can be made and development can be accelerated. Additionally, Iran can found special harbors in coastal areas of Oman Sea to link these networks to free seas. This will lead to increase the region's economical competitive power in compare with other international regions and improve regional convergence and further improvement of Iran's geopolitical and geo-economical situation.

**Key words:** transportation, economic geography, economical privilege, regional convergence

## 1. Introduction

Regionalism and convergence in the 21<sup>st</sup> century require collective will and collaboration between all countries to upgrade cooperation and exchanges. A quick glance at various geographic regions in the world that have taken the convergent and divergent paths informs us that identification and utilization of geographic advantages is the key to achieving regional understanding and cooperation. "A geographic space without common physical features can also be recognized and identified as a region provided there are a series of binding cultural, political, and economic factors among the constituents of the geographic space that set the region apart from other regions" ( Mojtahedzadeh, 2002, p.196).

Central Asia, because of its geographic position, forms part of the North-South Corridor and can take advantage of its cultural and economic indicators and, together with Iran, move towards regional convergence. Among the various factors that bring national interests of countries close together, transportation merits special attention. Utilization of transportation and communications networks raise the level of exchanges between the countries in a region, and reduction in the costs of imports and exports makes it possible to achieve suitable economic conditions in world trade. Therefore, this research investigated the role and effects of transportation economics in the convergence of Central Asian countries and Iran, and suggestions were offered regarding the expansion of economic, cultural, and political exchanges through benefiting from the help offered by transportation economics.

## 2. Methodology

Political and geomorphological maps and economic statistics that are helpful in expressing goals and methods of utilizing transportation economics for regional convergence were used in the various stages of this

research. Unfortunately, due to the lack of information and dynamic survey methods in Iran, we faced some problems in collecting and using statistics and information. Therefore, we used scientific description and comparative studies to compensate somewhat for this lack of required information and statistical sources.

### **3. Statement of the problem**

With the collapse of the Soviet Union, Central Asia embarked on a path regarding which it had no prior experience, and this has turned the region into a center for international competition and the second focus of attention for the United States after the Persian Gulf region and Southwest Asia. "It will be difficult for the United States to have presence, especially for carrying out military operations, in the landlocked region of Eurasia (Central Asia)" (Amir Ahmadian, 2005, p.64). Therefore, the United States has resorted to political and diplomatic actions and has been trying to gain extensive economic influence in the region. Obviously, if the United States achieves economic success in Central Asia, it will be justifiable for it to expand its military influence in this region. On the other hand, Russia considers itself a stakeholder in the affairs of Central Asia because of its proximity to this region, and it has tied its national security to the countries in Central Asia.

Competition between Iran on the one hand and the United States and Russia on the other in Central Asia forces us to view this geopolitical region with special attention and try to lead the countries in this region toward establishing a geopolitical construct and regional convergence so that we can secure our national interests and insure our national security. Economy and world-trade are among tools that can tangibly upgrade the level of exchanges and relations between countries in this region. In this regard, transportation economics has found great importance because of its role in economic development and access to world markets, and can enable us to enhance the regional convergence process and change the geopolitical and geo-economics equations of the region to our own advantage.

### **4. Iran's geopolitical and geoeconomic position in Central Asia**

Iran's dominance over a major part of the Persian Gulf and its control over the Strait of Hormuz, which is one of the strategic straits of the world and one of the "six strategic waterways of the world" (Mirheidar, 2005, p.200) are factors that require us to secure our national interests in this region. So are the easy, suitable, and rapid access to the Indian and Pacific Oceans through Iran and the Oman Sea, Iran's geographical contiguity with the Central Asian countries, a rich history of cultural commonalities with these countries, etc. Iran's neighbors in Central Asia need to secure for themselves rapid and suitable access to world markets because of the set of features that will be discussed below (and that are, in turn, known as geographical advantages and bottlenecks). Various natural resources, rich freshwater resources, huge fossil fuel reserves, etc. are among the positive features and opportunities of these countries that enable them to produce fuels and foodstuff and search for new markets for their products. On the other hand, lack of access to international waters, young and growing populations, worn out industries, distance from major world markets, and shortage of educated and specialized workforce threaten the economic and social stability in these countries. This very point gives a unique opportunity to Iran against interventions by Russia and other world powers in Central Asia, because Central Asian countries need access to world markets and are trying to enhance the competitiveness of their products and, therefore, need to transport their products through the Islamic Republic of Iran to world markets.

In recent years, the United States has taken a series of actions in the Middle East that are serious threats to Iran. In this framework, military occupation of Iraq and Afghanistan and signing various political, economic, and signing military treaties with Iran's neighbors with the purpose of weakening the geopolitical position of Iran and of isolating Iran in the region, have resulted in the strengthening of Iran's regional rivals and in increased economic and political costs for Iran. The political and economic activities and actions taken by the United States and the West, together with movements by Russia and China in this region, have ensnared Central Asian countries in the trap of competition between world powers, and have reduced the positive influences Iran can have and the benefits it can acquire in this region. To correct this trend and to push aside its rivals, Iran must focus on identifying and utilizing the existing economic and political capacities of Central Asian countries. This will enable Iran to take advantage of its geographical position, to bring these countries in the path towards regional convergence with Iran, and to reduce the presence and influence of intervening powers in this sensitive region.

The geographical position of the landlocked Central Asian countries in the heart of Eurasia has increased the costs of their access to international waters and to world markets. The increase in transportation costs, caused by the long distances between these countries and world markets, has considerably slowed down development processes in Central Asian countries and prevented them from rebuilding their economies. The long Iranian coastlines on the Oman Sea and the Persian Gulf provide these countries with suitable access to oil-rich countries of the Persian Gulf region and other world markets, and Iran can take advantage of this to increase its revenues and to enhance its economic influence in these Central Asian countries.

## 5. The role economy plays in the convergence between Iran and Central Asian countries

At present, Iran and Central Asian countries are among the few regions that have not achieved effective convergence. “If people of any country knew their security and welfare were strongly intertwined with the security and welfare of people living in other countries far away from them, their behavior in the past that was considered self-serving would be seen as self-destructive today ” (Broden and Shelley, 2004, . 289). In the past few decades, geopolitical and geoeconomic developments have put the world on the path to convergence and to establishment of regional groupings. The experience of countries like Luxemburg, Switzerland, and Austria in attracting the cooperation of coastal countries such as France, Italy, and Germany is a successful example of the positive effects cooperation and exchanges can have (cooperation and exchanges that have finally resulted in the formation of a regional convergence). Using the patterns set by such cooperation between other countries, we can reduce developmental costs through regional economic cooperation and by creating an integrated transportation network in order to enhance the rate of regional convergence.

### 5-1: The role played by transportation economics in Central Asian countries’ access to world markets

In recent years, in the framework of the international economic division of labor that has taken place in the world economy, large companies have moved their production sites from developed countries to developing regions. This huge worldwide transfer of capital has increased competition between various regions in attracting foreign investments and in creating large production centers. The substantial investments that have taken place during the past three decades in developing countries have considerably increased the volume of world trade. “Based on available statistics, the total world trade in goods and services in the period from 1985 to 2007 increased from 3.940 to the unprecedented 34.569 trillion dollars” (WTO, 2006). This extensive expansion in world trade owes itself to the expansion of equipment and of transportation infrastructure in recent decades. The important point regarding the effects of transportation on economic development lies in the fact that countries with the highest levels of foreign investments have enjoyed transportation facilities and have been able to conduct a large part of world trade.

Essentially, “The economic theory of transferring production centers from developed to developing countries is based on utilizing the relative advantages of developing countries in basic economic elements such as work force and transportation costs” (Razavian, 2009, p. 12). Based on conducted studies, the major portion of the investments made in Central Asian countries have been in oil and gas sectors with agriculture second in importance with respect to the volume of investments made, but other sectors have failed to attract substantial investments. The most important reason for this is the high costs of transportation and the lack of regional cooperation. Considering these conditions and the competition Iran faces in its attempts to gain influence and to create regional convergence in the Central Asian region, using economic tools takes center stage. Achieving economic and political convergence by Iran and Central Asian countries requires expansion of economic exchanges and participation in the markets of the countries in this region. However, this goal will be realized if these countries provide a part of the vital needs of each other and speed up the trend of expanding their economic partnerships. “Two separate places will be able to establish deeper relationships with each other if these relationships result in the realization of the functional goals of both” (Mirheidar, 2005, 10).

### 5-2: Transportation characteristics of current Iranian economy

Expansion of economic exchanges with other countries, and especially with those in Central Asia, requires having standard transportation facilities capable of meeting internal Iranian needs and those of its economic partners. Under present conditions, despite the efforts made to expand Iranian rail transportation network, there is a long way to go to reach the desired point because roads are the main means of transport in Iran. This shows the weakness of Iranian transportation to satisfy the needs of these countries (Table 1-5). Iran’s railway network, because of its low capacity, worn out rails and fleet, and due to failure in utilizing state of the art technology, is far from reaching suitable conditions. As a result, roads transport most goods.

Table 1-5: Volume of goods and passengers carried in the statistical period ending in 2013

Transportation means		2007	2008	2009	2010	2011	2012	2013
Rail transport	Passengers (in thousands)	24459	26225	27710	28814	28560	27015	25533
	Goods (in thousand tons)	30995	33044	32817	33458	33104	34276	32693
Road transport	Passengers (in millions)	248	264	267	245	236	226	211
	Goods ( in million tons)	301	319	333	351	356	375	381

Source (<http://www.rmto.ir/Pages/SalnameAmari.aspx>)

Although numerous actions have been taken to expand transportation (Tables 3-5 and 4-5), the building and expanding of roads that are important in connecting our neighbors to the Oman Sea and the Persian Gulf is not progressing at a desirable rate ( and some of the national projects are still entangled in the bureaucratic procedures). Projects signed by the presidents of Iran, Afghanistan, Tajikistan, and Uzbekistan in 2003 to build two highways connecting these counties (Mohammadi, 2009), and the project to build a North-South Corridor

approved in 2000 in Saint Petersburg between officials of Iran, Russia, and India are among important economic projects that not been pursued in earnest. Table 2-5 shows some of the railway lines that can play an important role in expanding international transit through Iran. These are important railway lines because they will be able to connect Central Asian countries, through Iranian railway lines, to other neighboring countries, to geographic regions in the four corners of Iran, to the Persian Gulf and Arab countries in the Persian gulf region and the Oman Sea, and to countries bordering the Mediterranean Sea.

Table 5.2. Railways proposed for the development of domestic and international transportation

Title of project	Path	Geographic area	Source	Foreign destination
North-East Railway	Chabahar-Zahedan-Mashhad-Torbat Jam (Taibad)	East	Southern Ports	The Middle East and Russia
North-South Corridor	A definite path is not determined.	The South, Center and North of Iran	Southern Ports	The Middle East and Russia
West Railway	Tehran-Arak-Kermanshah-Ghasr Shirin	West of Iran	The Middle East, the Caucasus, Southern Ports	Iraq and Mediterranean Countries
Tehran-Shiraz Railway	Isfahan-	The Center and South of Iran	The Middle East, the Caucasus, Northern Ports	The possibility of connecting Bushehr to Persian Gulf Countries
Qazvin-Astara Railway	Qazvin-Rasht-Astara	The Center and North of Iran	Southern Ports- Western and Southern neighboring countries	Russia and the Caucasian Countries

The concern exists that increase in the population of Iran and domestic demand for transportation cause a great amount of existing and even under construction infrastructures to be spent on local needs. This might decrease international transportation capacity of Iran and drive other Middle East countries towards using other alternative paths such as the land of Caucasian countries

Table 5.3. The length of railway lines and its development in Iran according to the type

Year	Main Lines (km)
2006	8595
2007	8745
2008	9079
2009	9482
2010	9795
2011	9992
2012	10223
2013	10407

Source: (Statistical yearbook of railway transport of Iran, 2013, 19)

Table 5.4. The length of railway main lines and secondary lines division of region

Regions	Main Lines (km)	Secondary Lines (km)
	Main line+ Secondary Line	Industrial and Commercial+Manoeuvrable
South	427	181
Lorestan	156	33
Arak	288	98
Tehran	790	252
North	479	72
Qom	352	78
North East	1071	136
Khorasan	731	261
North West	571	144
Azerbaijan	468	273
Isfahan	620	320
Zagros	220	78
Yazd	704	175
East	947	157
South East	328	37
Kerman	551	134
Fars	484	87
Hormozgan	1220	318
Sum total	10407	2834

Source: (Statistical yearbook of railway transport of Iran, 2013, 63)

Table 5.5. The length and types of roads under the jurisdiction of Ministry of Roads and Transportation

Year	Total	Freeway	Highway	Main Road	Paved secondary road
2007	72854	1606	6180	21579	43489
2008	73721	1629	7516	21402	43174
2009	74441	1770	9061	20794	42816
2010	77166	1957	10669	21276	43264
2011	79015	2053	11652	22052	43258
2012	80842	2185	12969	21234	44454
2013	84472	2203	14155	21628	46485

Source: (Statistical yearbook of lines road transport of Iran, 2013)

Presenting proper facilities, the competitors of Iran in the field of transportation economy on the coast of the Black Sea, the Mediterranean Sea and the Indian Ocean have been able to attract a significant part of transportation market of the Middle East and its abundant income. These measures by the competitors of Iran have been important. Today, Pakistan, the eastern neighbor of Iran, is aware of the capacity of transportation market of the Middle East and the necessity of connecting to the Persian Gulf Countries and the other countries in the world. Hoping that Afghanistan will be stable, this country tries to clear northern tribal areas of the country and transfer a part of this market to its ports especially Kerachi and Gowdar Ports.

Table. 5.6. The transported load on marine, road and rail lines of Iran (1000 Tons)

Year	Railway	Lines Road
2006	32978	273600
2007	30995	301229
2008	33044	319067
2009	32817	333405
2010	33458	350700
2011	33104	355823
2012	34276	374502
2013	32693	380934

Source: (Statistical Center of Iran, 2013)

### 5.3. The main access paths to the main seas and oceans

To have access to open waters, the Middle East needs to use the land of other countries. Countries that act like a medium provide three main paths to these countries:

1. The Black Sea and the Mediterranean Sea in Anatolia Eyalet and the Caucasus
2. Gulf of Oman and the Indian Ocean passing Afghanistan and Pakistan
3. Gulf of Oman and the Indian Ocean through Islamic Republic of Iran

#### 5.3.1. The Black Sea and the Mediterranean Sea in Anatolia Eyalet and the Caucasus

In order to have access to the Mediterranean Sea and the Black Sea, these countries need to pass the Caspian Sea. Passing the Caspian Sea increases the frequency of changing means of transportation, costs and wastes much time. This great number of countries and the difference in tariffs and rules impose excessive red tape upon these countries. This leads using the ports in the coasts of the Black Sea and the Mediterranean Sea uneconomical for the Middle East countries.

#### 5.3.2. Gulf of Oman and the Indian Ocean passing Afghanistan and Pakistan

In the south path of the war-ravaged country, Afghanistan, in which few transportation infrastructures exist and because of the southern mountains which are controlled by insurgents and are neighbors to the northern tribal areas of Pakistan, the economic risk is increased. High economic risk, significant decrease in the speed of good and passenger transportation, increase export and import costs for the Middle East countries and make them search for a safe path for transportation.

#### 5.3.3. Gulf of Oman and the Indian Ocean through Islamic Republic of Iran

Due to its territorial integrity, its safe and quick access to the Indian Ocean, Iran bears a part of the burden of good and passenger transportation and brings major advantages for them. Lack of major natural barriers in the East (Iran eastern borders) makes it possible to transfer a significant part of the Middle East transportation income to the Islamic Republic of Iran by developing transportation facilities.

### 5.4. Using transportation economy in order to facilitate the access of the Middle East Countries to sea

Marine Transportation provides more abilities and capabilities to economy in comparison to other transportation methods. It significantly decreases the costs at long distances. "The cost of a ton of goods for a mile is 22 Cents through air transportation, 6-8 cents by truck, 0.5-1.5 by railway, 0.2-0.5 for oil and gas with pipeline and 0.03-0.06 by large ships" (Hafez Nia & Romina, 2005, 39-40). Despite being landlocked, and due to lack of wide economic cooperation, wide investments in the neighboring coasts is not economically attractive for the Middle East countries. The fear exists that it is possible for their capital to be threatened by possible tensions in political relations. This mutual fear has slowed down the development process in the Middle East countries and the utilization of relative benefits of Iran.

"Creating rail corridors and connecting it to the neighboring countries and ports of Iran is a part of economic strategic plans whose access and use of its final capacities will have a great share in national development because the development of the communication network of this area brings at least an annual 10 billion income" (Hafez Nia & Romina, 2005, 41). With the savings in the transportation costs, this corridor will

decrease the expenses of the Middle East countries in accessing the world markets. Decreasing transportation costs will significantly decrease production costs. This way, the process of foreign investment can be facilitated and the development of the countries in the region will be accelerated. Comparing this figure with the existing gross domestic product indicates the ability to increase Iran domestic production for 10-12 percent. Transportation economy shows its importance when we can maintain the economic-political superiority of Iran in Western Asia and the Middle East using this option and consolidates our position as the reliance point of the economy and politics of the region. Considering that the economy of Iran is unable to provide the necessary capital for the development of communicative infrastructures. Attracting the attention of the Middle East countries for using Iran Southern ports as the gateway for trade, the homogeneity of the region will be increased in addition to providing part of the necessary credits. If the northern neighbors of Iran cooperate with Iran by using transportation capacities of Iran, they will be able to use the vast natural resources from the world oceans to satisfy their needs.

The weak interaction and economic relations between the countries of this region have caused each country to develop its economic-political projects with no regard to its position in the region. This lack of attention to their role and position in the region has damaged the rights and interests of other members of the region in cases and has created some conflicts. "The need of many countries to the roads and ports of the neighboring countries determine their policy with the neighboring countries" (Razavian, 2009, 37). Transportation and the facilitation of international business communications through the land governed by governments are tools that can affect the policies of other countries by satisfying a part of their needs. "Iran has a lower position with regard to its eastern area and is threatened by Afghanistan. This is evident regarding Hirmand River and Friendship Dam" (Abdi & Mokhtari, 2005, 194). Afghanistan has announced that using surface water is an important basic for the development of Afghanistan. Preventing the water flow into the lands of Iran in the recent years has increased the existing tensions in the political relations with eastern neighbors and has threatened the lives of Iranian citizens in the eastern regions of Iran. Finding appropriate leverages, Iran can remove such threats and create opportunities and utilize economic-geographical benefits. Today, transportation and communication with the world are the most important tools that can be relied on to increase the dependence of the neighboring countries on Iran. "No government can survive separate from others and, thus, governments need to communicate with other governments or units" (Jones et al., 2007, 70). In such conditions in which countries cooperate and need each other very much, countries have to interact with each other and will respect mutual expectations and demands.

#### **5.4.1. Using marine transportation in the development of**

The allocation of port facilities to landlocked countries has not significantly been attended to among coastal countries. Despite the fact that landlocked countries have tried to access open waters, they have not been much successful and even have faced problems in their relations with their coastal countries in some cases and the parties have lost their trust as a result. The most important factor about the lack of trust of the coastal countries is the issues related to national security and threats of the foreign countries. Such a perspective can be observed among the Middle East countries and the neighbors who have access to open waters. Naturally, the activity of foreign countries and international companies have some restrictions in the Islamic Republic of Iran leading to low levels of foreign investment in various economic parts.

Powerful regional competitors such as Jebel Ali and Rashid Ports in the UAE, Muscat Port in Oman and also Bahrain and Qatar that have taken great steps in the field of marine trade and have surpassed Iran indicate that we need more courage and initiative in our major decisions for competitiveness in the field of transportation economy. Taking the initiative in this field, Iran can give free access to the Middle East countries for international trade and the exploitation of marine resources. In addition to attracting foreign great investments, this makes them require Iran for the processing and transportation of mined materials to Iranian domestic transportation network and improve the ability of Iran to compete with its regional competitors.

#### **5-4-2. Solution**

Creating a harbor complex on the southern coasts of the country to facilitate activities of Central Asian states will be the first effective step in the political and economic convergence in the region. In particular, given the geopolitical and geo-economics of Iran, it is recommended to establish an international free trade zone by local governance in Iran's southern waters.

Establishment of an international free trade zone with the delegation of political power to local authorities to carry out internal affairs and external communications is to attract foreign investors and provide Central Asian states countries access to the sea according to the 1982 convention. According to the constitution, "leasing and selling land to permitted foreign nationals is absolutely forbidden" (Hafeznia, 2012, 415). Therefore, long-term lease of parts of the southern coast to the Central Asian states provides the context for huge investments of these states in the prospective international free trade zone.

Iranian geopolitical and geo-economical conditions in the global system reminds the necessity of an elucidate locating of a suitable area to create an international free trade zone. The area should have natural resources necessary for the establishment of dense human population who as an effect of this plan will enter the region, and have the minimum cost for land-sea connection of Central Asian states to free water. However, it should regard Iranian considerations in security and political terms. Therefore, among harbor cities on the southern coast of the country, the main focus of this paper is on the areas in the Eastern head of the Hormuz Strait.

### 5-4-3. Locating International Free Trade Zone

Geological and geographical features of Southern coasts of country limits the location of a suitable place for a free sea area to the Gulf of Oman to the head of the Hormuz Strait, as the "Persian Gulf water depth is limited. Its average depth is 35 meters to 100 meters in the Hormuz Strait, although in some points depths of 165 m have been also recorded. Interestingly, in the Oman sea, water depth amounts to three thousand meters, but in the Hormuz Strait and then in the Persian Gulf it sharply reduces" (Elahi, 2005, 9). The geographical distance of Central Asian states from Iran's southern waters in Oman sea is less than the Persian Gulf.

In the southern coastal areas near were selected close to 4 ports of Chabahar, Konarak, Jask, and Bandar Abbas who benefit from primary and suitable facilities for international trade.

Bandar Abbas, based on 2006 Census, has a population of over 397,301 people (Iran Statistical Center, 107, 2006). Executing development plan in this harbor is not appropriate due to the high proportion of the population, playing a central role in Hormozgan, and its role in overseeing the strategic Hormuz Strait. The importance of the Hormuz Strait in the national security and military centers and multiple armed headquarters that are available to the Armed Forces makes establishment of a free zone in this harbor virtually impossible.

Bandar Jask with a low population is located in the closest distance to the mouth of the Hormuz Strait in Oman Sea and like Bandar Abbas, is far from eastern borders of Iran. The protection of Hormuz Strait and Oman Sea, as well as Navy operations of Islamic Republic of Iran in the northern Indian Ocean is conducted in this harbor. Important security and military roles assigned to this harbor along with its geopolitical situation in Iran make us cautious about establishment of the zone in this harbor.

Due to the uplifting of the beach and functions of waves, geomorphological view of Coasts in Iran during a long distance from the Oman coasts is as vertical cliffs with different levels of a few meters to more than one hundred meters (see Figure 5-1). This feature affects other coastal features of the area, so that Oman coast is often known as the coast of vertical cliffs "(Alaei Taleghani, 2005, 366). In geomorphological terms, two harbors of Chabahar and Konarak are located on the "Chabahar delta feature" and "Pozm Cape" which have been advanced in the Oman Sea. These two features have created a small closed gulf named Chabahar Bay. There are several small coasts in the distance line of these two cities on the side of Chabahar Bay due to the geomorphological features of closed gulfs that are less susceptible to mechanical erosion of seas which are less eroded than other parts of the coast of Oman (figure 5-2).

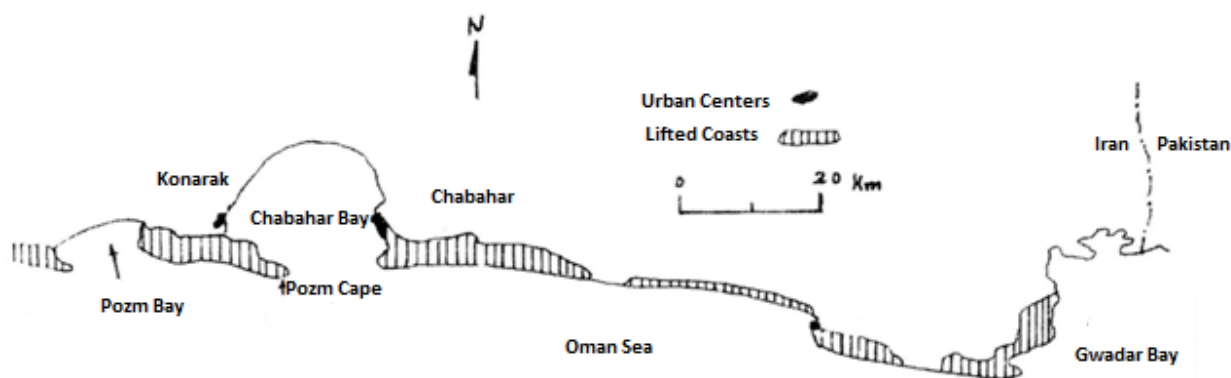


Figure (5-1) geomorphological map of uplifted coasts in Oman Sea (Alaei Taleghni, 2005)

At the mouth of the Bay, "geographic area of free Chabahar trade zone with approximately 14,000 hectares consists of the Eastern body of Chabahar Bay "(Islamnia, 2007, Aftab.ir). Chabahar harbor has the highest depth slope among all southern harbors of Iran. Increasing the depth in coast of Chabahar bay, particularly in the inlet of Chabahar bay is such that only through 1 km of the coast, the water depth will rise to more than 25 meters. (Rafiei, 2007, Aftab.ir). The geographical position of Southern coast of Iran in the coast of Oman causes these harbors at risk of cyclone from the sea. The last cyclone occurred in the region included Gonu cyclone in May 2007 and Phet Cyclone in May 2010 (National Center for Climate Studies, 2010). This can be considered as a main challenge from critic's viewpoint and in the process of ratification and implementation of the project and



cause confusion. However, the study of large projects implemented in the seas and coastal areas around the world suggests that current scientific and technological capabilities are available to overcome the natural problems and to minimize the risk of cyclone from the sea. Kansai International Airport in Osaka, Japan established on an artificial island in the coastal waters of the Great Ocean, is one of the things that proves the human and technical capacity to overcome the negative effects of storms and dangers on the sea harbors and coastal installations (Wikipedia, 2010). Therefore, considering technical and engineering preparation and utilization of modern knowledge, Iran can adopt an arrangement to reduce the negative impacts of flooding from the sea on the harbors, and increase concerns about the risk of sea storms on establishment of harbor in Chabahar bay. In addition, the close distance of this area from Indian ocean and eastern borders, reduce the distance of Central Asian states to the open waters to 1840 km, and its location at the mouth of the Hormuz Strait, will put Chabahar bay among the world's major harbors.

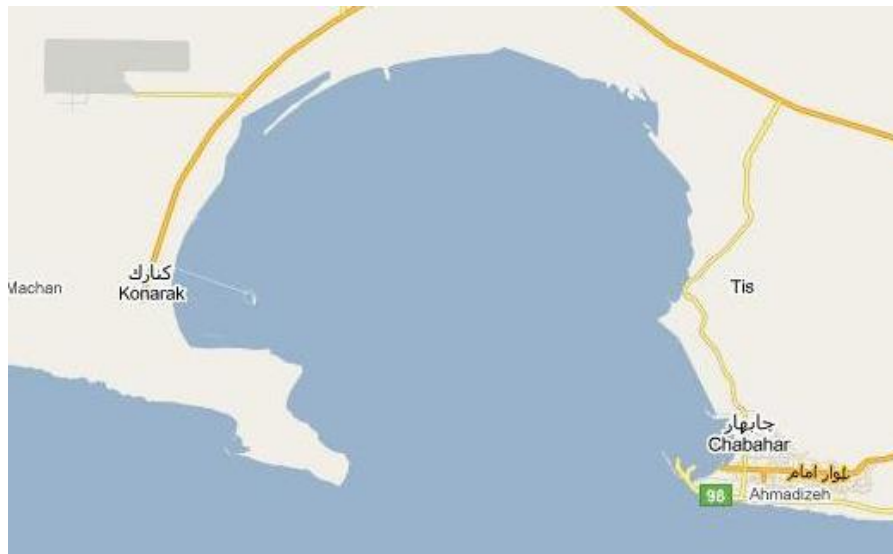


Figure (5-2) Positioned of Konarak and Chabahar harbors in Chabahar Bay

#### 5-4-4. How northern neighbors, Central Asian states use the International Free Trade Zone

The features introduced above make geographical region of Chabahar Bay a very suitable location for an international free trade zone in economic and geographical terms and build a Pathway & Rail road to Central Asian states. Associated road along the shoreline between Chabahar and Konarak harbors located in the sides of Chabahar bay provides appropriate facilities for activities of the Central Asian states in the south of our country. Being located near the eastern border of the country and through the world transportation route, these harbors offer us a strong potential to compete with Gwadar harbor in Pakistan.

Using harbor and airport facilities of Chabahar Free Trade Area at the launch of this international area will provide investors with suitable facilities. In international Chabahar Bay area, by granting freedom transport from sea to the Central Asian states and vice versa, in addition to facilitating international trade, the context for exploitation of these countries from rich oceans resources and the common heritage of mankind will be provided. Based on the 1982 Convention, the common heritage of mankind refers to the geographical area beyond the jurisdiction and sovereignty of the coastal states. It can be referred in general to the areas beyond a 200 miles from the baseline "(Hafeznia., 2004, 181). The importance and value of intact resources that are located on the ocean floor and bed every day finds a new dimension. Limitations of access to some materials in the land illuminate the position of oceans for the future of the world economy and politics. Therefore, huge reserves of minerals and nutrients in the oceans will have a strategic importance in meeting the needs of a significant portion of the Central Asian states and Iran in twenty-first century.

Central Asian states can benefit from Iranian land to explore, extract, and transport these resources in the oceans that are beyond the jurisdiction of coastal states. In this route, definitely the southern coast of Iran in Oman sea will be definitely an option for the establishment of centers for processing of minerals and food by our northern neighbors. "In fact, the concept of source requires a human subjectivity. The natural substance are called source only if being extracted and used by humans. Understanding of issues relating to international cooperation for the management of resources needs to understand the concept of value "( comprehensive geopolitics, 236). With the development of regional cooperation with Central Asian states, our southern coast in the Oman sea can be converted into a center of the vast mineral processing, and using these resources, domestic needs of these

countries will be met through the development of regional transport network (Pathway & Railway). The activities of foreign nationals and partners in this area should benefit from more freedom than other parts of Iran. This freedom can include economic and social freedoms. To ensure the social and economic freedom and transparency of rules for international investment, the cooperation and efforts of all countries that benefit from the project is needed.

## 6. Conclusion

While the military alliance are substituted by economic agreements, and the world is step toward economic integrity, use of transport economy and free trade zones can provide sphere of influence for the promotion of national interests. Using transport economy and facilitating trade activities of Central Asian states through the Oman sea, can transform the Chabahar Bay area into an economic-industrial center, where natural resources and industrial production are internationally traded. This project is relied on the rapid and extensive development of transportation networks inside Iran to be connected to Central Asian states transportation network, and the result would be conversion of Chabahar Bay to the heart of North-South Transport Corridor and the huge leap in the economy of Iran and Central Asia.

Accurate estimation of the investment required to implement the plan requires the participation of the Central Asian states. However, it is predicted that after implementation of this plan, much of the international transport of goods and movement of capital will be performed through the Chabahar Bay International Free Trade Zone. Good cooperation of Central Asian states involved in the project significantly increase the economic competitiveness of products in this group of countries, advances the relative advantages of Central Asian states to attract foreign investment, and reduces shipping cost and time to a minimum. Obviously, the effects of the project on development of Iranian and Central Asian states will be the most effective incentive for the expansion and consolidation of regional integration.

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