1. Introduction:
The Aral Sea is located at the heart of Central Asia between Kazakhstan and Uzbekistan. These two former Soviet Republics are the riparian countries of the Aral Sea. The rest of the Central Asian countries, Kyrgyzstan, Tadjikistan and Turkmenistan share the Aral Sea basin although they are not riparian states.

The northern riparian country is Kazakhstan. This country with a surface of 2,727,300 Km$^2$ and a population of 15,700,000 inhabitants is the largest country of
Central Asia but it is not the regional leader. This position is occupied by Uzbekistan, the country with the strongest Western influence in Central Asia.

The southern shore of the Aral Sea belongs to Uzbekistan which has a surface of 447,400 Km² and a population of 22 millions of inhabitants distributed as follows:

![Population in Uzbekistan Diagram]

SOURCE: [www.census.org](http://www.census.org)

Tashkent is the capital of Uzbekistan with a population of 2,120,000. There are another important cities such as Samarkand (372,000), Namagan (333,000) or Bukhara (325,000)¹ Uzbekistan is an important economic core in Central Asia. It has a PIB per capita of $870 (www.unesco.org).

2. The Karakalpak Nationalism
Karakalpakstan is an Autonomous Republic which belongs to Uzbekistan. Its population is very mixed, being its composition:

![Major Ethnic Groups in Karakakpastan Diagram]


¹ Source World Bank 1999.
We could define the Karakalpakstan nationalism taking into account four aspects established by Reuel R. HANK\(^2\):

1. Cultural identity.
2. Autonomous History.
3. Underdevelopment.
4. Environmental Damage.

1. **Cultural identity:** Karakalpaks, Kazakhs, Uzbeks and Turkmen have a common ethnic origin, the Turkic one. Nevertheless, each of them try to define their own cultural identity despite the fact that Karakalpakstan lacked a true literary language before the Russian and Tartar conquest. The big boom of the Karakalpak culture was occurred in the 1980s but this initiative was out back by the Soviet Authorities.

Karakalpak language is spoken by inhabitants of Karakalpakstan. However they can also speak Uzbek language fluently. Notwithstanding, Uzbek government allows Karakalpak population to study this language in the national schools. Thus in 1994 there were 345 schools in Karakalpakstan where students could learn their mother tongue. Summarising, we could affirm that the language it is not a defining element of the Karakalpak nationalism.

The religion is not a decisive element in the definition of the Karakalpak nationalism; Karakalpak people share with Uzbeks the same religion; they are Sunni Muslims of the Hanafi school.

2. **Autonomous History.** However, Karakalpakstan does not have a history linked to Uzbekistan. This territory made part of the Russian empire from 1722 to 1811 when it was joined by Khiba Khan. Finally, after Tsar Alexander II’s campaigns in 1873 Karakalpakstan returned to the Russian empire.

In the 20\(^{th}\) century, from 1925 to 1930 Karakalpakstan was an Autonomous Soviet Socialist Region (ASSR) in the Soviet Republic of Kazakhstan. Five years after it became an Autonomous Soviet Socialist Republic in the Russian Soviet Socialist Republic. In 1936, Karakalpakstan was transferred to Uzbekistan as an Autonomous Republic. This status has lasted until the present. Finally, we could affirm that Karakalpakstan has never enjoyed a period of independence in its history.

The third and the fourth points in the definition of the Karakalpak nationalism, the environmental and the economical one, in my opinion the most important, deserve to be treated more deeply. We are going to address in the following point.

---

3. The Ecological Disaster of the Aral Sea.
The Aral Sea was the fourth closed sea in the world and the second of the former Soviet Union. In the past, this sea had more than 1,000 islands scattered over all the Aral Sea. The main ones were Barsakelmes, Vozrozhdenie, and Kok-Aral which divide the northern and southern seas, since 1989. The northern sea is called the Small Sea and the southern one, the Large Sea. Both seas are connected by the Berg strait.

3.1. Natural Disaster

The Water from the Amudarya and Sirdarya rivers, the principal source of the Aral Sea, was used to irrigate cotton crops. From 1960 to 1990, Central Asia was the fourth cotton producer in the world. This fact has caused the fall of the water level in these rivers. Nowadays, the Aral Sea receives less than 1/10 of the water received in 1950.

The fall of the amount of water supplied by the Amudarya and Syrdarya rivers has caused the emergence of several kilometres of land which were covered by the sea in the past. This surface appears covered by tonnes of salt now.

This is not the only consequence, northern and southern shores have been moved about 150 kilometers from its original shore and as a consequence, Moynaq and Aralsk have lost its fishing opportunities creating a very important economical and social problem.
At the same time the fall of the water level, has also produced the emergence of some islands in the center of the Aral Sea, dividing the area in two seas (The small or northern sea and the large or southern sea).

The rise of the salt level has killed several sorts of fish. Besides many mammals and birds have also disappeared.

Scientists have also pointed out the climate change in the Aral Sea Basin. Precipitation and air humidity have fallen down. Seasons have also changed, winters become colder and drier and summers hotter and hotter.

3.2. Social Consequences.
First of all, we must mention that drinkable water is almost a poison. The quantity of salt in the water is four times higher that the recommended by the World Health Organization (WHO) The Amudarya and Sirdarya waters carry fertilizers and pesticides wastes along with a high concentration of heavy metals.

Secondly, the climate change and the crust of salt over the land have made thousand of hectares useless for the agriculture. This is one of the most important problems in order to re-start the economy of the Aral Sea.

The third major problem of the Aral Sea economy relates to the fishing activity. Nowadays there is a decline of fishing opportunities in the region. Moynaq and Aralks harbours are unavailable for fishermen since the Aral Sea is too far from the original shore. This fact has resulted in the rise of the number of unemployed whose rate is one of the highest in the Uzbekistan Republic.

The solution for the economical matters is very difficult because agriculture and fishery are among the main activities of the Karakalpak economy while industry counts less than 10% of the total employment.

These are not the only consequences, and the population of this region has suffered from several diseases. The death rate in Karakalpakstan is one of the highest in the world and the birth rate, which was one of the highest of Central Asia, at present has also fallen down. We can explain this taking into account the worsening of health conditions.

<table>
<thead>
<tr>
<th>Lands covered with crust of salt in Uzbekistan</th>
</tr>
</thead>
<tbody>
<tr>
<td>1982</td>
</tr>
<tr>
<td>1985</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Dessertification of the Aral Sea</th>
</tr>
</thead>
<tbody>
<tr>
<td>56 Km³ per year</td>
</tr>
<tr>
<td>1966-1970</td>
</tr>
<tr>
<td>1981-1985</td>
</tr>
</tbody>
</table>

SOURCE: www.fao.org

For instance, in Karakalpakstan 76% of women in the Aral Sea area suffer from anemia disease (18-06-2002 Uzreport.com “Japanese aid is focused in order to avoid...
this problem. Recently Japanese government has donated $1.5 billion to this goal.) In this respect, we have to take into account the opinion of Dr. Ataiyazovo. He said to www.oneworld.org “our people are dying like flies” “Over 20% of our young women, aged 13-19 have kidney disease”.

Besides, Karakalpak people suffer from the highest levels of heavy metals, salts and other toxic substances in air and drinking water. This has also worsened the health situation.

3.3. The influence of the environmental and economic problems in the definition of the Karakalpak nationalism.
The environmental problems are the most important elements in the definition of the Karakalpak nationalism. The cultural identity and the autonomous history are two elements shared by other nationalisms, but the environmental one is distinctive of the Karakalpak nationalism. Uz.Report give us a proof about the importance of the environment in the region “June 5th - World Environment Day- Give Earth a Chance”

4. Solutions
From the Soviet period the Aral Basin population had demanded a solution for their ecological problem. At the end of 1970s many journalists and scientists discussed the possibility of re-routing rivers from Siberia to the Aral Sea. The problem of this option was the tremendous amount of money needed for the implementation of this project. When the Soviet Union fell down the international community started to be concerned with the problem of the Aral Sea.

In 1991 several international organisations such as the World Bank, the UNDP, the UNESCO or the European Union created a development program for the Aral Sea. We could stress the initiative adopted by the World Bank:

   a. The Aral Sea Basin Program (ASBP), the largest, started in 1994 with a Project Preparatory Assistance grant of US$500.000 as the initial phase of the regional water strategy. This program is a component of the “Program of Concrete Activities for the Improvement of Social and Economic Situation and Environmental Stabilisation in the Aral Sea Basin”

This program was approved by the Heads of State of Central Asia in January of 1994 with the following objectives:

   • To build the capacity of the regional institutions.
   • Promotion of sustainable development of countries,
   • Stabilising of the environment of the region.
   • Rehabilitate the zone around the Aral Sea.

The ASBP has a common strategy in order to get these objectives. This strategy accounts on five components:

---

• **Water and salt Management** (US$ 6.3 million) This component will prepare the common policy strategy programs for the ASBP, a framework for interstate agreement to improve regional water, and salt management.

• **Public awareness** (US$ 3.1 million) This component will educate the general public about ASBP issues and on possible water conservation efforts in their communities through a public awareness campaign. We could give an example: there is a TV program (Kzyland TV) with the following spot “If you save the water you save money”

• **Dam and reservoir management.** (US$ 2.6 million) This component will complete the independent safety assessment, improve dam safety, examine sedimentation problems and prepare investment plans.

• **Trans-boundary water monitoring.** (US$ 3.5 million) This component will be the base to monitor transboundary water flows and quality.

• **Wetland restoration.** (US$ 3.9 million) This component will rehabilitate the Sudache Lake wetland near the Amudarya delta.

• **Project management support.** (US$ 1.9) This component will enable the Executive Committee of the International Fund for Saving the Aral Sea to implement the project.

Funds are granted by:

<table>
<thead>
<tr>
<th>Donnor</th>
<th>US$ million</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEF</td>
<td>12.2</td>
</tr>
<tr>
<td>Five Central Asian Republics</td>
<td>4.1</td>
</tr>
<tr>
<td>The Netherlands</td>
<td>2.3</td>
</tr>
<tr>
<td>European Union/TACIS</td>
<td>1.4</td>
</tr>
<tr>
<td>Swedish International Development Agency</td>
<td>0.3</td>
</tr>
<tr>
<td>Unidentified</td>
<td>0.9</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>21.2</strong></td>
</tr>
</tbody>
</table>

Associated Investment in Improved Water Management (Of which 45.6 is World Bank derived)

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>65.2</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Grand Total** 86.4

**SOURCE:** The World Bank 2002

The World Bank has another projects that we can summarise: Water Supply, Sanitation and Health Project (US$ 75 million) or some aspects inside the Country Assistance Strategy (US$20 million). In this project we could stress the fourth point “reinforce the maintenance and effectiveness of the country’s extensive irrigation and drainage infrastructure”

Regarding to the European Union we could stress the document “Tacis Regional Cooperation: Strategic Considerations 2002-2006 and Indicative Programme 2002-2003” In this document we could find the problem of the Aral Sea in the point 5.2.1.3 “Regional Seas” where we can read “the promotion of sustainable development and
sustainable management of natural resources including monitoring reduction and prevention of pollution, better management of water and fish resources and development of the policy and regulatory framework to facilitate the implementation of regional or international agreement or commitments”

There are other sources of funds as:

- ECOSAN (International Ecological and Healthcare Fund) and Russia Foreign agreement on Cooperation. (See Uz.Report.com Posted 6-9-2001)
- Japan: example “to step up Medical Aid Worth of 355 millions of Yen” (Sea Uz.Report 15-12-2001)
- USA. Example: “USA to Grant 12,3 million worth of Medical Aid” (Uz.Report.com 15-12-2001)

SOURCES:


Historire des Peuples de l’ex-URSS. Du XIX siècle à nos jours, Libraire Academie Perrin, Paris 1993

UNISCI : www.ucm/info/unisci
Brussels University : www.almanach.be
World Bank : www.theworldbank.org
Uz-Report: www.uzreport.com
One World: www.oneworld.org
FAO: www.fao.org
UNESCO: www.unesco.org
CENSUS: www.census.org