



The Environmental Consequences Of The Turkey Gap Project And Its Examination In International Law

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Abstract

The Republic of Turkey considers the implementation of the Gap project on the Tigris and Euphrates rivers as its exclusive right and has also taken control of the water supply to its downstream countries. This has caused dissatisfaction among these countries. It has created problems from various aspects, including security. Therefore, considering the effects of this project and its impact on its downstream countries, this article raises the question: What are the environmental effects of this project on the environment in the region? The main goal of the Gap project is to increase its income in the region and the world. The current activities of the Gap include many sectors, including agriculture, electricity generation, infrastructure development, and forests. But the environmental consequences of the Gap project are worthy of reflection and discussion. The principles governing the exploitation of shared water resources, which are based on general legal principles, customary international law and international treaties, non-adherence to these principles and their violation demonstrate the international responsibility of states because Turkey cannot be indifferent to the exploitation of a project whose harmful effects cause extensive environmental damage to neighboring lands. Therefore, the purpose of this article is to examine the threats and obligations of the Turkish government in the implementation of the Gap project.

Keywords: Environment, Fine Dust, International Law, Gap Project

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Introduction

In 1936 and 1937, the idea of a gap project on the Tigris and Euphrates rivers began. This plan was taking shape on a large scale (Asari, 2018), and Turkey needed thirty years and more than thirty billion dollars to implement this project. (GAP İdaresi Vizyonu, 2017)

The aim of this huge project is to operate more than twenty hydroelectric dams and twenty hydroelectric power plants on these dams, as well as develop irrigation networks for agricultural purposes on 1.8 million hectares of land. By building the GAP project and numerous dams on the Tigris and Euphrates rivers (Ekbari et al., 2019), Turkey is confronting its downstream countries with serious environmental and human problems. (Salari, 2019) Challenges such as dangerous micro-dust, water shortages in downstream countries, endangering native aquatic life, as well as the crisis of drying up wetlands and desertification in a large part of the regions of neighboring countries, and migrations that have created serious problems for downstream countries are only some of the consequences of the GAP projects. (Kazemi, 2019) The effects of this project are the threat and destruction of native species and some aquatic life in the Persian Gulf (Amini, 2019; 55) and the production of micro-dust and The water rights challenge of downstream countries (Kazemzadeh, 1400; 102) and the endangerment of the valuable riverside ecosystem along the Tigris and Euphrates rivers (Mottaqi et al., 1399; 303) has created. With all the environmental threats mentioned above, the GAP project has not yet been fully implemented, so that its environmental impacts can be observed. This article seeks to analyze and examine the environmental principles violated by Turkey in the context of the consequences of the GAP project, using international environmental legal documents.

Research Background

Afshin Barzegar (1402) has studied the environmental effects of the Turkish Gap project on the downstream rivers and has explained the creation of these dams as a serious challenge and its destructive effects on the downstream countries of Turkey. Mehrabi (1402) has warned in an article about the approaches and hydropolitical effects of the dust crisis resulting from the Gap project on Iran and about the drying up of the Tigris and Euphrates and the loss of agriculture in the countries of southern Turkey. Ahmad Kazemi (1401) has looked at the Gap project from the perspective of international law in an article that is in serious conflict with the Ramsar Conventions, Combating Desertification, Espoo and Aarhus, and the Stockholm Declaration. Abbas Pourhashmi (1401) in his analysis of compensation in the light of international law has addressed the differences of opinion on environmental destruction and considers this disagreement to be very important in the present era, which will cause irreparable damage to the global environment. Also, Seyyed Baqer Mir Abbasi (1398) states that the international responsibility of states due to environmental destruction and international criminal law and the rules of the game in recent decades in international criminal and environmental law are complex and very important, and states cannot avoid it. (Zahra Pishgahifar (1400) in her geopolitical analysis of Turkey's water policies and its effects that cause water shortages and changes in power indicators has warned and addressed the operation of neo-Ottomanism in the Ottoman territory and the imbalance in water distribution. Mohammad Nasihi (1399) has a project on security threats to West Asia, especially Iran, which has violated international conventions and the Islamic Republic must seriously pursue this important challenge within the international framework, which is considered a threat. Behzad Shahandeh (139) in an article discusses the role of

the Gap project in the context of the national identity crisis in Turkey and claims that with all these dams and power plants, one of the largest projects in the world is being built, which is accompanied by serious security margins that lead to the identity crisis of the Kurds in southern Turkey and other Kurds in southern Turkey, which must be considered. Amin Jafari (2019) claims that environmental crimes are not taken seriously in international law and are facing serious challenges that are behind them powerful companies and other layers of power that do not give the slightest importance to the environment and ultimately the victims are ordinary people. Murad Kaviani Rad (2018) in an article discusses the concept and security of water from a geopolitical perspective and considers water resources to be one of the important indicators in the balance of powers in the region and, considering water consumption and water shortages from sources, considers it a powerful tool in the hands of politicians. Seyyed Abbas Pourhashmi (2013) refers to the principle of the place of cooperation in international environmental law and It claims that transboundary water resources should be managed rationally and through international interaction because international cooperation is mandatory for environmental protection.

Research Method

This research is applied in terms of purpose and descriptive-analytical in terms of research method. The approach to the nature of the data is a qualitative process and the data collection method was carried out in a library manner. The analysis of the research findings was also carried out using the content analysis method. The effects of the formation of environmental crises that have affected or will affect the region were analyzed descriptively-analytically. Also; the results of the content analysis were discussed and exchanged by interviewing 12 specialists and experts in the field of geopolitics and international relations.

Water Security

Environment is one of the most important transnational issues (Zareipour and Askari, 1402). Environmental security is also one of the important dimensions of peace and human rights in this century. (Kelleher, Orla 2021) and this has led to serious concerns about climate change and environmental degradation. (Pishgahifar, 1400) Environmental security is affected by economic and political growth and development in the international system, and after the disappearance of the bipolar space, it has become a comprehensive necessity among the stakeholders and economic and political actors who monitor the global environment and power relations (Zargar and Alamoti, 1402, p. 75). Serious concerns about environmental degradation and the social impacts resulting from climate and weather changes have led to serious and important discussions about the security of the planet. (Alizadeh and Pishgahifar, 1390, 108) Therefore, environmental security is a very broad concept with many opinions (Qavam, 1390, p. 10). The concept of security is a fluid concept, and different definitions and perceptions of it have been presented and interpreted in different periods, but the origin of this difference and what the perceptions of it were is a matter of debate, and different thinkers have

answered this question in different ways and have defined five components for it. (Sadeghizadeh, 1400, 12)

1_Environment as a reason or target of conflict

2_Using the environment as a weapon of war

3_Destruction of the environment in war and military operations

4_Indirect impact of environmental destruction on security through the issues of war and its development

_5Deliberate destruction and protection of the environment, separate from political and security effects and any other anthropological consequences. (Zargar quoted by Horsman, 1402, p. 75) Accordingly, one of the main components of environmental security is the impact on the national security of political-spatial units, the issue of water security. Water security is evidence of the emergence of conditions and, consequently, a new discourse that has placed security and stability in the focus of scientific centers and institutes and security studies today. (Kaviani-Rad et al., 2019, p. 25). Water security as one of the geopolitical and geopolitics issues (Kaviani-Rad, 2019) is currently one of the geographical and geopolitical values and affects the national security of each country. (Kazemi, 2019) The issue of water supply affects national security (Nami, 2011) because the limited water resources and the increase in water consumption have caused serious challenges and many dangers. (Mohammadi et al., 2012) Alarm bells for providing water in the world, sufficient access to sustainable water resources and managing its productivity have led to the conceptual design of water security. (Kaviani, 2019, p. 26) The Turkey Gap Project is one of the important and thought-provoking issues (Shahandeh et al., 2019) that should be considered in dealing with possible future political and security tensions related to the water crisis and its consequences in the political geography of the region. (Mehrabi et al., 2019) Regardless of these possibilities and using the opportunities created by the political and security vacuum, Turkey should pursue and implement all water management programs in the form of constructing various dams. The countries of Syria and Iraq will be the main victims of this disaster in the near future (Pishgahifar, 2019) and all activities of these two countries will come to a complete halt. The consequence of the drying up of the Tigris and Euphrates rivers is the creation of major centers of dust and fine dust and its entry into Iran (Jalili, 2019, 2020).

Dust and fine dust phenomenon in the northwest

The Gap Project indirectly harms Iran due to desertification in millions of hectares of Syrian and Iraqi lands (Nasehi, 2010). The Gap Project directly affects Iran. (Khosravi et al., 2010). The consequences of the Gap Project for Iran are mainly in the form of lack of environmental water supply, which leads to dust and fine dust phenomenon (Zargar, 2013). Meanwhile, the dam constructions of Turkey in the Gap Project directly affect the drinking water supply, industry, agriculture and environment of Iran in the transboundary Aras watershed and the environmental water supply of the Caspian Sea (Pishgahifar, 2012). So that its impact on the creation of dust phenomenon in the

northwest region of Iran in the future is estimated to be greater than the impact of water abstraction from the Kamal Khan Dam in Afghanistan on the land of Sistan and Baluchestan. Iran is an upstream country in terms of water in the Tigris and Euphrates and downstream in terms of environment and dust, but in the Aras Basin, Iran is considered a downstream country (Faraji-Rad, 2010). Therefore, the negative effects of the Eastern Anatolian Project, or the Gap, on wider Iran will have bad effects in the long term. Of course, there is severe censorship in the Turkish media regarding news of this project. (Paknejad Mottaki, 2010)

Dimensions of Violation of International Environmental Law in Gap Projects

In the 1987 Statement of Legal Analysis on Foreign Relations of the United States, whose principles on environmental law were rooted in customary international law, it was emphasized that the state should take all necessary measures to the extent possible to prevent activities that occur within its jurisdiction or supervision and cause significant damage and injury to the environment outside its territory. This statement also specifies and codifies the responsibility of the state for any major environmental damage to areas beyond the national territorial limits that results from such an intentional violation. (Parnouri et al., 2006) In international custom, the prohibition of harmful use of the environment is considered an important customary rule and method in the environment, based on which no country has the right to use its territorial integrity or the territorial integrity of another country in a way that leads to damage and loss to the environment of the territory of another country or territories outside its national jurisdiction. (Mousavi, 2011) The Smelter Trail arbitration in 1938 was also in this direction, which introduced the principle of the prohibition of harmful use of the environment into international legal practice. (Pourhashemi and Mousavi, 2011: 83) Such disputes There are many, such as: the Ecuador vs. Colombia case known as the aerial spraying case of March 31, 2008, which was pending before the International Court of Justice on the principle of non-harmful use of land. (Javadi, 2016) The \$32 billion project in southeastern Turkey with an area of 74,000 square kilometers is a major project in Turkey and in turn one of the largest in the world with a total of 90 dams and 60 power plants (Sahan, E., Mason, S., Gilli, A. Zogg, A, 2000.) With the capacity to store 30 billion cubic meters and also with the ability to store 5 billion cubic meters of water with a 340-mile lake, it promises a devastating plan (Soffer, A, Trans. 1999). This plan has seriously challenged the lifeblood of the two great and historic rivers, the Tigris and the Euphrates, along with the lives of millions of people. (Williams, p, 2012) Despite the construction of all these dams and power plants that have been ongoing for years, the thirst of Turkish political authorities for the water resources available in this country has not been quenched based on international laws, including the Convention on the Rights of Non-Navigational Uses of International Watercourses, which was ratified by the United Nations in 1997. (Rezaei and Jalalian, 2018: 169) Not only are they unwilling to pay the water rights of downstream countries and their agricultural lands, but they have also begun the construction of the Ilisu Dam, a dam that, according to experts, has challenged and desertified more than 500,000 hectares of agricultural lands in Iraq. And in the near future, it will threaten agricultural lands and

nature in Syria and Iran, and will give away dust particles because there will be no more water left for downstream countries (Asari, 2015). According to the UNEP report, the Gap Project, its dams will turn 90% of the largest and most beautiful wetlands in the Middle East into deserts and salt marshes (Shamshiri et al., 2012).

The international responsibility of the Turkish government for the Gap project and its consequences

Responsibility is logical, in international custom. (Pourhashemi and Mousavi, 2011:78) and every legal order requires that subjects of law assume their responsibility if they do not harm the rights and interests of others (Habibi, 2011). However, in the international community, each state can make independent and free decisions based on its interests (Bigdali, 2012). Today, there are numerous environmental problems at the international level, such as: deforestation, damage to the ozone layer, nuclear and radioactive issues, chemical issues (Qasimi, 2011), and water pollution and issues surrounding it, which were approved by the International Criminal Court Law Commission in 1993 and also in a series of secondary negotiations in 1998 in Italy, and all countries are required to comply with it. (Mir Abbasi, 2011) In the New York Convention on the Use of International Non-Navigational Waterways The goal is to protect the environment of lakes, rivers, and international waterways. (Akbari and Mashadi, 2018: 317) This convention refers to important legal principles in international environmental law. (Ward, J. V & Stanford, J. A, 1995) and emphasizes international cooperation based on the observance of equality of sovereignty among states and the preservation of territorial integrity and mutual exploitation of the capacities available in shared international waterways (Shirazian and Khatibi, 2015). One of Turkey's main goals is to exploit the potential for energy generation and, along with it, to make political use of the huge project. (Kirschner, 2012) However, the commitment of governments to not cause transboundary environmental damage is an international custom that governments must commit to (Mackielo, 2009). The adverse environmental consequences resulting from the Gap project are not hidden from anyone, and the role of the Turkish government in carrying out this work is quite evident. (Mehrparvar, 1401) Therefore, it is quite clear and evident that the Gap project under the governance and implementation of the Turkish government means the reduction and disappearance of biological species (Rezaei and Jalalian, 1397) and irreparable damage in the downstream of the Tigris and Euphrates rivers in Iraq and Syria, the wetlands dry up, and the main source of dust also becomes a source of pollution. Its catastrophic effects have also threatened the economic and environmental life, as well as the indigenous biodiversity, which is an important part of the Middle East, for which the responsibility lies directly with the Turkish government and sovereignty. Its damage to the region's environment and indigenous and local communities will be irreparable. Gruen, G. E, 2000)

The reduction of water rights in Syria and Iraq

Data shows that Turkey can store billions of liters of water, some of which belongs to neighboring countries, in its territory (Kazemzadeh and Shafiei, 1400) and the capacity

of dams built by coastal countries on the Euphrates River is more than three times the total annual yield of this basin, and the capacity of these structures on the historical Tigris rivers is almost 5 times. (Mianabadi and Amini, 1398) Also, due to these inappropriate dams on the Tigris and Euphrates, the amount of oxygen is also reduced, which leads to a decrease in the quality of water that is supposed to be used in downstream countries (Zargar, 1402:80)

Agricultural crisis, unemployment and loss of food security

The exploitation and use of shared waters are important hydropolitical challenges in the Tigris and Euphrates. (Roghani & Minabadi, 2015), (Fereshtour With the decrease in water entering the downstream countries of Turkey, namely Iraq and Syria (Qurashi, 2019), a large part of local livestock breeding and agriculture is facing the challenge of extinction. (Kirschner & Tiroch, 2012) In such an environment, the import of various products such as food will increase significantly. (Mianabadi, 2014). One of the destructive effects of the Ilisu Dam Gap Project is that it prevents more than 55 percent of the Tigris water from entering the territory of Iraq and Syria and destroys about six and a half million hectares of agricultural land in these two countries. This project, in addition to reducing the right to drinking water in Syria and Iraq, has caused desertification of important areas of these two countries, lack of human development, lack of social development, cultural development and economic development, and ultimately has caused unemployment of indigenous people, disruption of population balance, migration to cities and changing climate conditions (Mianabadi & Amini, 2014). Statistics show that within Türkiye has also seen the evacuation of villages and the migration of more than 200,000 people due to the construction of a dam, which has led to an increase in unemployment in the region (Gholian, 2017).

Water Pollution

If we over-irrigate agricultural fields, we will experience a phenomenon called "waterlogging", which raises the groundwater level and leaches out the natural salt present in the ground, contributing to the salinization of the upper layers of the soil and ultimately returning it to the freshwater system (World Commission on Dams, 2001). This phenomenon has occurred in the Euphrates and has caused a serious threat and crisis to this historic river. (Rahi and Halihan, 2010) The Tigris River also has this problem because according to estimates, the Tigris River requires about 6 billion cubic meters for irrigation, which will not be provided (Rezaei and Jalalian, 2019:82). According to the standards of the World Health Organization, water that contains more than 1000 parts per million of salt is not suitable for human consumption, and if this amount is more than 2000 parts per million, it is not suitable even for agricultural and non-human uses (Zargar and Moti, 2019:82).

Conclusion

The effects of the Gap project will cause the formation of dust and other crises. The winds blowing from the Mediterranean Sea will bring dust from the Syrian and Iraqi deserts to Iran, and its volume will increase every year. What is more interesting is that the effects

of the Gap project have no place in the minds of Turkish political authorities in environmental assessments and they are completely indifferent to it. The drying up of wetlands, local lakes, and the destruction of agriculture in Iraq, Syria, and Iran, as well as the extinction of native plant species, which is only a part of what was mentioned in the article, are completely contrary to international laws and the fundamental principles of international environmental law. In a way that has brought them to the streets many times in many environmentalist circles in this country, because the damage of this project is not limited to Iraq, Syria and Iran, and in Turkey itself, it will also lead to the submergence of many of the cultural heritage of the past and the villages of that region and the forced displacement of thousands of Turkish people, including the Kurds of southern Turkey. It is as if the policy of the Republic of Turkey, apart from the previously announced goals of the GAP project, namely the development of agriculture, tourism and economic prosperity of southeastern Turkey, has other political goals on its agenda, such as pressure on the Kurds of southern Turkey and changing their demographic composition, as well as creating a geopolitical space to put pressure on the countries of Iraq, Syria and ultimately Iran. Therefore, it can be said that the GAP project will create a type of unsustainable development that will selfishly and without considering the conditions of other countries and like-minded and cooperative with them, will create conditions and cause serious challenges and friction, as well as irreparable damage to the people of the regions. The poor residents of the southeastern cities, the Kurds of this country, who are unable to find full-time jobs and live in poverty, will suffer. Therefore, in order to carry out and exploit this huge development project, Turkey must understand all the realities and interact with neighboring countries, because the implementation of this project will face the entire region with serious erosion and challenges. If we say that the exploitation of this project poses a potential danger to the territorial integrity of neighboring countries, we are not exaggerating, because scientific data shows that its irreparable effects can bring threats from which Turkey itself will not be immune.

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