

ARAL GÖLÜ FELAKETİ: BEKLENTİLER VE ÖNCELİKLERDE FARKLILIKLAR DEVAM EDERKEN NE YAPILMALI?

Alaeddin YALÇINKAYA

Marmara Üniversitesi, Siyasal Bilgiler Fakültesi, alaeddin.yalcinkaya@marmara.edu.tr

Hakan MEHMETCIK

Marmara Üniversitesi, Siyasal Bilgiler Fakültesi, hakanmehmetcik@gmail.com

ÖZ

Çevre sorunları 20. Yüzyılın ikinci yarısından itibaren varlığını duyurmaya başlamış ve 21. Yüzyıl başı itibarıyla uluslararası politikanın temel sorunlarından biri haline gelmiştir. Sorunun önde gelen konuları arasında küresel ısınma, hava kirliliği, çölleşme, mevcut su kaynaklarının, bitki ve hayvan türlerinin azalması gibi başlıklar sayılabilir. Öncelikle öngörüsüz, plansız sanayileşmenin sonucu olan bu durum, daha çok eski sömürgeci/sanayileşmiş ülkelerin doğal kaynakları hesapsız kullanması sonucu ortaya çıkmıştır. Afro-Avrasya'da çevresel sorunların temelinde ise Avrupa'nın Afrasya'yı sömürsü yer almaktadır. Bu çalışmada SSCB döneminde Moskova'nın aşırı pamuk üretimi programı sonucu Aral Gölü'nün kuruma sürecine girmesi ele alınmaktadır. Bağımsızlık sonrası başta Kazakistan olmak üzere Orta Asya cumhuriyetlerinin, Aral Gölü'nü kurtarma yolundaki girişimleri ile bu çabaların ulaştığı sonuçlar, bugünkü durum çerçevesinde değerlendirilmektedir. Bu yöndeki girişimlerin sonucu dikkate alınarak Aral Gölü kaynaklı çevresel felaketlerin sona erdirilmesi konusunda kararlı işbirliğinin gereği üzerinde durulmaktadır. Bu programın maliyetine Rusya'nın da katılması gereğine işaret edilmektedir.

Anahtar Kelimeler: Aral Gölü, Çölleşme, Orta Asya Cumhuriyetleri, Afro-Avrasya, Çevre Koruması

ARAL LAKE DISASTER: WHAT TO DO AS DIFFERENCES IN EXPECTATIONS AND PRIORITIES ENDURE?

ABSTRACT

Environmental problems have increased since the half of the 20th century, and they have become one of the major concerns of international politics since the beginning of the 21st century. Global warming, air pollution, desertification, depletion of existing water resources, reduction of plant and animal species are some of the leading causes of the problem to list. Primarily the result of careless and unplanned industrialization, these problems for the most part associated with colonial/industrialized powers' unrestrictive use of natural resources. European colonization is the fundamental cause of environmental issues in the Afro-Eurasia region. This paper is concerned with shrinking of Aral Sea as a result of Moscow's excessive cotton production in the era of Soviet Union. The efforts particularly by Kazakhstan and other Central Asian republics after independence to reverse the process is evaluated with. The achievements of these attempts are evaluated with respect to current situation. Taking the effects of these initiatives into consideration, to end the environmental disaster in the Aral Sea, the need for decisive cooperation is highlighted. It is also argued that Russia should share the cost this program.

Keywords: Aral Sea, Desertification, Central Asian Republics, Afro-Eurasia, Environmental Protection

Introduction

Afro-Eurasia is the mainland of the world consisting of Asia, Europe and Africa. The environmental problems addressed on this mainland are not different from the other parts of the world such as America, Australia or Poles by nature. Matter of fact, most of the environmental problems are global as it is seen in the concept of "global warming", a problem not limited to a singular region but to a "global" danger or disaster, which overall is a direct result of carbon emissions and overuse and over dependency to fossil fuels in the developed economies. Today, almost all environmental problems are cross-border issues that the impacts of these issues are now one of the critical components of globalization. The transition from hard-core military security issues to these new form of transnational and trans-border environmental and human security issues in the study of International Relations departs from the fact that numbers of concerns that we faced today are substantively and geographically interconnected. These problems are also greatly interlinked to other issues of political economy, international relations, global governance, health and security. Therefore, these problems require international interests and collective action.

Located between Kazakhstan and Uzbekistan, Aral Lake has been one of the most important source of well-being for the Central Asian people. It was the fourth largest saline lake up until 1960s offering a bousting fishing stocke, supply of sustainable water, and more modest climate. Since then, the water level of the lake has severely declined marking "*one of the planet's most shocking environmental disasters*" induced by human activities. ("Aral Sea 'one of the planet's worst environmental disasters,'" 2010) Soviet governments deliberately deprived the Aral Sea by diverting its two main sources, Amu Darya and Syr Darya, in order to favor agricultural production, especially cotton, which consumes large amount of water. After the fall of the Soviet Union, newly independent Central Asian states countiuned the very same policy as they faced with dilemma of the economic growth and environmental troubles. Receiving less water than it ought to be, Aral Lake has shrunked drastically over the decades leaving millions of people, an entire fauna effected by large and complex primary and secondary results, which varied from economic, health and environmental problems to climate change, salinization, desertification, salt-dust storms, etc. Between 1960 and 2000, the lake shrank by %90 while sea level dropped by 16-23 meters. The southern part of the lake completely dried up, which is known as Aralkum Desert or "a graveyard of ships" today while western part is survived due to the efforts taken by Kazakshtan. Therefore, Aral Lake is literaly a catastrophe that collectively committed by several past and present governments. For the time being, bringing back the lake to its 1960s level is not attainable, yet countries can slow-down the evaporation and even revive some portion of it. Nevertheless, this requires collective action too. However, cooperation is continuously hampered by diverging priorities, expectations and disagreements among the interested parties. This paper aims to surveys these priorities, expectations to make attainable policy oriented suggestions for initiating cooperation to revive and protect Aral Lake to address the enviromental crisis, its immediate and long-terms effects in the region and beyond and international and regional responses to this crisis. In this paper, the roots of the global environmental problems are also addressed and explored and contextualized. To do that, the paper starts with surveying the historical roots of the environmental issues, and shifts the currents for the region before

presenting why and to what degree priorities and expectations diverge among actors over the Aral Lake, and how to reconcile them as well as surveying through the legal documents that focuses on the protection of the lake.

Environmental Issues in the 21st Century: A Heritage from 20th Century

Environmental pollution first emerged in the West with increasing rate of industrialization. For example, in the 19th century, production in the iron and steel and other heavy industrial plants, especially in the thermal power plants that produced electricity from coal in the 19th century, began to distort the air, water and vegetation of the region where the plants were located. As a result of high dependence on coal consumptions along with deforestation, soil erosion and animal agriculture, air-quality related illnesses started surfacing and the life span shortened. However, with the rise of social consciousness and democratic participation in Western Europe, pressures on the governments over the environmental side effects increased, and over the time the environmental pollution levels relatively reduced. Wastes or fumes from many industrial fields have either become to subject of filtration by advanced techniques, or such polluting industries have been shifted to third world countries, where there were little or no sentiments against these kinds of industries due to the urgent need of economic development. While the environmental awareness developed in the Western countries, some of the indicators such as the rate of greenery areas in cities or the total amount of water and clean water per person increased significantly. On the other hand, environmental issues in old colonial or underdeveloped countries were sidelined as there has been a long-fight against underdevelopment in the form of starvation and epidemic diseases, security issues. Inadequate drinking and using water, inadequate food while green ratio, living species and population continue to decreasing become a constant cycle of the life for millions in these countries.

When it came to the 1970s, it was noticed that this catastrophe was not limited to the place where these industries are located. With the reality of a human-induced increase of greenhouse gases, known as global warming, it became clear that the carbon dioxide and carbon monoxide produced by many industrial plants elsewhere in the world had grown in the atmosphere after a certain stage of greenhouse effect. Many regional and global initiatives and international legal documents has put in place to limit global temperature increases and climate change, and especially the ones signed in the UN are important in this sense. The Kyoto Protocol, which was signed in 1997, and later the 2015 Paris Agreement, in which the parties reached a new global deal for limiting and gradually reducing the carbon derivatives that industrialized nations suffer from (to limit global warming below 2°C threshold). The United Nations Convention on Biological Diversity, the United Nations Convention to Combat Desertification and the UN Framework Convention on Climate Change (the Kyoto Protocol, drafted under this convention), signed at the conclusion of the 1992 Rio Conference, are an important start in this area. Aral Lake rescue efforts, which were the primary theme of this work, was frequently referred in the documents of the United Nations Convention on Combat Desertification (UNCCD). However, there are significant problems in the implementation of the contracts signed.

Today's catastrophe is a consequence of the destruction of the environment in the process of industrialization of the significantly developed countries, and in this

process the former colonialist countries were enriched by establishing the industrial infrastructure. On the other hand, countries that want to develop by establishing industrial facilities in a certain way are being warned against environmental pollution, or the cost of their development is taken to be much heavier than industrialized ones. This is in fact a mass of people advocating the view that "environmental pollution is a hoax that developed countries are trying to prevent the development of others."(Sencar, 2007: 92).

At the beginning of the measures to prevent the problem from coming to the disaster is the reduction of consumption of fossil fuel (coal and petroleum products). However, coal-based thermal power plants are the cheapest source of energy. On the other hand, today many industries, especially automotive sector, depend on oil. At the same time, oil constitutes the skeleton of multinational corporations in the vital position of many developed countries. It is the leading export product for many countries, such as Russia, Saudi Arabia, Venezuela. An important part of the Gulf countries oil is exported and marketed by large American companies or European countries. Importantly, this Western dominated oil industry, allegedly know that oil dependence has been causing serious worldwide environmental changes since the early 1960s.(Milman, 2016) In this sense, Western responsibilities both in causes and solutions for the global climate disasters should be underlined.

Third World and Environmental Disaster

The environmental catastrophe takes place in two ways. On the one hand, poisonous gases, liquids and other wastes emanating from human induced activities threaten air, water, forests and the atmosphere while forests, agricultural lands and water resources are directly destroyed by human for different reasons. As it is mentioned earlier, to cope with rapid development and economic growth needs, emerging and underdeveloped countries tend to sideline environmental considerations. It is also true that in the old colonized, newly independent countries, there is a significant link between conflict and environmental issues as agriculture and animal husbandry have been damaged, deforested and desertified, as a result of bombing, burning, destruction.(Gamba-Stonehouse, 1992; Raleigh and Urdal, 2007) In Africa, Middle East, and Central and Eastern Asia, conflicts and hunger go hand in hand. All of the known types of environmental pollution or over-consumption and destruction are common more intensely in these underdeveloped and developing countries. The thermal power plants that mainly use coal to produce electricity are still utilized in a large scale without filtering systems applied, since underdeveloped or developing countries often can not afford, or will not pay for these expensive systems.

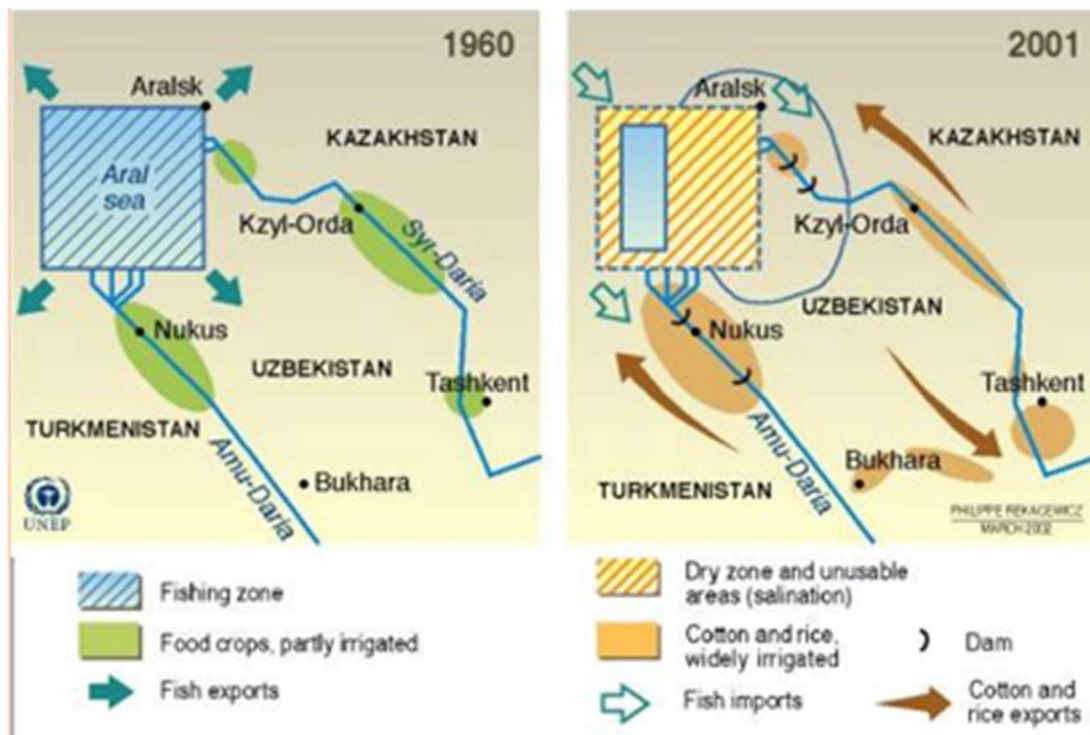
In 2003, as more than one million people died in the process of the USA's intervention in Iraq, Baghdad became a wreath and desert. Since 2011, the worst humanitarian crisis of history in Syria has been continuing ("Syria," 2015) leaving millions of Syrian either dead, or displaced while the world watching. Cities such as Baghdad, Mosul and Aleppo, which are the legacy of civilizations with the bonds and gardens that the rivers feed, are also examples of the environmental disasters and conflict. The competition over Middle East energy resources and conflicts in the region is more than a century long making, and it is deeply connected to environmental issues either as a cause or a result. Yet, the greatest environmental disasters are caused by unplanned production of colonialism in Africa, and are the

leading examples of Chad Lake, which is located between Nigeria, Niger and Cameroon. Once upon a time it was the world's sixth largest lake but today it has shrunk by 90 percent, almost completely dried up because of several countries' overconsumption, conflict and ill-management. Due to inadequate water coming from the river and the drillings, the Cameroon part of the lake is completely dried up today and the remaining part is divided in two. (Gao, 2011:1) A similar situation, whose beginning goes back to the invasion of Central Asia by Russia, has been underway in the Fergana region, a "paradise of the world" according to many Russian travelers before the occupation.

Another Disaster Inherited from the Past: Aral Lake

Aral Lake area has been characterised as one of the worst environmental catastrophes of 21st century that affects directly and indirectly well over millions of people while entire ecosystem collapse as the sea evaporates. (Micklin, 2004) In this sense, Aral Lake problem is not just a matter of water crisis, it is well beyond that as it is closely associated with economy, health, air pollution, nutrition, and ecosystem and biodiversity. (Small, Meer and Usphur, 2001)

Figure 1: The Shrinking of the Aral Lake: Socio-Economic Impacts



Reference: Retrived from <https://goo.gl/WUA17>

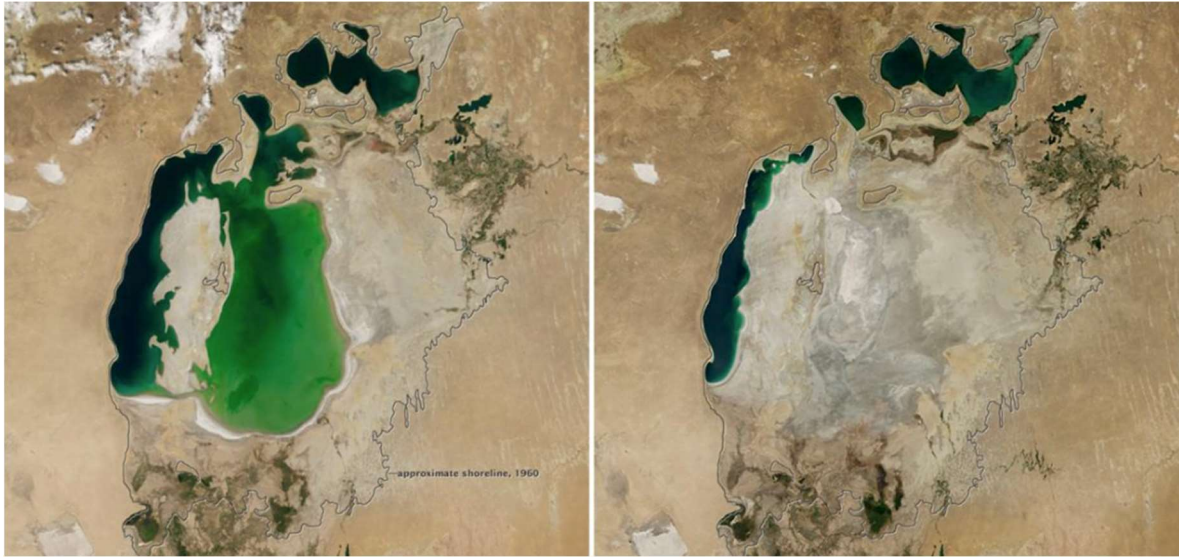
The Aral Sea tragedy provides the most striking example of the interconnections between the health of an ecosystem and that of the economy, community, and people dependent on that ecosystem. (Postel, 2000) The most important effect of the desiccation of the Aral Lake is that there is literally a water scarcity in the region. Even though since 1990s, the rate of the water loss significantly decreased, the critical level of water budget, which is derived from several components such as inflow, rate of evaporation, precipitation etc., has already been under the critical level. The desiccation of the lake is accompanied by a sharp increase in salinity and desertification. As the water level diminished over the years, the

salinity level peaked, causing number of direct side effects, such as destruction of fishing resources, causing extreme health issues, detoretaing agriable land. Especially desertification is one of the greatest impact of the desiccation of the Aral Lake. The desiccation of the lake also accompanied by increasing changes in surface temperature that significantly effect regional fauna. With huge deserted, salty soil, extreme weather events, the salty dust storms are now daily occurrence in the region. There are positive correlations between all of these factors, decline in the water level, salinity, desertification, biodiversity, climate change.

Beyond these environmental impacts, there are lot of impacts on economic and social life of the region. The population of the Aral Lake basin has shrunk significantly over the years as their number one life-stock, the sea, evaporated. Health, population growth, migration patterns, agriculture, many industries, especially fishing industry, are all negatively effected from the desiccation of the Aral Lake.

The Aral Lake basin, which historically has been home to great civilizations, is fed by two main rivers Amu Derya and Sir Derya. These two rivers consist mainly of the mountainous regions of Kyrgyzstan and the rivers of other neighboring countries. Five Central Asian republics, Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan, and partly Afghanistan form this basin. The Aral Lake crisis has been a direct results of past and present day misdeeds and misuses, and in this sense, it has a historical background. Over the several decades, the vital veins of Aral Lake have been repetedly dried up by several states. Soviet goverments deliberately deprived the Aral Sea by diverting its two main sources, Amu Darya and Syr Darya, in order to favor agricultural production, especially cotton, which consumes large amount of water. Post-Soviet era policies have changed only in degree, not in kind. Ozbekistan is still second in cotton export. With the decline of water from the rivers, the lake began to face increasing environmental strains since the 1960s, but no serious measures were taken in the Soviet period. After the disintegration of the Soviet Union, disputes arise in the management of the water in terms of limitation, sharing and the use. As of 2017, more than 90 percent of the lake has been dried up even though there are billions of dollar worth regenerations projects going on.

Figure 2: Shrinking Aral Lake (2000-2016)



Reference: Retrived from <https://goo.gl/jXzwEx>

As a result of past and present abusive practices, the Aral Lake has replaced an expanding aird lands crusted with salt, and chemicals, which over all cause economic, social, helath, and environmental problems in the region and beyond. Therefore, it is a tragdy of commons, where the solutions lie at the collective and cooperative actions. To understand the essence of the issue requires a closer examination of the region and regional relations and how regional countries contextualize Aral Lake environmental crisis as a water security issue, which is an amalgam of physical water availability, economical water access, access to clean, safe drinking water, and sustainable water resources management.(Sakson-Boulet, 2016)

Figure 3: Water Management in Central Asia



Reference: Retrieved from <http://bit.ly/2rlj9S5>

As it is a case for almost every collective action problem, solution is not easy. For instance, countries has agreed upon creating a joint fund by allocating their %1 of their GDP annually to prevent further desiccation has not been upheld. Among many promises made over the years, only Kazakhstan, with World Bank support, build a dam, Kok-Aral Dam, and supporting canals, which partly revive the Northern Part of the basin. Other countries, especially Uzbekistan, has not played their role by contributing to the large-scale projects. One of the main reason for diverging contribution between Kazakhstan and other countries is the fact that Kazakhstan with its oil and gas resources, it has gained relative freedom to act on its own. The water rich countries situated in the upper reaches of Syr Darya such as Tajikistan, Kyrgyzstan are depended on the hydropower production produced from that river. Without any other tangible alternatives, these countries cannot afford substantial support the Aral Lake by simply freeing Syr Darya water flows to the lake. Other countries situated in the down stream of the Lake, Uzbekistan, and Turkmenistan are still largely depended on the agriculture and irrigation for their economy. However, over the years, if they don't act, the Southern Part of the Aral basin will completely dry up.

Aral Lake Conservation Organizations

On 10-12 October 1991 (exactly 25 years before the gathering of the Afro-Eurasian conference on October 12-15, 2016), the ministers of five independent republics gathered in Tashkent and accepted the 1991 document, agreeing that the problem could be resolved peacefully if all parties cooperate. In 1992, "Almaty Agreement on Cooperation in Joint Management" was signed for the conservation and use of interstate common water resources. Later, according to the decision of heads of

state at the summit of 1993, it was decided that the Interstate Commission for Water Coordination of Central Asia (ICWC) was a common body based on fairness, equality and reconciliation of Central Asian states. Accordingly, the organization is an international organization, including the "International Fund for the Protection of the Lake of Aral" (interstate commission, 2016).

The 66th meeting was held in Ashgabat in 2015. This committee organized many meetings, signed documents, formed institutions and agreed on the grounds for cooperation. For example, the 20th Anniversary of Water Cooperation Between Central Asian Countries: Past Experience and Future Threats "held in Almaty again on September 20-21, 2012. The main agenda of the meeting is energy and energy cooperation in the use of rivers and rivers to protect Aral Lake.(Twenty Years of, 2012)

The above-mentioned "International Fund for Saving the Aral Sea (IFAS)" is another organization in this area. It was aimed at establishing the fund needed by this initiative, which won the status of international organization with the decision signed by the Heads of Central Asia on 28 February 1997. The center of this organization has been in Almaty since 2009. It should be noted that, although the participation of five Central Asian Republics, which constitute the skeleton of the initiative to prevent the deportation of Aral Lake, is foreseen, we do not see the contribution of Russia, which is primarily responsible for the disaster. (History of IFAS, 2006).

Aral Lake disaster is the worst heritage left to the Central Asian countries from the Soviet Union, and it can be characterized the worst legacy of the Soviet past in the region. According to the succession law of the states, the Russian textile sector, which was developed by utilizing the cotton produced in the region, should bear a significant part of the cost for the preservation of Aral Lake. "It is accepted that the debts of the previous state (predecessor, Soviet Union) will be reflected in the new state (successor, Turkish republics) as a rule so as not to be contrary to the right (Doğan, 2013: 293). In this case, the loss from the previous state should be borne by the successor states as well as the predecessor. As a natural consequence of this, Russia is expected to participate in the recovery of Aral Lake. Thus, it is necessary to fulfill its responsibilities for the damage already done by Russia (Koşan, 2015: 66), who is also ready to sign the UN Climate Change Environmental Charter and take responsibility for it.

As a Conclusion: Last Task Expected from Turkistan Gray Bearded Statesmen *(An article that is reflected here also was written week before the Uzbekistan President Islam Kerimov dead. See (Türkistan Aksakalları, 2016))*

Two of the Turkish republics, which have won post-Soviet independence in 1991, are still governed by the same president: Kazakhstan and Uzbekistan under President of Kazakhstan Nursultan Nazarbayev and the President of Uzbekistan Islam Kerimov. These republics are at the same time a degree of prosperity and stabilization in the region, and the transition period has not been as conflict and instability even though there were points of conflict with Russia. Russia was demanding the northern part of Kazakhstan while its independence was in the process of being declared. Moreover, the Russians constituted 80% of the requested region's population. On the other hand, in this republic the Russians occupied the key points of the administrative staff, especially the military bureaucracy. Under these circumstances, Nazarbayev survived the danger by

carrying the capital of his country to the north, where Russia aspires. In this process, we should not forget the successful and multidimensional politics towards the managers in Moscow. Uzbekistan is also a stable island in the center of Turkestan. It is the largest of the Turkish republics in terms of population and economy. Kazakhstan is the largest Turkic republic in geographical terms and is rich in oil and natural gas. In the Uzbekistan economy, fossil fuels have a certain weight. This republic has also grown relatively in terms of industry and industrial production.

The Lake of Aral the two republics share has lost its 90% reservuars due to Soviet policies to increase cotton production. Amu Derya and Sırı Derya (Ceyhun and Seyhun) rivers emerged by the merging of the rivers from the Kyrgyzstan mountains and their branches were passing through Kyrgyzstan, Tajikistan, Uzbekistan, Turkmenistan and Kazakhstan into Amu Derya. Fergana Valley became a "thousand-year-old civilization" region on the vineyards, gardens and fields that were swallowed up by these rivers. The Soviet administration allocated all of these waters to cotton production. On the one hand, vineyards and gardens requiring huge water supply raised in the region while more and more agricultural fertilizers and medicines used every year, poisoned the waters and lowered water and soil quality. From the 1960s on wards, the waters that flowed to Aral Lake kept gradually decreasing due to both increased useage and misuse. By the year 2010, about 90 percent of the lake dired up. As a result of the slatification, diminishing level, fishing also died in the area.

Meanwhile, hundreds of hectares of salt and sand have appeared over the dired and diminished surface of the lake. Rather than sending water from the rivers to the lake becomes a common useage practice among those who share and use the waters collectively. Moreover, due to the severity of the wind, sand and salt, which have been blown away by hundreds of kilometers, has deserted the fields and gardens in the neighbouring areas. Thus, not only the immediate borders of the lake, but for much a larger area, the zero-production phase is approaching step by step.

Apart from Uzbekistan and Kazakhstan, CIS has come to the agenda of international organizations such as UN. Many resolutions were held in the Turkic republics, mainly in Uzbekistan and Kazakhstan, and documents were signed on the settlement, but no serious cooperation has been realized. Every country has put forward its own troubles and priorities forward.

Despite the fact that Kazakhstan is generally lonely, at least the sacrifice on the way to revive Northern Aral by this country, should be an example. The field of water that has become deserted ten years ago has increased steadily thanks to Kazakhstan's efforts to do so, and the partial waters that reach up to the warmer places have led to re-greening of the area. However, the rescue of Aral is not only in Kazakhstan's hand, and it is naïve to expect its efforts would be enough to preserve the lake let alone revive it. Urgently, Turkmenistan and Uzbekistan must take necessary steps to send more water to the lake and reduce irrigation from the lake reservuars. It is wittingly known that, even in case of full-blown cooperation, it would not be possible for Aral Lake to be restored within 40-50 years. Yet, without Aral, a life won't be sustainable for the future generation.

Nazarbayev and Kerimov, who are old in Turkestan, have disagreements among

each other. Yet, the pure responsibility lies over their shoulder as no one can oppose if they can make a joint decision on the issue. Turkmenistan and other neighbors will participate in this determination with the pressure of national and international public opinion. However, the cost should be paid not only by these republics but also by Russia, which is the succer of the sole responsible in the disaster. In this context, the UN, the EU, the Islamic Cooperation Organization and other international funds should take immediate and direct actions.

We are expecting this great service for the Turkestan republics, the region and the world from the big climbers Kerimov and Nazarbayev as the apocalypse is fast approaching. Rescuing Aral, the hermit crabs will be the last big, perhaps the greatest gift to all of Turkestan.

Environmental disaster is perhaps the most important and urgent problems of the 21st century, after wars and terrorism. There are many examples, where this catastrophe and security problems are actually intertwined with each other. In order to prevent the disappearance of Lake Aral and step back to its former existence, many global and regional meetings have been held. One of them is 1992 UN Rio Conventions and among the action plans under this agreement, Aral lake and to combat desertification and to save the Lake of Aral was underlined. The main theme of the "Sub-regional Action Program of the Central Asian Countries in the Context of the United Nations Convention to Combat Desertification" in Havana on 3 September 2003, Aral Lake was covered a considerable extend. (Subregional Countries, 2003) Most importantly, an international organization has been established in 1993. This organization, together with the International Fund to Save the Lake of Aral, which was established on the way to prevent catastrophe, has taken on the function of giving life to these initiatives. For example, the above-mentioned "Inter-State Water Coordination Commission" held its 66th meeting on 4 April 2015 in Turkmenistan, Ashgabat. The main agenda of the meeting, chaired by the Minister of Water Resources of Turkmenistan, is the use and management of water resources and the protection of the Aral Lake basin. (66th Regular, 2015)

As a result, significant progress has been made in the area of regional and international talks, meetings, reconciliation and organization on disaster prevention. At every meeting, more cooperation was emphasized and urgency is underlined. What is missing here is that the necessary support from the outside. In this sense, international support is expected from all developed countries, and especially Russia should contribute more to the effort of preserving Aral Lake. Thanks to the cotton produced from this lake basin, Russia has realized the industrial revolution at the expense of the environment. Russia as a permanent member of the UN Security Council and responsible stakeholder in the preservation peace and stability in the world and especaily in this region should do more in terms of financial and political contribution. However, Turkish Republics, are the sole actor that are required to sacrifice most to revive the lake before drying up completely.

At this stage, successful measures of Kazakhstan appear a good but not bold enough to revitalization of the lake resourvars. Kazakhstan's step must e copied and intensified. Thus, in the future, the rescue of Aral Lake will become an example for countries that have suffered similar disasters, especially in the shrinking Lake Chad, which is retreating in Africa.

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