TRANSBOUNDARY WATER DEVELOPMENT PROBLEMS BETWEEN TAJIKISTAN AND UZBEKISTAN CONCERNING THE AMU DARYA RIVER

By: Sandy Satya Suryananda

Department of International Relations

Universitas Muhammadiyah Yogyakarta

sandy.suryananda@gmail.com

Abstract

Water is one of the primary source for humanity to survive, and it becomes a daily consumes for people around the world. The amount of clean water however, is decreasing over the years, since there are currently more people who live in this world than before. The increase of population and climate change had created a phenomenon of water scarcity. The emerging of water scarcity phenomena had triggered so many conflicts, just like what happened in Central Asia when Tajikistan planned to established a new dam which called Rogun Dam Hydroelectric Project in the Vakhs River, one of the downstream rivers of Amu Darya that is located near of Uzbekistan. After Tajikistan announced about the project, Uzbekistan was opposing it and applied many policies which made the Rogun Dam project slower.

This paper will analyze the reason behind Uzbekistan disagreement towards Tajikistan's Rogun Dam Hydroelectric project with using environmental security concept and neo classical theory as tools in order to analyze the reason behind Uzbekistan's disagreement. The first thing that this paper want to prove is that Uzbekistan disagreement was mostly because of the impact of Rogun Dam project to water amount which is flowing in the Amu Darya river. Second, the decreasing amount of water in Amu Darya River will threaten Uzbekistan cotton industry and affecting its economic development.

Keywords:

Environmental Security, Freshwater Dispute, Central Asia, Tajikistan, Uzbekistan, Neo-Classical Realism, Amu Darya River, Water

Introduction

Rogun Dam Hydroelectric project was first proposed by USSR government which supposedly made Tajiksitan become self-sufficient in providing energy for itself. After the fall of USSR this project was left abandoned until Tajikistan government took control of the project in 2004. Uzbekistan is highly disagreed with this action. Although the Rogun Dam hydroelectric project is expected to bring advantages to Central Asian countries, including Uzbekistan, the Uzbek is still insisting in rejecting the project. Uzbekistan is highly disagreed with the Rogun Dam project and taking a further action in order to postpone the building of Rogun Dam such as blocking the rail import transportation from Uzbekistan to Southern Tajikistan, economic sanctions and planted thousands of minefields on the border of Tajikistan and Uzbekistan.

These policy which shown by Uzbekistan in respond to Tajikistan's Rogun Dam hydroelectric project resemble the awareness of non-traditional security over the water resource in Amu Darya which will threaten its economic condition and applied neo classical realism approach that puts national interest as a non-negotiable option. Uzbekistan seeks every possible way in order to postpone the establishment of the Rogun Dam with applying some controversial foreign policy and seeking international attention about the project. However, the Rogun Dam project itself is backed up with world banking institutions and developed countries including Russia. Thus the development of the Rogun Dam would still going with or without Uzbekistan agreement and might be resulted in the rise of potential violent conflict over the sharing of water resource.

The Concept of Environmental Security

The concept of environmental security had occurred since the end of the cold war. However, there are still some debates on defining the environmental security, since both environment and security concept are different. Simon Dalby described environmental security as:

"Policies to protect the integrity of the environment from human threats, and simultaneously, to prevent political conflict and war as a result of environmental change and degradation" (O'Louglin, 1994:72)

The dictionary of geopolitics also defined the environmental security as

"Threats that arise from political instabilities resulting from large numbers of people displaced due to environmental degradation"

In order to analyze the dispute between Tajikistan and Uzbekistan, this paper will use Dabelko's definition about the environmental security. According to Dabelko, environmental security is defined as "What maybe environmental hazards or resource shortages created entirely by one country, can dramatically affect the neighboring states" (Heather L. Beach, 2000) this

definition of environmental security will be used to analyze the dispute between Tajikistan and Uzbekistan.

Neo-Classical Realism Theory

In the classical realism theory, the national interest had become one of the most important factors which influence a state's foreign policy. Morgenthau is a neo classical realist who stated the fundamental purpose of every country's foreign policy is national interest. Based on his belief in "Animus Dominandi" (the desire to rule and dominate). Morgenthau had created an approach which is based on national interest in analyzing a country's foreign policy. As what Morgenthau stated in his "six principles of political realism", that "interest defined as power". Morgenthau also defines national interest as "The Meaning of national interest is survival – the protection of physical, political and cultural identity against encroachments by other nation states".

According to Morgenthau, the kinds of national interest are depends on the political and cultural contexts in which the foreign policy is formulated. In this case, Uzbekistan loudly speaks towards the disagreement of the ongoing project of Rogun Dam because of several reasons regarding to its national interest. The establishment of the Rogun Dam project had simply put Uzbekistan national interest towards Tajikistan become threaten. Besides threatening the Uzbekistan national interest to Tajikistan, it is also endangered Uzbekistan cotton monocrop economy because of the decreasing of water flowing through the Amu Darya River. Uzbekistan willing to do anything in order to delay the project includes cutting off the natural gas supply from Uzbekistan to Tajikistan (The Australian, 2013), implemented visa for Tajikistan people to enter Uzbekistan (Radio Free Europe, 2003) and loudly stressed this issue in the international community. There is actually some possible cooperation with the establishment of the Rogun Dam, but Uzbekistan still hasn't agreed on any of the opportunities. The Uzbekistan policy towards the Rogun Dam project had reflected the neo classical realism which put the national interest as the fundamental reason in the foreign policy with no chance to have any cooperation. Thus, neo classical realism theory will help this paper to analyze this issue.

A. The Roots of Tajikistan – Uzbekistan Water Dispute

Without the presence of water, Central Asia would be just an empty mountainous region with difficult access to any country which lies in Central Asia. Uzbekistan and Tajikistan had a long dispute in allocating water in Amu Darya River. Both countries are highly dependent on having the water which came from the river for several purposes such as irrigation and farming. Both Tajiksitan and Uzbekistan are has its own agenda in using the water. Tajikistan, for example, needed the water to supplying its Rogun Dam for creating the country with energy.

Meanwhile Uzbekistan needs the water because of its cotton monoculture which contributes to economy of Uzbekistan.

In 1987, during the USSR rule in Central Asia, the USSR Ministry of Land and Water Resources arranged water allocation for its Central Asian in Amu Darya River as follows:

```
"Kyrgyzstan – 0.6% (0.4 km3or 0.1 mi3),
```

- Tajikistan 15.4% (11.3 km3or 2.7 mi3),
- Turkmenistan 35.8% (26.3 km3or 6.3 mi3), and
- Uzbekistan 48.2% (35.5 km3or 8.5 mi3)."

In 1998, the government of USSR established two water management agencies in order to control the flow of water which flows through the rivers. All the water resources were controlled by the Union-wide ministry of melioration and Water Management (MinVodKhoz) and Regional Agency of Water Management (SrezAdVodKhoz), (Joest) both of the agencies were located in Tashkent, Uzbekistan . The water agencies had the water allocation around the Central Asia standardized and there were fixed schedules for each of the USSR country in Central Asia. Beside allocated the water quotas, these agencies also arranged energy barter deals between USSR countries. The USSR top priority behind the making of these agencies is to irrigate cotton farms which spread around the Central Asia.

During the collapse of USSR, the agency which has the power to resolve intra and inter water dispute in Central Asia were gone, resulting many unequal water distribution as many independence country appeared. The upstream countries gained a legacy which left by the USSR in which a power to control water allocation that can go to downstream countries.

After gaining independence, former soviet countries had an agreement to keep USSR water resource allocation system. The "Agreement of Joint Management, Use and Protection of Interstate Sources of Water Resources" had been signed in February 1992 by all five president Central Asian states. The agreement was about approving former Soviet water management system to be applied until a new arrangements developed. The implementation of agreement had resulted on the establishment of Interstate Coordinating Water Commission (ICWC) which has members from Central Asia countries (International Crisis Group, 2014). The role of the ICWC in here is pretty similar with the previous Soviet agencies, which is the water management and allocation. The ICWC had its member Tajikistan and Kyrgyzstan to collected water in autumn and winter, then released it in the spring and summer in order to irrigate the downstream farm crops. In exchange of the water, Uzbekistan and Kazakhstan provide oil, gas and electricity produced from its thermal plant during winter. However, Tajikistan and Kyrgyzstan could not afford the price of mineral resources due to the cut off from USSR assistance. Tajikistan and Kyrgyzstan had no fuel for the heating plant in the winter, thus it was needed to use the collected

water in the winter to empower the hydroelectric dam in order to heating up the country during the winter with simply switch from the irrigation mode to hydro energy generation mode. As the result it had disrupted the Soviet system of water allocation that always supplied Uzbekistan and Kazakhstan water during summer and spring.

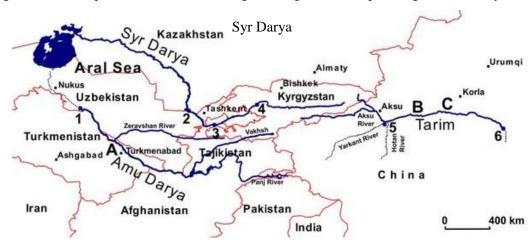


Figure 2.1: A map of Central Asia showing the origin and the spreading of Amu Darya and

Source: http://www.botanik.uni-greifswald.de/central_asia.html?L=1

As the upstream countries, Tajikistan has the advantage in having the access to the main source of the water which flows through the Amu Darya River, Tajikistan will need the water flows in order to empower the Rogun Dam hydroelectric turbines. The project was intended to supply Tajikistan with energy in order to increase the development of the country. It is the only way for Tajikistan to overcome the energy deficit because of its geographical condition that made it difficult for Tajikistan in supplying energy from other countries and making the development of the country being held. After the fall of USSR, Tajikistan had taken over the project from its Russian original developer in 2001 and worked together with another Russian developer to resume the Rogun Dam project. The project finished in 2007 but then it was being inspected by the World Bank in 2012. After several years of inspection in 2013, the World Bank stated that Rogun Dam project is necessary and does not implied any casualties for its nearby environment. This project not only brought energy supply to Tajikistan itself, but also the neighboring countries which spread around Central Asia. (World Bank, 2014)

The amount of water which spread around the Central Asia is actually still enough to watering the region, but the old water management system had made it difficult for the people to access freshwater supply in Central Asia. Tajikistan and Uzbekistan water management system is

already outdated and it needed to be replaced by a more advanced technology. Approximately 7.5 million people of 28.9 million people of Uzbekistan and 4.8 million people of 8.05 million people of Tajikistan lack adequate access to clean water. The World Health Organization however, had noted some improvements in the access to clean water the region. But the improvement is not good enough to provide a good quality of water in the region. The Swiss Agency for Development and Cooperation (SDC) had observed the region since the 1990 and stated that the access of clean water in the region had been decreasing since then. The agency also recommended on building many new water infrastructures for the region to replace the outdated one. However, the existing government is lack of fund to build new water infrastructures for its people. (International Crisis Group, 2014)

The water crisis of Tajikistan and Uzbekistan are also being affected by ballooning amount of people in the region and water demand in Central Asia. In 2000, there are approximately 55.9 million people who living in the Central Asia. Today, the amount of people is increased into 65.7 million people. More twenty million projected to come in 2040, placing a huge demand of improvements in water and infrastructure. The migration from countryside to urban areas also added the problem of ballooning population in the region. The government of Tajikistan and Uzbekistan also put less interest in taking report of the emigrant, all the government knew about the number of population which came from the countryside to urban area is very large. Water demand in Central Asia is also exceeded the amount of natural water flow in the region, as stated by ICAS (Interstate Council for the Aral Sea) in 1998, the water demand of Countries in Central Asia is 151.8 km3, while the river only provided 119.2 km3. (International Crisis Group, 2014)

This issue had grown many international concerns, A US intelligence community assessment had report in 2012 regarding of Amu Darya River issue that the regional water crisis is caused by ineffective water agreements and managements as well as the decline of water quality and noted:

"Water shortages, poor water quality, and floods by themselves are unlikely to result in state failure. However, water problems – when combined with poverty, social tensions, environmental degradation, ineffectual leadership, and weak political institutions – contribute to social disruptions that can result in state failure"

An FAO expert also concluded:

"The absence of a shared vision on water security leads to increased risks of competition and conflict over water resources and the degradation of natural resources. The drivers of change – climate change, urbanization, population growth and economic growth – are placing increased pressure on the region's water resources and governments must ensure that the institutions responsible for water resources and services can respond to this emerging challenge"

Russia also worries that the energy and water crisis in Central Asia could spark a local armed conflicts and become the main reason of political instability in Central Asia, as stated by Russian ground forces commander Colonel General Vladimir Chirkin in 2012.

Uzbekistan as the downstream and neighboring country of Tajikistan is highly opposed the development of Rogun Dam hydroelectric project as it will threaten Uzbekistan's cotton monoculture farming because it will decrease the water flowing through the Amu Darya River. From the very first start of the Rogun Dam Project, Uzbekistan already opposed the project.

B. Uzbekistan Disapproval

Many countries in Central Asia are showing supportive intention towards the development of the Rogun Dam project. However, the statement doesn't work for Uzbekistan. Even with all opportunities which provided by the development of the Rogun Dam, Uzbekistan still insist on rejecting the project. Uzbekistan president, Islam Karimov had stated that the reason behind its disagreement is that project will affect surrounding environment of Central Asia. Uzbekistan also emphasized that it will threaten its cotton monoculture which currently still become the main focus of Uzbekistan government in order to move its economic performance. Uzbekistan used to be the center of USSR government in central Asia and with the population of ten times higher than Kazakhstan, Uzbekistan thinks that its government should have a decisive role in the Central Asia which make the country insisting the refusal on Rogun Dam Hydroelectric Project.

The Uzbekistan disagreement towards the project had been stated by the Uzbek finance minister who said the taller the dam the bigger the consequence for Uzbekistan if the dam collapsed. Uzbekistan's foreign minister, Abdulazis Kalimov also brought this issue of Rogun to the UN General Assembly in 2013, stated that it request a binding UN evaluation to the project. Islam Karimov also stated that the project should not only be internationally assessed but also need Uzbekistan approval, which in this case always have some record in rejecting one. Uzbekistan also expressed its disapproval towards the CASA 1000 program which projected to be the main economic cooperation of Rogun Dam. As stated by Uzbek Economy minister that:

"The implementation of the CASA-1000 Project is integral with the plans of the Tajik and Kyrgyz participants to construct gigantic hydro-engineering facilities – the Rogun HPP and the Kambarata HPP-I, which will catastrophically aggravate the already tense water management situation in the region". Tashkent has urged the World Bank to abandon the project as it will "result in irreversible social and environmental consequences in the Central Asian region".

Although there were already a feasibility studies conducted towards the project, Uzbekistan argued that it has major errors. Responding to the risk assessment which conducted by the World Bank in 2013, Uzbekistan said that the assessment studies had overestimated the water amount during the summer and underestimated Tajikistan and Kyrgyzstan energy consumption to empower each country. Uzbekistan disagreement on the Rogun Dam got little

sympathy from its country neighbors and international community. (International Crisis Group, 2014)

C. Uzbekistan's Cotton Industry and Economic Stability

Every Central Asian country has one thing in common; most of it is a cotton producer and exporter. This happened because during the USSR era in Central Asia, the region was designed to be a special region with cotton production and helped USSR economy by exporting it to the world. Like any other countries in Central Asia, Uzbekistan is one of the counties which produced cotton in a large scale and had been listed as the sixth highest cotton exporter in the world, make it crucial commodity for Uzbekistan to back up its economy. Due to its vital position in economy, Cotton industries also become a political tool of economy and sustainable water cooperation between countries in the region. In order to keep a steady cotton production, it is necessary for having water to be present around the field. The building of Rogun Dam would threaten and even deteriorate Uzbekistan cotton industry because of the decreasing amount of water which flows in Amu Darya River.

The history of cotton in Uzbekistan can be traced back into the 4th century B.C when the ancient Silk Road still existed. The presence of Cotton in Uzbekistan had been developed by the USSR government in 1924, during the rule of USSR in Central Asia. Soviet investors mostly oriented to cotton industry in Uzbekistan and increased the use of land for cotton from 441.600 ha in 1913 to 1.022.600 ha in 1940. Thus, cotton had been declared as the "white gold" of Central Asia. The export of cotton in Uzbekistan was started in 1950's. In 1980's there was nearly 2.000.000 ha of arable land for cotton in Uzbekistan. Before the collapse of USSR in 1994, Uzbekistan's cotton is mostly exported to USSR. After Uzbekistan gained its independence, the country need to sought its way to sell the cotton. Until now, cotton still becomes one of the most important commodities for Uzbekistan, which resulting 60% of foreign exchange revenue for the country and provide 45% employment for the people. Even after the USSR cotton specialization in Central Asia, Uzbekistan still considers cotton as one of its main industry. Uzbekistan made 1 million ton of cotton fiber annually and provided 6% of global cotton production. During 2003-07 Uzbekistan had exported 4.447 million tons of cotton fiber, which is equivalent to 11% of global production and used to be the second largest cotton producer after the United States. (Muradov, 2014)

Cotton played a very important role for Uzbekistan economic stability. This statement had been proven after the collapse of USSR rule in Central Asia. Many former USSR countries had struggled to build its economy alone, whereas Uzbekistan didn't take long to stabilize its economy, thanks to the cotton industry which already established in Uzbekistan. The government of Uzbekistan is using revenues from the export of cotton to build the country and make Uzbekistan become self-sufficient in supplying the country with energy. The cotton exports also

make Uzbekistan avoided hyper-inflation and served as the domestic buffer from the increase of global food and energy prices. .

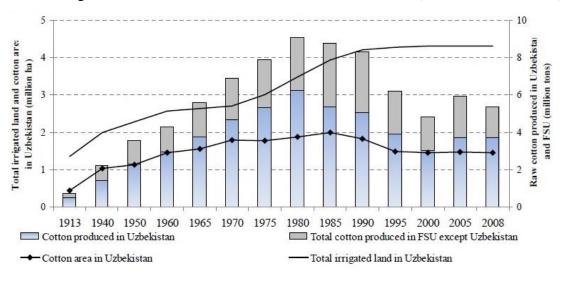


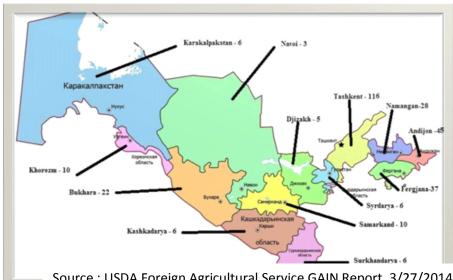
Figure 4.1: Cotton Production in Uzbekistan and FSU (Former Soviet Union)

Source: (Muradov, 2014)

Uzbekistan government now has managed its people to plant what the government demands. Cotton and wheat become two most commodities which are cropped in Uzbekistan. The government also buys cotton from the farmers with a cheap price then sells it to another country with global price, creating huge revenue for the country. The cotton farmers can't withstand a chance towards the government because of lack foreign network to sell its cotton. Current Uzbekistan government does not only dependent on the cotton export, but also oil and fossil fuels, which makes the cotton safe from the global cotton fluctuations. As with the cotton, Uzbekistan still maintained to keep the industry as it is, because it provides revenues which came from the export and tax of the cotton farmers. (Muradov, 2014)

The implication of the Rogun Dam hydroelectric project is highly affected the agricultural economic performance of Uzbekistan, which in this case is the cotton industry. The cotton industries in Uzbekistan are spread around the Uzbekistan region and several of it are located near the Amu Darya River. If Rogun Dam is built, the dam would reduce the amount of water which flows in Amu Darya and it would threaten Uzbekistan cotton industry.

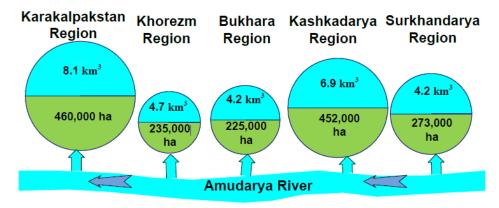
Figure 4.2: The spread of Uzbekistan Cotton Farming



Source: USDA Foreign Agricultural Service GAIN Report. 3/27/2014

There are five regions of Uzbekistan along the Amu Darya River that crop cotton and wheat. Cotton and wheat always become two most cropped agricultural commodities in the country. This situation is possible because most of the farmers in Uzbekistan are managed by the government to do so. In order to keep the national cotton production, Uzbekistan needs to irrigate the cotton by huge amount of water. (Jalilov, 2010)

Figure 4.3: Irrigated land water use in regions of Uzbekistan along Amu Darya River



Source: Shokhrukh-Mirzo Jalilov, Impact of Rogun Dam Towards Uzbekistan Agriculture, North Dakota University, 2012.

The water which is used by Uzbekistan to irrigate its land is about 90% from the Amu Darya and focused on irrigating the cotton farming. Agriculture would become the most damaged sector if the establishment of Rogun Dam is completed and Uzbekistan projected to experience some loss. According to some studies it will not only threaten the agriculture industries, but also the whole economy of Uzbekistan, since main sectors of Uzbekistan economy is largely chained with agriculture. Uzbekistan in total has more than four million hectares of irrigated land and provides 32% to the country's GDP. The number of land which is used for farming purpose in Uzbekistan is about 1.645 million hectares along the Amu Darya River, and using 28 km3 of water from the river to irrigate the land. According to a study conducted by Shokhruh Mizrov Jalilov, the implication of the Rogun Dam will be highly towards Uzbekistan monetary loss that mostly came from agriculture. (Jalilov, 2010)

In order to generate electricity, Rogun Dam needs fill its water reservoir with water. A study conducted by Jalilov perceived that the dam would need to fill its reservoir for 11 years. The Tajikistan government planned to accumulate water in the summer season (April-September) and generate electricity in the winter (October-March), thus it will make water resource in Amu Darya River reduced. According to Jalilov, the water shortage could affect in \$609 million loss annually in agriculture and decrease Uzbekistan GDP for 2.2% and create 336,000 thousand unemployment. (Jalilov, 2010)

The impact of Rogun Dam would not only impact the agriculture industries, but also its monetary condition. As the change in the water quota that flows in Amu Darya River, Uzbekistan will have some difficulties to distribute water in the country because of the lack of water infrastructure and poor water management which is built in the country.

D. Uzbekistan's Struggle for Power

Beside from the technical reason which has been already described in the previous sub chapter, there are also political reasons behind the Uzbekistan's disapproval of the Rogun Dam. The statement of "Upstream countries use water to get more power, while downstream countries use power to get water" is very well described between the dispute of Uzbekistan and Tajikistan. The upstream country (Tajikistan) had followed its national interest in order to get more water and not willing to compromise. There is another dam located near Rogun which called as Nurek Dam and it had been controlled 43% of the flow in Amu Darya River. If the Rogun Dam Hydroelectric project is completed, Tajikistan would become more influential for Uzbekistan as the Tajikistan also controlled the water resource. Therefore, Uzbekistan stated its disagreement towards Tajikistan in building the Rogun Dam as a struggle for power towards Tajikistan.

Uzbekistan president, Islam Karimov had personally stated that the establishment of Rogun Dam is threatening the country and stated that the project is a complete waste of time and ideas. As being stated in Reuters that:

"Water resources could become a problem in the future that could escalate tensions not only in our region, but on every continent. I won't name specific countries, but all this could deteriorate to the point where not just serious confrontation but even wars could be the result [Tajikistan's planned Rogun dam is] going for the Guinness world record, it would seem, but we are talking here about the lives of millions of people who cannot live without water. These projects were

devised in the '70s and '80s, when we were all living in the Soviet Union and suffering from megalomania, but times change. Hydropower structures today should be built on a different basis entirely." (Nurshayeva, 2012)

Uzbekistan president, Islam Karimov is never to be seen agreed with the Rogun Dam project. Having ruled Uzbekistan since 1989, Islam Karimov's is seeing as the oldest leader and Uzbekistan itself is generally viewed as highly influential country in the region. Although Uzbekistan had signed the feasibility studies which stated the dam is safe, Islam Karimov reaction on the dam is contradict. Islam Karimov also stated a potential water conflict might happen "Water resources can become a problem which leads to the sharpening of relations in the Central Asian region. The situation could deteriorate beyond only religious opposition to war."

Tajikistan president, Emomali Rahmon insisted on continuing the Rogun Dam project, stated that it is a matter of life and death. He also stated his protest over Uzbekistan's intolerance attitude in late payment of oil and natural gas so that Tajikistan needs to build the dam. Uzbekistan had done many things in order to postpone the Rogun Dam project. Uzbekistan have used economic and transportation sanction including blocking the rail import transportation from Uzbekistan to Southern Tajikistan. Uzbekistan also has planted thousands of minefields between the border of Tajikistan and Uzbekistan to tackle Tajik extremist called "Islamic Movement of Tajikistan" which is currently had killed 76 civilians and injured 81 people instead of terrorist.

Recently, Uzbekistan government even stated its disagreement through a press release which was conducted by Uzbekistan ministry of Foreign Affairs in July 18 2014 in respond to the feasibility studies which had already been carried out by many research institutions.

"I would like to state that the findings of the consultants and the panel of experts on Rogun Hydropower Project are completely unacceptable to the Republic of Uzbekistan. We have to state that the panel of experts and consultants were guided by the principle "to pleasure everyone". To be more specific, they were guided by the desire to push forward at any cost the project, designed during the Soviet gigantomania era, and ignoring the interests of people and the states in the middle and lower reaches of the Amudarya. Therefore, there is not a single talk over our agreement with the main conclusions of the documents presented by the Bank. Uzbekistan never, and under no circumstances, will provide support to this project." (Nurshayeva, 2012)

Until now, Uzbekistan has shown no sign of approval towards the Rogun Dam Hydroelectric project. This paper assumed that Rogun Dam will eventually be constructed and triggered an escalating conflict between Tajikistan and Uzbekistan, and regional power balancing.

E. Conclusion

In every case of transboundary water development dispute, water had always become the key player in it. Similar with Tajikistan and Uzbekistan dispute over the Amu Darya River, there are many cases in the world which involved water such as Danube River of Europe, Ganges River of India and Euphrates basin of Egypt. All of these cases shared similar problem, the lack of water management cooperation on the supposedly shared water resource. Without a proper agreement towards the use of water, every country will try to get the most of it by building dams and reservoir. As with the establishment of dams, it will distract the amount of water which flows through the transboundary River. In most cases, downstream countries always become the victims which are affected by the building of a dam in various disadvantage ways. Thus it had created much disintegration and led to potential conflict between some countries. This had been proven that water is vital enough to affect a country foreign policy and used as a tool of political bargain towards another country.

The main event which triggered the dispute between Tajikistan and Uzbekistan was the fall of USSR region in Central Asia. During the rule of USSR in Central Asia, water had been controlled by two water institution SrezAdVodKoz and MinAdVodkoz which are maintained the distribution of water on central Asia region. Besides maintaining the distribution, these institutions are also solved water related issues between central Asian countries. With the presence of these institutions, water had been fairly distributed to all Soviet Central Asian countries. But soon after the collapse of USSR, there are many newly independent countries which are rising to power and created turmoil in water distribution on the region. There was a water agreement which created based on previous USSR water management system, but then failed to prevent Tajikistan and Uzbekistan dispute over the Amu Darya River.

Tajikistan and Uzbekistan are two former USSR countries in Central Asia. Tajikistan has an abundance amount of water since the country is located on the higher place on Central Asia, thus made Tajikistan as an upstream country. While Uzbekistan is located on the lower ground than Tajikistan but it has many natural gas and oil reserve, location might be the most valuable thing that Uzbekistan have rather than Tajikistan because it has made the country accessible from another countries while Tajikistan is surrounded by mountains. During the rule of USSR in Central Asia, these countries are having a warm relationship, in which Tajikistan provides water for Uzbekistan, and in return, Uzbekistan provides oil and natural gas to supply Tajikistan energy. However, after the fall of USSR, Uzbekistan stopped supplying Tajikistan with natural gas and oil since Tajikistan cannot afford the global price (Tajikistan was provided some aid by USSR before it falls). In order to empower its country with electricity, Tajikistan government then turned into hydroelectric power. Using current Nurek Dam which had already been established in Vakhs river one of the branch river of Amu Darya, Tajikistan improved national energy supply. Tajikistan then planned to build one more dam to create energy for its country which is called as Rogun Dam Hydroelectric project.

Rogun Dam Hydroelectric project was first proposed by USSR government which supposedly made Tajiksitan become self-sufficient in providing energy for itself. After the fall of USSR this project was left abandoned until Tajikistan government took control of the project in 2004. Uzbekistan highly disagreed with this action, since it will decrease the amount of water which is flowing in Amu Darya River. Although the Rogun Dam hydroelectric project is expected to bring advantages to Central Asian countries, including Uzbekistan, the Uzbek is still insisting in rejecting the project. The decreasing amount of water which will be caused by Rogun Dam will threaten Uzbekistan cotton industry which had already been established since the USSR era. Uzbekistan highly disagreed with the Rogun Dam project and took a further action in order to postpone the building of Rogun Dam such as blocking the rail import transportation from Uzbekistan to Southern Tajikistan, giving economic sanctions and planting thousands of minefields on the border of Tajikistan and Uzbekistan.

These policies which are shown by Uzbekistan in respond to Tajikistan's Rogun Dam hydroelectric project resemble the awareness of non-traditional security over the water resource in Amu Darya which will threaten its economic condition and applied neo classical realism approach that puts national interest as a non-negotiable option. Uzbekistan seeks every possible way in order to postpone the establishment of the Rogun Dam by applying some controversial foreign policies and seeking international attention on the Rogun Dam. However, the Rogun Dam project itself is backed up by world banking institutions and developed countries including Russia. Thus, the development of the Rogun Dam would be still going with or without Uzbekistan agreement and might be resulted in the rise of potential violent conflict over the sharing of water resource.

Refferences

- Botanik.Uni-Greifswald.De. (n.d.). *Adaptation Strategies To Climate Change And Sustainable Land Use In Central Asia*. Retrieved 12 21, 2016, from botanik.uni-greifswald.de: http://www.botanik.uni-greifswald.de/central_asia.html?L=1
- Burchill, S. L.-S. (2005). Theories of International Relations Third Edition. New York: Palgrave Macmillan.
- Heather L. Beach, J. H. (2000). *Transboundary Freshwater Dispute Resolution: Theory, Practice and Annotated References.* Tokyo: United Nations University Press.
- International Crisis Group. (2014, September 11). Water Pressures In Central Asia International Crisis Group. Retrieved 01 15, 2016, from Crisisgroup.Org:

 http://www.crisisgroup.org/en/regions/asia/central-asia/233-water-pressures-in-central-asia.aspx
- International Crisis Group. (2014). *Water Pressures in Central Asia: Europe and Central Asia Report No.* 233. Internationan Crisis Group.

- Jalilov, S.-M. (2010). The Impact of Rogun Dam on Downstream Uzbekistan Agriculture. *North Dakota State University*.
- Joest, F. (n.d.). Water Usage And Water Management In The Soviet Union From The Glaciers To The Aral Sea Water Unites. Retrieved February 21, 2016, from Waterunites-Ca.Org: http://www.waterunites-ca.org/themes/8-water-usage-and-water-management-in-the-soviet-union.html.
- Kucera, J. (2013, June 10). *Tajikistan's Folly? The Rogun Dam*. Retrieved 02 04, 2016, from Pulitzer Center.Org: http://pulitzercenter.org/reporting/central-asia-tajikistan-rogun-vakhsh-river-dam-impoverished-uzbekistan-worldbank-UN
- Kucera, J. (2013, June 10). *The Roots Of Uzbekistan And Tajikistan Water Conflict*. Retrieved 03 04, 2016, from Eurasianet.Org: http://www.eurasianet.org/node/67095
- Muradov, A. I. (2014). Uzbekistan's Cotton Sector. Financial Flows and Distribution of Resources.
- Nurshayeva, R. (2012, September 07). *Uzbek Leader Sounds Warning Over Central Asia Water Disputes*. Retrieved 02 21, 2016, from Reuters.com: http://www.reuters.com/article/centralasia-wateridUSL6E8K793I20120907.
- Radio Free Europe. (2003, 02 17). *Tajikistan: Minefields A Lasting Legacy Of Civil War*. Retrieved 02 10, 2016, from Radio Free Europe Website: http://reliefweb.int/report/tajikistan/tajikistan-minefields-lasting-legacy-civil-wa
- Radiofreeeurope/Radioliberty. (2010, April 26). *Tajikistan To Allow Roghun Shares On The Market*.

 Retrieved 02 20, 2016, from Radiofreeeurope/Radioliberty:

 http://www.rferl.org/content/Tajikistan_To_A
- The Australian. (2013, January 01). *Uzbekistan 'Cuts Off Gas' To Tajikistan*. Retrieved 02 12, 2016, from The Australian Web Site: http://www.theaustralian.com.au/news/latest-news/uzbekistan-cuts-off-gas-to-tajikistan/story-fn3dxix6-1226545967186
- World Bank. (2014). Key Issues for Consideration on the Proposed Rogun Hydropower Project. World Bank.
- World Bank. (2014, September 1). Assessment Studies For Proposed Rogun Hydropower Project In Tajikistan. Retrieved 02 21, 2016, from World Bank.com:

 http://www.worldbank.org/en/region/eca/brief/rogun-assessment-studies
- World Wildlife Fund. (n.d.). Water Scarcity | Threats | WWF. Retrieved 02 20, 2016, from WorldWildLife.org: http://www.worldwildlife.org/threats/water-scarcity
- Yuldashbaev, N. (2014). *Global Agricultural Information Network Report: The Republic of Uzbekistan 2014 Uzbekistan Cotton and Products Annual.* USDA Foreign Agricultural Service.