The role of morphological changes in diplomatic relations between Iran and Afghanistan's Hermand River border

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Abstract

Borders are phenomena that are essentially human nature through understanding the differences between human beings, they are drawn and studies in the field of geopolitics, as a significant issue to be considered. In the meantime, Rivers as natural boundaries of political units, Due to the changing nature and its morphological diversity, Significant effects on the political relations between the two countries, particularly on border issues Hermand River, located on the border of Iran and Afghanistan Natural and anthropogenic reasons since the formation of the border, Relations between the two countries has always impressed. One of the factors contributing to the river border issues between the two countries, Of morphological Hermand River and its numerous shift in short-term periods, The numerous and complex issues in the legal system has created This article seeks to answer the key question: “Is Iran-Afghanistan border dispute on the Hermand River, Morphology and natural landscape of the river Or only as a result of political relations between the two countries?” The results show that the morphology of the Hermand River, Particularly in the interval boundary of the arterial pattern .The river is the biggest change in comparison to other models. And the border completely informed on the most vulnerable parts of the river bed is placed. This disorder causes Fhay border between Iran and Afghanistan is the first ever and possibly in the future, a number of underlying problems for both countries, especially for the part of Iran. In general, the most important consequences of changes in the morphology of the river on political relations. The country has been effective Include a dispute over the border determined in the context of accompanying the river, Disputes arising from instability distribution of water rights between the two countries and finally determines the scope a broader range of disputes. The research paper based on cross-sectional and library studies As well as historical measurements of changes in the morphology of the Hermand River Using remote sensing data and comparison of satellite images TM-5 Twenty-year-old was conducted in two intervals of time.

Keywords: morphology of the river, the border river, bordering Hermand, Diplomatic relations between Iran and Afghanistan.
Introduction

one of the central issues in political geography studies to governments and the border between them dated. The formation of the border, the border conflict due to boundary issues and the like, Border is an interesting debate in political geography (Mir Hydra, 2002). One significant point in discussing borders, the phenomenon of colonialism in the drawing border And frequently essentially colonial border communities have combined together or separated (Muir, 2000). These borders are not mapped lands; usually a river or little-known mountain ranges are connected. And then directly, along the lines of latitude or longitude that passes through unknown areas, the colonial boundaries imposed on its core include most of the problems for countries around the border. In the meantime, the boundaries are natural boundaries such as rivers which could disrupt the economy of an area due to natural or due Turning, problems for countries on their border. Iran is among the countries

On the one hand, its borders drawn by colonial powers or interfere with and on the other hand is faced with several neighbors. Iranian borders, both land and water for both marine and river a total of 8731 kilometers of river borders with its neighbors, which is 20.9 percent against 1830 kilometers (Hafeznia 2003). Iran borders are the main river, Atrak, Ares, Arvand River, Hermand Harirud the past two rivers, the most important river in the East are input that part of the border between Iran and Afghanistan on the two rivers. Hermand River is important, Shape and pattern of rivers that given the importance of surface water resources, Plays an important role in relations between the countries. For example, the boundary river as a natural border colonial Hermand And imposed a vital role in Iran's eastern half Which can be used to supply drinking water to the public including, To create a lake in which reeds grow Provision of animal feed and animal husbandry, which led to the employment of people noted. The river when water, Thereby wetting the dry winds and temperatures Sistan 120-day action Figure 1. The length and type of graph Iran-Afghan border ,this article tries to find an answer to this question "Is essentially a dispute on the border of Iran and Afghanistan Hermand, Morphological characteristics of the river or just as a result of political relations between the two countries? The results show Using the most vulnerable parts of the bed Helmand Downstream of the river as the border, Cause of dispute between Iran and Afghanistan border The first ever been And perhaps in the future underlies numerous problems for both countries, especially Iran.

Theoretical Foundations

River morphology and their changes

Rivers flowing body of water that passes through open channels (Chorley et al., 1379). The morphology of the river, river system in terms of cognitive science, Details of admission and study the longitudinal profile and how to change it (Yamani and 1385), River flowing rivers that form the pattern, Most chapters with water during flood flow and sediment processes operate, Controlled (Berridge, 2008). One of the most common classification criteria morphology of rivers, a river in terms of shape and geometric plan. A river in terms of appearance Vhndsy plan Accordingly, the pattern of the river in three main categories, namely, straight, meandering and arterial classification is Variability in rivers, in all the patterns river is a natural phenomenon And in the short term may be, Ongoing and long-term, discontinuous and sudden. Therefore, all the rivers, environmental factors in the change of appearance, Various forms so that changes can
be seen in different river. Divided into three rivers flow pattern has been said, does not mean especially in a river, only to see one of the specific models. It may be different in a specific location range. River flow to different modes Bayati (Khatibi and Zahedan, 2008) Hermand river as a river of long, diverse morphology. Border Rivers geopolitical borders are essentially human phenomena. Fhay differences among human beings due to their understanding, they establish their. In fact, to determine the human environment, As with all areas of activity interfering neighbor, Inevitably the determination of contract in the final part of its territory and surrounding environment (Mojtahedzadeh, 2002). Thus, the border to establish a state on a particular territory has been established physical law. Different categories of the border provided that each. This classification is based on certain factors have been carried out. Like morphology, since the establishment of the legal status. Each border is unique in its kind. And often its complexity, this can be prevented. The following is a simple classification. Today, serious efforts are not made to classify borders. Similar borders occurred in various geographic locations. International rivers between the two countries may different forms. fixed-line played well, they (Mir Haydar, 2003). In the first form, the river cut off the border into neighboring countries. In this case, the upstream and downstream relations between the two countries will be discussed. In the second, the river may be part of your route, as the line is and does not enter the neighboring country to which it refers. Border River. In the third, a combination of the previous two that part of its course the river forms the border between the two countries and then entered the neighboring country. (Janparvar, 2008).

To determine the international boundary in rivers of seven used the following methods:
1- To determine the boundary line between River and joint exploitation of it;
2- Boundary on one side of the river;
3- Fair determination of the boundary line by line;
4- Determining the boundary line by line Thalweg;
5- Determining the boundary line by line Thalweg fair in sub shipping lane in the estuaries;
6- Determine the straight line optional;
7- Determine the boundary line through the integration of the above methods (Frshadghor, 1988)

Research method
This study is applied and descriptive analysis. Method of data collection using the library archive and web sites, we have done the development of relations between Iran and Afghanistan and factors affecting it. Afghanistan has long been in the range of Iran's civilization and major parts of the country was part of a massive empire Iran. During the Safavid Shi'ism in Iran because of the dominant limb. Southern and western parts of present-day Afghanistan were converted to Sunni. In the meantime, the nations of this region, as a result of the attack, the city is the center of the Safavid dynasty, occupied. Of course, the riot ended with the rise of Nadir Shah. During the Qajar, Last impact on the body of this ancient civilization came follower and in 1747 the country was separated from Iran. Analysis of Iran's relations with emerging countries Afghanistan in the nineteenth century, Only in the light of the role of Britain and Russia is possible, For example, the first Iranian alliance with a Western country. The coalition was formed by the British in 1801; When the United Kingdom for Iran's help in attacking coalition framework for the elimination of the long
Afghans to India. Iran was happy; because for years dreamed hope that the border city of Herat, Afghanistan, withdraw, eventually, the alliance did not materialize, but thirty-five years later, in 1836, claiming Iran to Herat, Britain faced direct opposition tended; because they believed that to achieve this question, Afghanistan, weaken and breach of Russia will facilitate (Fuller (1994)). Finally, the Treaty of Paris in 1857, Iran claims its territorial formally rejected. Therefore, a major part of discussions to resolve the Iran-Afghan border. Until 1872 to separate Afghanistan from Iran, as the formation of new political boundaries lasted.

And subsequently, the emergence of new political relationships that were emerging under the impact of some of these variables is essentially geographical have been such as: geopolitical, geographical shape and properties inscribed or enclosed Afghanistan and finally the border river Hermant. Others are more political, geographical or have been affected by the new Afghan human geography. After the occurrence of the Islamic Revolution in Iran and Afghanistan accidents Following the attack the forces of the former Soviet Union and then out of the country so far.

Other parameters, in addition to conventional factors play a role in their bilateral relations, Such as: the presence of Afghan refugees in Iran, the reconstruction of Afghanistan, the presence of Iranian businessmen and companies in the Afghan market, energy routes, the Shiites in Afghanistan, Taliban and al-Qaeda activities, active participation of the US-led foreign troops in the country And regional competitions played by rival countries such as Pakistan, Saudi Arabia, UAE and others. Interestingly, the geographic variables from past to present, Continue to determine the relations between the two countries have been active, For example, the boundary river Hermant and issues arising from it.

In fact, the only part of Afghanistan that Iran was contemporary debate on its head, Sistan region, Nimroz and Hermant provinces far (in the southwestern corner of Afghanistan. This area includes important agricultural water Hermant River that passes in Sistan. Many strategists United Kingdom to Sistan, As an important point of penetration, special geo-strategic properties held; Because this area Interface Iran, Afghanistan and British India was Thus, the British in 1872, Afghans and Iranians seek arbitration in case of conflicting claims sought Thus, although the territorial issues largely resolved, Iran and Afghanistan in 1872, But sensitive issues related to water use and rights remained dam. Since then, the issue of the Hermant River was handed over to arbitration and has reached the threshold of the Iranian parliament, But it did not address any organ of the Afghan parliament, (Fuller,1994).

Share issue of the Hermant River Delta region and its method of operation, always one of the most important aspects of border conflicts in Iran and Afghanistan has been Sistan. Although both governments have adopted many years ago exact location of the border, however, militants of the shares and other rights of the border river despite great strides in the past 120 years, has remained. The last contract (Contract 1972 against 26 cubic meters per second of water rights was considered. and the two countries agreed facility is constructed on river Iran and Afghanistan to ensure the provision of water rights The agreement to a treaty on the Hermant River And two protocols signed by the two sides reached on 22 Persian date Esfand 1351. After the treaty of 1972, as a result of repeated coups Afghanistan, Subsequent actions indicate the government of Afghanistan on this question, it is not evident. The Taliban in the Hermant River closed on Iran. And despite the geopolitical changes in the region and regime change in Afghanistan, Still kept closed this is while Iran Sistan region for several consecutive years and a severe shortage of water resources Faced drought conditions. In
recent years, the dialogue that took place between officials of the two countries, The Iranian government has demanded an encore contract in 1972. Afghan officials would not run properly. And in practice, the Iranian government has even written into law in the treaty also does not achieve; While the volume of water behind Sdkjky is estimated to be 2 billion cubic meters. Afghan government over the past 50 years helped US companies Dams and channels, regardless of the agreements between the two sides, it is built on the Hermand River and its branches. That can even be said, have transformed Sistan ecosystems, So that in 50 years of severe drought over the past 5 to 6 Sistan entered, As a result of our lake is dry. And settlements and pastures around it are faced with a serious danger In terms of natural problems related to the division of the Hermand River, due to the morphological characteristics of the river . The constant fluctuation of river bed, has a key role in relations between the two countries, But in human terms, colonialist role And decisive in the development of the border and its consequences Because the separation Afghanistan from Iran. The two countries pledged to resolve any border dispute with the United Kingdom's intervention. Since after the formal independence of Afghanistan from Iran, the country was dominated by England, Therefore, solving disputes over water use between the two countries Hermand River, since suspected British involvement began Iran's eastern borders. In the second half of the nineteenth century, coupled with the difference that in the eastern part of Iran . Among the local rulers of Iran and Afghanistan over border issues had been The two countries on the basis of separate treaties with England had, The government is committed to tackling the issues to arbitration As a result, three arbitration-line Iran-Afghanistan border was determined by the government( Hafeznia, 2006).
Table 1. The process of development of political relations between the two countries on the issue of Hermand

<table>
<thead>
<tr>
<th>Agreements between the two countries Hermand</th>
<th>Year</th>
<th>Consequences of agreements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paris Convention</td>
<td>1236</td>
<td>Commitment of both countries to judge the place by the UK border</td>
</tr>
<tr>
<td>Goldsmith arbitration</td>
<td>1250</td>
<td>Boundary main tributary, the River Hermand and oblivious to the legal system.</td>
</tr>
<tr>
<td>McMahon arbitration</td>
<td>1282</td>
<td>Confirmed the previous border with Iran redirect rivers and reduction of water share from 62 percent to 33 percent, With awareness of water requirement of the performance counters Natural reality and was only to protect British interests.</td>
</tr>
<tr>
<td>Mavadat Convention</td>
<td>1300</td>
<td>The development of friendly relations and a new chapter in political relations between the two countries after independence Afghan political.</td>
</tr>
<tr>
<td>Vedayeh Convention</td>
<td>1306</td>
<td>Consolidation of relations between the two nations' Khan reaza boundary issues</td>
</tr>
<tr>
<td>Temporary contracts</td>
<td>1315</td>
<td>The dehydration effect in July 1315 with the construction of the dam Lakhshak Afghans and its destruction by farmers Sistani, the development contract to divide half of the Helmand River from paragraph to paragraph Lakhshak Kamal Khan for one year and renewed it in 1316 in Abad Treaty</td>
</tr>
<tr>
<td>Commission Neutral</td>
<td>1327</td>
<td>The American proposal and determine water rights in Iran - as a result of the drought in 1326 An average of 22 m3 per second, weakening Iran's position on water rights</td>
</tr>
<tr>
<td>Water sharing treaty</td>
<td>1236</td>
<td>Increasing 4 m3 to 22 m3 of the Commission and its approval of parliament in both countries, but Afghan coup was to prevent the exchange of documents.</td>
</tr>
</tbody>
</table>

The formation of Iran-Afghanistan border and judgments relating to it on the Helmand River is important is that For the most conscious sections of the Helmand River bed downstream sector, Was chosen as the joint border. For example, General Goldsmith putting the Afghan border headquarters in the Helmand River Delta region, Has the ability to Afghanistan to be
fertile half of Sistan who is desperately in need of it. He denied receiving it. This section due to their morphology characteristics, causes fluctuations and redirects are repeated. Determine the outcome of such a boundary imposed as a consequence of colonial boundaries. As a result of the border dispute between Iran and Afghanistan did not have Geographical borders and environmental Helmand River plain. Hermand River, the largest river in the distance, latitude Tigris to the document which is at an altitude of 3,000 meters near the source of Kabul, Afghanistan's central findings derived. When entering Iranian border Tuesday Helmand, Afghanistan's border with Iran forms (Clifford, 1997). An offshoot of the border between Iran and Afghanistan is going "common fairy" is called. Another branch of the Helmand River, which arrived in Sistan plain and Lake pours Helmand. Helmand is located in Sistan plain, Sistan and redirect rivers and its major branches over time, Causing displacement of human settlements have been On the other hand, residents economy more plain agriculture, fish farming and the use of these lands is plain in the weaving activity. On the other hand, it can be said that the construction of new dams upstream in Afghanistan, Decreased inflow boundary interval in the coming years will be to Helmand As a result, a strong bond between life settlements Sistan and the water flow from Afghanistan's Helmand River.

Discussion and Results
Changes in river morphology and its impact on diplomatic relations between Iran and Afghanistan's Helmand border. As noted, based on historical analyzes, Helmand river forming the border since the beginning, has been under British colonial interests; This means that arbitration by Goldsmith and McMahon, River border between the two countries is one of the most informed on the river, Fork and arteries, where the river is located, While, the morphology of rivers such as Helmand, The highest variability compared to other models are river. Such morphological characteristics, numerous and complex issues in the legal system constitute river, Such as how to divide water or redirect the border. Whatever little attention has been Helmand geographer’s issues, without attention to measuring the periodic variations of the river is the border. To overcome these shortcomings, efforts have been made to use the sensor TM-5 images. To measure these changes. The river downstream, because of being in a field with a low gradient and a wide admitted, basically, the function of an artery model. Evidence that this model can be Landsat satellite images from Google Images and earned and interpretation.

One of the most important geomorphological evidence arterial models in this river is:
1. alluvial plain of the river flow
2. Wide river bed
3. Multi-branching secondary channels of the river, its tributaries as a result of widespread ramifications.
4. There longitudinal barrier islands or in the bed of the river. To analyze morphological changes in the bordering river.

In this study, using Landsat images of TM5-s. We can redirect the annual average 5/12 m displacement in position. These geographical occurred in the Hermand River. These changes are severe in some parts of the river. And in parts it is very low. In addition to these changes, in some parts of the border into Afghanistan and in some parts also extends to Iran. However, during the past two decades, to the spatial variability of soil towards Afghanistan. And it means that the share of waterway Iran's eastern borders in particular, will have a decreasing
trend. Because of this variability River for a brief period and unstable. Primarily due to the characteristics of the arterial morphology of rivers in the region. Therefore it can be concluded. The changing nature trails Hermand River in the coming years. Cause more tensions between Iran and Afghanistan will be over water share. It is far more important that some experts believe problem Hermand is one of the major cases that relations between Iran and Afghanistan in the neighborhood affected, So as to resolve it, a dozen diplomatic crises. And twenty-seven cases of bilateral negotiations has led to However, none of these agreements could not sustainable model for the distribution of water rights in the country. Now, Iran's protest over Afghanistan's stability Convention of 1351. Water for the operation of the Hermand River, the government found According to which annual 850 million cubic meters of Iran have to have the water rights of Hermand. According to the Parliament Research Centre, closed on all of treaty between Iran and Afghanistan, balancing the water rights for the benefit of Hermand, Iran is in a weak position and none of the treaties between Iran and Afghanistan on the Hermand River closed, in accordance with international regulations and not without deficiencies.
References