#### UDC 94:[332.025.7(560.8):327(560:569.1:567)]"199/20" DOI 10.24919/2519-058X.32.311503

#### **Oksana MEMISH**

*PhD (History), Senior Lecturer of the Department of Archeology and Special Branches of History, Bohdan Khmelnytsky National University of Cherkasy, 81 Shevchenko Boulevard, Cherkasy, Ukraine, postal code 18031 (okcana\_82@ukr.net)* 

## ORCID: 0000-0003-1838-4877 Researcher ID: HTP-7814-2023 Scopus-Author ID: 57716443800

## Maryna ZAKHARCHENKO

*PhD* (History), Associate Professor of the Department of Archeology and Special Branches of History, Bohdan Khmelnytsky National University of Cherkasy, 81 Shevchenko Boulevard, Cherkasy, Ukraine, postal code 18031 (mari-mar@ukr.net)

### **ORCID:** 0000-0002-1428-5778 **Researcher ID:** KAO-3176-2024

#### Оксана МЕМІШ

кандидатка історичних наук, старша викладачка кафедри археології та спеціальних галузей історичної науки, Черкаський національний університет імені Богдана Хмельницького, бульвар Шевченка, 81, м. Черкаси, Україна, індекс 18031 (okcana\_82@ukr.net)

## Марина ЗАХАРЧЕНКО

кандидатка історичних наук, доцентка кафедри археології та спеціальних галузей історичної науки, Черкаський національний університет імені Богдана Хмельницького, бульвар Шевченка, 81, м. Черкаси, Україна, індекс 18031 (mari-mar@ukr.net)

**Bibliographic Description of the Article:** Memish, O. & Zakharchenko, M. (2024). Southeast Anatolia Project (Güneydoğu Anadolu Projesi) and its impact on international relations in the Mesopotamia region (the end of the 20th – the beginning of the 21st century). *Skhidnoievropeiskyi istorychnyi visnyk, 32*, 121–130. doi: 10.24919/2519-058X.32.311503

# SOUTHEAST ANATOLIA PROJECT (GÜNEYDOĞU ANADOLU PROJESI) AND ITS IMPACT ON INTERNATIONAL RELATIONS IN THE MESOPOTAMIA REGION (the end of the 20th – the beginning of the 21st century)

**Abstract.** The article focuses on clarification of the main reasons for the formation and development of the Turkish-Syrian-Iraqi contradictions regarding the joint use of the rivers of Mesopotamia. The degree of effectiveness of the agreements concluded during the period of the 1940s – the 2010s and other interstate normative legal acts related to the use of the waters of the Euphrates and Tigris rivers have been elucidated. **The purpose of our research** is to analyse the results of Turkey's implementation of the Southeast Anatolia Project (GAP) – a multi-sectoral integrated regional development project based on the concept of a sustainable development of the south-eastern region of Turkey, the main

component of which was aimed at expanding the opportunities and scale of economic use of water resources. Its consequences for water supply and water use in the Tigris and Euphrates river basins have been clarified. An attempt is made to explain the role of GAP in the "water conflict" between Turkey, Iraq and Syria. **The scientific novelty** of the study consists in the following: based on the processing of documentary sources, statistical materials, numerous analytical publications, both national and provincial, as well as relying on the authors' own field research, there has been maked one of the first attempts in Ukrainian historiography to show the depth and magnitude of the GAP's impact on interstate relations in the Mesopotamia region. **The methodological basis of the research** is the principles of historicism, scientificity, interdisciplinarity, a value approach and the use of general scientific (analysis, synthesis and generalization) methods.

As a result of the scientific analysis carried out with the involvement of numerous original sources, the following **conclusions** have been made: GAP is one of the largest regional development projects ever implemented in the Middle East and one of the nine largest engineering projects in the world nowadays. During the period of the 1990s – the 2010s, the GAP completely transformed the region of Southeast Anatolia, reducing the disparity between regions and creating favourable conditions for socio-economic development. On the other hand, the GAP has caused great alarm in Syria and Iraq, since its launch at full capacity will deprive Syria of 50% and Iraq of 90% of their water flow from the Euphrates, so the authors note that in order to prevent new conflicts, Turkey, Syria and Iraq should develop and actually implement a compromise long-term strategic plan for the management and exploitation of water resources.

Key words: Turkey, Syria, Iraq, Southeast Anatolia, Southeast Anatolia Project (GAP), international relations, Middle East, Mesopotamia, water supply.

# ПРОЄКТ ПІВДЕННО-СХІДНОЇ АНАТОЛІЇ (GÜNEYDOĞU ANADOLU PROJESI) ТА ЙОГО ВПЛИВ НА МІЖНАРОДНІ ВІДНОСИНИ У РЕГІОНІ МЕСОПОТАМІЇ (кінець XX – початок XXI ст.)

Анотація. У статті з'ясовано основні причини формування і розвитку турецько-сирійськоіракських суперечностей щодо спільного використання річок Месопотамії. Виявлено ступінь ефективності угод, укладених впродовж 1940–2010-х рр. та інших міждержавних нормативноправових актів, які стосуються використання вод річок Євфрат і Тигр. Метою наших пошуків є проаналізувати результати впровадження Туреччиною Проєкту Південно-Східної Анатолії (GAP) – багатогалузевого інтегрованого регіонального проєкту розвитку на основі концепції сталого розвитку південно-східного регіону Туреччини, головний компонент якого було спрямовано на розширення можливостей і масштабу економічного використання водних ресурсів. З'ясовано його наслідки для водозабезпечення і водокористування у басейні річок Тигр та Євфрат. Зроблено спробу пояснити роль GAP у "водному конфлікті" між Туреччиною, Іраком та Сирією. Науковою новизною дослідження є те, що на основі опрацювання документальних джерел, статистичних матеріалів, численних аналітичних публікацій як загальнотурецьких, так і провінційних, а також, спираючись на проведенні автором польові дослідження, у статті зроблено одну з перших в українській історіографії спроб показати глибину і масштабність впливу GAP на міждержавні відносини в регіоні Месопотамії.

**Методологічною основою** дослідження є принципи історизму, науковості, міждисциплінарності, ціннісний підхід та використання загальнонаукових (аналізу, синтезу й узагальнення) методів.

У результаті проведення наукового аналізу, здійсненого із залученням численних оригінальних джерел було сформульовано такі висновки: GAP є одним із найбільших проєктів регіонального розвитку, коли-небудь реалізованих на Близькому Сході, та одним із дев'яти найбільших інженерних проєктів у сучасному світі. Упродовж 1990 – 2010-х pp. GAP повністю трансформував регіон Південно-Східної Анатолії, скоротивши диспропорцію між регіонами та створивши сприятливі умови для соціально-економічного розвитку. З іншого боку, GAP викликав велику тривогу в Сирії та Іраку, оскільки його запуск на повну потужність позбавить Сирію 50 %, а Ірак – 90 % їх потоку води з Євфрату, тому авторки відзначають, що з метою запобігання новим конфліктам Туреччина, Сирія та Ірак мають розробити та реально виконувати компромісний довгостроковий стратегічний план управління й експлуатації водних ресурсів.

**Ключові слова:** Туреччина, Сирія, Ірак, Південно-Східна Анатолія, Проєкт Південно-Східної Анатолії (GAP), міжнародні відносини, Близький Схід, Месопотамія, водопостачання.

**The Problem Statement.** More than 6,000 years ago, an active use of the Tigris and Euphrates rivers' waters in Mesopotamia ensured the emergence of one of the world's oldest civilizations and the origin of agriculture. To this day, remnants of ancient irrigation networks can be found in the desert plains of Syria and Iraq, many of which are still in use. For centuries, the peoples who nowadays inhabit Southeastern Turkey, Syria, and Iraq used the Euphrates and Tigris for economic and domestic needs, on the basis of which they claim that historically they have the right to an unhindered use of the rivers, regardless of the change in the hydropolitical scenario in their upper reaches.

Against the background of a significant revitalization of a socio-economic life in the countries of the Middle East during the second half of the 20th – at the beginning of the 21st century the region experiences a shortage of fresh water increasingly. In addition to purely ecological consequences, this shortage leads to the reduction of suitable agricultural land and requires constant irrigation of infertile lands.

Mesopotamia's main river, the Euphrates, is the longest river in the Middle East, originating in the eastern highlands of Turkey, between Lake Van and the Black Sea, its length is 2,700 km, and it flows into the Persian Gulf. Approximately 40% of the Euphrates flows through Turkey, with the rest – through Syria (25%) and Iraq (35%). The average annual flow of the Euphrates is approximately 37 billion m<sup>3</sup>, of which Turkey uses about 32 billion m<sup>3</sup>, i.e. 85% of water. In the case of the Tigris River, 25% of which flows through the territory of Turkey, and the total annual flow is 57 billion m<sup>3</sup>, Turkey uses 24 billion m<sup>3</sup> (40%) of the river's water (Kankal, Nacar, Uzlu, 2016, pp. 123–124). These facts indicate that Syria and, to a lesser extent, Iraq, are dependent on Turkey's water policy.

During the period of the 1970s – 2010s implementation of the Southeastern Anatolia Project (Güneydoğu Anadolu Projesi, GAP) by the Turkish government became a serious challenge for international relations in this region, as it significantly changed the volume of available water resources and the nature of their use in Syria and Iraq.

The Review of Sources and Recent Research. Actualization of water resources issue in the world, and especially in the water-deficiency region of the Middle East, has led to the appearance of a significant number of studies on this issue. The analysis of the latest publications, the subject of which is the GAP Project and its impact on Mesopotamia's water supply and the course of the "water conflict" in the region, allows us to distinguish the Turkish, Arab, and Western historiography of the issue. There should be mentioned publications by A. Akanda, S. Freeman, and M. Placht (Akanda, Freeman, Placht, 2007), D. Altınbilek (Altınbilek, 2004), A. Bagis (Bagis, 1997), M. Balat (Balat, 2003), A. Bilgen (Bilgen, 2020), A. Biswas (Biswas, 1994), O. Boyarkina (Boyarkina, 2017), L. Harris (Harris, 2002), M. Kankal, S. Nacar, E. Uzlu (Kankal, Nacar & Uzlu, 2016), A. Kirschner, K. Tiroch (Kirschner, Tiroch, 2012), N. Kliot (Kliot, 1994), F. Lorenz, E. Erickson (Lorenz, Erickson, 1999), K. Ozkahrama, M. Gunter (Ozkahraman & Gunter, 2016), O. Ünver (Ünver, 1997), D. al Khasun (Khasun Dzhasim Al' Obaydi Khalid, 2019), O. Khlopov (Khlopov, 2019), M. Schulz (Schulz, 1995), I. Yuksel (Yuksel, 2006). **The purpose** of our research is to find out the results of the GAP implementation by Turkey, to analyse its consequences for water supply and water use in Mesopotamia, and therefore to explain the conflict-genicity of the project in the relations among Turkey, Iraq and Syria.

The Research Results. In the 1960s and 1970s, Turkey, Syria, and Iraq began implementing national programmes for more rational use of the water resources of the Tigris and Euphrates rivers, which included the construction of reservoirs cascades, networks of hydroelectric power plants, and implementation of large-scale agricultural work. Among them, the largest project was the Güneydoğu Anadolu Projesi or Southeastern Anatolia Project – a multi-sectoral integrated regional project for the development of the southeastern region of Turkey based on the concept of a sustainable development. The chief goal of GAP was to eliminate disparity in the socio-economic development of the regions of Turkey by increasing the income and living standards of people. The chief goals of the project were set and implemented in 1977 - 2010, however, the construction of individual objects and implementation of some components continues even today. Thus, in 2019, the construction of 76% of all planned hydroelectric power stations was completed, and with the start of operation of the Ilis dam in 2020, this indicator reached 90%. The main component of the project was aimed at expanding the possibilities and scale of economic use of water resources. The means of achieving this goal was the construction of 22 dams and 19 hydroelectric power plants in 1987 - 2019 with the aim of irrigating 17 thousand km<sup>2</sup> of agricultural land. The total budget exceeded 32 billion US dollars (GAP Bölge Kalkınma İdaresi Başkanlığı).

It should be noted that the total gross hydropower potential of Turkey is 433 GWh/ year, but at the beginning of the 2000s, only 125 GWh/year were developed for economic purposes. Due to the commissioning of new hydroelectric power plants within the GAP, it became possible to use 40% of economically useful hydropower potential of the country, which in absolute terms equals 27 billion kWh of electricity (Yuksel, 2006, p. 361). At the same time, the Euphrates and Tigris rivers account for more than 30% of Turkey's gross hydropower potential (Kankal, Nacar & Uzlu, 2016, p. 128).

During the implementation of the GAP, a cascade of 19 hydroelectric power plants was built – one of the largest hydroelectric complexes in the world, capable of generating 8,900 gigawatt-hours. As of 2010, it provided 22% of the national electricity consumption. Owing to the GAP implementation, the area of irrigated agricultural land in Turkey doubled, and within the Southeastern Anatolia region – from 2.9 to 22.8% (Balat, 2003, p. 391). Cotton production increased from 150,000 to 400,000 metric tons, making the southeastern regions of Turkey one of the largest cotton producers in the world. Owing to the GAP, the role of Southeast Anatolia in the structure of the country's exports increased significantly. If in 2002 the total volume of exports from the region amounted to 689 million US dollars, then in 2010 this indicator reached 4.166 billion US dollars. Long summer droughts typical of the GAP zone previously forced farmers to cultivate traditional crops that require little water, including winter crops, barley, lentils, and sesame. However, on the soil where irrigation became widespread owing to the GAP, farmers switched to the cultivation of cotton, tobacco and other more commercially profitable crops (GAP Bölge Kalkınma İdaresi Başkanlığı).

Along with enormous economic and social benefits that the GAP brought to Turkey and Southeast Anatolia in particular, its implementation aggravated international relations in the region significantly. The future launch of all GAP capacities will deprive Syria of 50% and Iraq of 90% of water from the Euphrates, and also threatens to pollute the lower reaches of the river with fertilizers and pesticides. Thus, as of 2012, water flows to Syria have already decreased by 40%, and to Iraq – by 80% (Khlopov, 2019, p. 78). In addition, Syria also plans to divert a significant amount of water for the development of agriculture in the Euphrates valley. The approximate percentage of water that, according to forecasts, will be needed to meet water management needs of each country is the following: Iraq – 65%, Turkey – 52%, Syria – 32% (Akanda, Freeman & Placht, 2007, pp. 1–2). This percentage makes up an impossible 149% of a total demand for water of the Euphrates. Although disputes over fresh water distribution are likely to intensify in the future, tensions among the three countries have existed for a long time. Twice, in 1975 and 1998, it was possible to avoid a war based on the water conflict only owing to foreign mediation. At the end of the 20th – at the beginning of the 21st century the governments of Turkey, Syria and Iraq made several attempts to exchange data and discuss the problem collectively, however, so far the countries continue implementing their uncoordinated water management development projects.

The essence of the water conflict consists in the accusations of Arab countries against Turkey regarding the violation of international water laws regarding the Euphrates River. Iraq and Syria consider the river to be an international watercourse that should be treated as a unit by all riparian users. Ankara's position is that the Turkish law defines the Euphrates as a transboundary river that is under Turkey's exclusive sovereignty as long as it does not flow across the border. According to the Turkish side, the Euphrates becomes an international river only after it joins the Tigris in lower Iraq, forming the Shatt al-Arab, which serves as the border between Iraq and Iran until it reaches the Persian Gulf. Turkey argues its position by the fact that, unlike Syria and Iraq, it is not a party to the UN Convention on the Law of Non-Navigational Uses of International Watercourses (Akanda, Freeman & Placht, 2007, p. 2).

On the other hand, the arguments of F. Lorenz and E. Erickson, who noted an uneven annual flow of the Tigris and Euphrates, deserve attention. If in the dry season their flow is  $150 - 200 \text{ m}^3$ /s, then in the spring months this indicator can reach 5000 m<sup>3</sup>/s, which threatens devastating consequences for the lands in the lower reaches of the rivers, primarily in Iraq and Syria. Thus, hydrotechnical structures, primarily dams built during the implementation of the GAP, equipped with modern water management facilities and efficient reservoirs with low evaporation losses, can bring relief to countries located downstream, ensuring a more uniform and stable flow of water (Lorenz & Erickson, 1999, pp. 7–8).

Since the 1960s, differences of varying degrees of severity have arisen among Turkey, Iraq, and Syria over the shared use of the Euphrates. A steady growth of population in the region and desire for agricultural and food self-sufficiency have led to an increase in the demand for fresh water, and, in turn, to an increase in the number of projects aimed at water supply. A significant catalyst for the tension was the beginning of a practical implementation by the parties of large-scale water management development projects. Turkey constructed the first major dam in the basin, commissioning the Keban Dam in 1973 – 1974, and soon Syria constructed the Tabka Dam in 1975.

At the turn of the 1980s and 1990s, the Turkish-Syrian-Iraqi relations over the use of water resources intensified. The contradictions were caused by the filling of the Atatürk Dam by Turkey, which led to a temporary suspension of water supply to Syria. Although the Turkish government made efforts to minimize the damage, Syria saw the move as an attempt to deliberately deprive it of access to the Euphrates waters. The problem of a joint use of Mesopotamia's water resources is complicated by the differences among Turkey, Iraq and Syria over the "Kurdish issue". For example, in 1989, due to the above-mentioned filling of

the Atatürk Dam and the lowering of the water level in the Euphrates valley, Iraq refused to conclude a security agreement with Turkey, according to which the latter's authorities were supposed to be able to bring to justice the Kurdish militants hiding in the territory of Iraq (Boyarkina, 2017, p. 59). Likewise, the "water conflict" between Turkey and Syria became political in 1998, when the Turkish government threatened Syria to block the Euphrates watercourse if it continued to support the Kurdistan Workers' Party. The outcome of the incident was the compromise Seikhan Treaty (Boyarkina, 2017, p. 59).

The national plans of Turkey, Syria, and Iraq for the development of the Euphrates waters during the past half century led to a significant reduction in the volume of the drain and a violation of the river's regime. Nowadays, the growth of demand for water resources, the uncoordinated plans of neighbouring countries regarding the implementation of infrastructure projects on the transboundary river, climate changes and other factors caused the drainage reduction of the main artery of Mesopotamia by 40 - 45% compared to the beginning of the 1970s.

According to L. Harris, the easing of international tension against the background of the "water conflict" in the Mesopotamia region is possible under the conditions of finding parity between Turkey's interests in South-Eastern Anatolia and the effective exploitation of GAP capacities on the one hand, and guarantees of water resources security, food security and a balanced development of agriculture in Syria and Iraq on the other hand (Harris, 2002, pp. 746–747).

A retrospective analysis of the Turkish-Syrian-Iraqi relations proved the presence of a positive experience and constructive steps in the settlement of mutual claims around the use of Euphrates water resources.

In 1946, Iraq and Turkey signed the Treaty of Friendship and Good Neighbourly Relations, covering a wide range of issues defined in six additional protocols. In particular, Protocol No. 1 concerns the regulation of the use of the Tigris and Euphrates waters and their tributaries. Under the terms of the agreement, both parties recognized the importance of building environmental protection structures on the rivers to regulate water flow and prevent catastrophic floods. In addition, the need for operation of permanent observation posts was recognized. The agreement provided for a large-scale construction of hydrotechnical structures in the upper reaches of the Euphrates (on the territory of Turkey), which was supposed to contribute to the improvement of irrigation and ensure the production of more electricity in both countries. Mechanisms for joint analysis, monitoring and information exchange were developed to achieve the goals defined by the Protocol. Under such conditions, Iraq received the right to send technical experts to Turkey to conduct research, gather information, and prepare plans for possible construction works on various rivers. In addition, the protocol contained a number of obligations for Turkey. Firstly, Turkey was to provide the Iraqi experts with all the necessary information, access to hydrotechnical facilities, assistance and facilities, as well as to ensure cooperation with the Turkish experts. It was also required to establish permanent monitoring stations to ensure their operation and maintenance, and regularly report measurement results to the competent Iraqi authorities. Finally, Turkey was required to consult with Iraq regarding any Turkish construction plans on the Euphrates and to adapt the construction plans to the interests of both sides as far as possible. In practice, the implementation of hydrotechnical projects defined by the Treaty of 1946 started to slip and drag on, not the least due to the fears of the Turkish government about a possible encroachment on the country's sovereignty (Kirschner & Tiroch, 2012, pp. 369-370).

In 1984, Turkey suggested Syria and Iraq the "Three-Stage Plan for Optimum, Equitable and Reasonable Use of the Transboundary Watercourses of the Euphrates-Tigris Basin", which provided for: 1) compilation of water resources cadastre; 2) compilation of land resources cadastre; 3) determining the optimal total water needs of each country for domestic, industrial and agricultural needs. However, the suggestion was rejected by Syria and Iraq, because Turkey's three-stage plan was unable to ensure a fair and rational distribution of water resources (Altınbilek, 2004, p. 16).

In 1987, the Protocol on Economic Cooperation was signed between Turkey and Syria, which aimed at strengthening cooperation and a mutual benefit of both states in various fields, in particular in the oil and gas industry, electricity, banking, transport, telecommunications and trade. Paragraphs 6 – 10 of the Protocol related to water issues. In view of the future commissioning of the Atatürk Dam, a component of the South-Eastern Anatolia Project, the parties agreed on the joint use of the Euphrates resources. Turkey agreed to maintain the average annual flow of the Euphrates to Syria at a level of more than 500 m<sup>3</sup>/s. If the monthly flow fell below the agreed level, Turkey had to make up the difference during the following months (Kirschner & Tiroch, 2012, pp. 371–372). In addition, Turkey, similar to the aforementioned the 1946 Treaty with Iraq, agreed to jointly construct and operate irrigation and hydropower projects with Syria. However, the 1987 agreement was considered provisional until Turkey and Syria reached a final agreement with Iraq on distribution of the Euphrates waters among the three riparian countries. To date, the final agreement on distribution of the Euphrates waters has not been concluded yet.

In 1989, Iraq and Syria adopted the Joint Protocol on the preliminary distribution of the Euphrates River waters, according to which Syria undertook to use 42% for its own needs and to ensure the transit of 58% of the Euphrates water flow to Iraq.

In the 1990s, with the exception of the Joint Communique on Cooperation concluded between Syria and Turkey in January of 1993, which only indirectly concerned the water issue, no water agreements were reached among Turkey, Iraq, and Syria, the riparian states.

In the 21st century diplomatic efforts to resolve the water conflict around the Euphrates received a new impetus, leading to the signing of a number of memorandums of understanding, joint communiques and other agreements related to water issues. The first significant breakthrough was the joint communique between Turkey and Syria in 2001. The agreement provides for technical cooperation between the parties, including training programmes, joint water management development projects, as well as exchange and partnership programmes. It should be noted that the agreement concerned the GAP for the first time. In particular, Turkey declared its readiness to manage certain GAP sectors in the field of irrigation with Syria. In addition, the exchange programme provided for the visits of Syrian engineers to Turkey to participate in the implementation of projects "Management, Operation and Maintenance of Irrigation Systems in the Region of South-Eastern Anatolia", "Joint Development of Rural Areas" and "Improvement of Soil and Restoration of Soil Quality by the Use of Agricultural Waste and Biofertilizers". In 2002 and 2009, the Syrian-Iraqi and Syrian-Turkish agreements were concluded, respectively, on the installation of pumping stations for taking water from the Tigris River. Both agreements regulate the amount of water that Syria can pump from the river. In turn, Syria is obliged to report on all stages of project implementation, as well as on the volume of water pumped. In the greement, the parties agreed on a joint monitoring of the river flows by establishing appropriate monitoring stations. The 2002 Agreement also provides for the establishment of a joint technical committee to determine the amount of water pumped from the pumping station regularly. In addition, Iraq and Syria emphasize their obligations to the UN Watercourses Convention. The 2009 Syrian-Turkish agreement does not contain such far-reaching provisions regarding a joint monitoring. However, it emphasizes a regular exchange of data and information (Kirschner & Tiroch, 2012, pp. 373–374).

The 2008 drought that hit Mesopotamia forced Turkey, Syria, and Iraq to seek compromises over water use. In this regard, the parties reached an agreement on restarting the work of the Joint Technical Committee. Also, with the aim of improving cooperation on the Euphrates River, Syria and Turkey adopted a Memorandum of Understanding in water management in 2009 (Boyarkina, 2017, p. 60). In addition, the parties once again declared their desire to conclude a final agreement on the distribution of the Euphrates and Tigris waters among all three riparian states. In 2009, the Turkish-Syrian memoranda were also signed in the field of effective use of water resources and combating drought, as well as in the field of restoring water quality (Kirschner & Tiroch, 2012, pp. 374–375). In the same year, at the World Water Summit, Turkey and Iraq concluded the Treaty of Friendship and Good Neighbourly Relations, according to which Turkey was supposed to ensure the drainage of the Euphrates to the territory of Iraq at the level of 400 m<sup>3</sup>/s, but due to a significant decrease in the amount of precipitation, the agreement implementation was suspended (Khlopov, 2010, p. 79).

In the Mesopotamia region the "water conflict" requires outside interference to push Turkey, Iraq and Syria into constructive tripartite talks. Such a mediator can offer them a reliable, mutually beneficial alternative solution. Three potential mediators with the necessary legitimacy, technical and financial resources are, in our view, Saudi Arabia, Egypt or the World Bank.

A long history of diplomatic attempts to resolve the water conflict among Turkey, Syria and Iraq proves that the parties recognize the importance of cooperation, implementation of a joint irrigation and hydropower projects, exchange of information and the need for consultations, but the majority of agreements, memoranda and communiques, adopted during the period of the 1940s – 2010s, are marked by declarativeness and do not regulate clear algorithms of such cooperation.

From the point of view of modern international law, a compromise option for solving the "water conflict" in Mesopotamia is the implementation of "joint jurisdiction" and "equitable use" principles, based on the doctrine of limited territorial sovereignty and integrity in individual river basins. The principle of "joint jurisdiction" consists in the need for cooperation in the distribution of water resources of all countries of the international river basin, which, in fact, means a "collective ownership" of water resources. The principle of "fair use" means the possibility of using water resources by any country through which the river flows in a way that does not harm other countries of the same river basin. In this case, the requirements of the parties should be sufficiently flexible and based on an analysis of the needs of the population, taking into account socio-economic needs.

The Conclusions. Based on the analysis of the origins and development of the Turkish-Syrian-Iraqi contradictions regarding the joint use of the Mesopotamia rivers, as well as the influence of the GAP on the course of the "water conflict", the authors made a number of conclusions and generalizations.

The GAP is one of the largest regional development projects ever undertaken in the Middle East and one of the nine largest engineering projects in the world nowadays. During period of the 1990s – 2010s, the GAP transformed the region of Southeast Anatolia completely, reducing the disparity among the regions creating favourable conditions for a socio-economic

development. On the other hand, the GAP has caused great alarm in Syria and Iraq, as its launch at full capacity would deprive Syria of 50% and Iraq of 90% of their water flow from the Euphrates. The problem is exacerbated by the fact that Turkey, which owns 40% of the Euphrates and 25% of the Tigris, uses 85% and 40% of their water flow, respectively.

The river systems of the Middle East are international in nature, and the use of their resources is not regulated by international agreements, since they have not been ratified by all parties. Thus, the user countries have a special responsibility for the exploitation of water resources, their preservation and prevention of pollution. The joint use of water resources in the region should be based on transparent, clear and competent agreements, which contain quantitative and qualitative characteristics of water resources. These agreements should determine principles and regulate practical mechanisms for the use of water resources of the Euphrates and Tigris, control of water quality, volumes of its consumption, as well as determine measures to protect the environment.

The weakening of international tension against the background of the "water conflict" in the Mesopotamia region is possible under the conditions of finding parity between Turkey's interests in Southeast Anatolia, an effective exploitation of the GAP capacities, and at the same time – guaranteeing the safety of water resources, food security and balanced development of agriculture in Syria and Iraq, which lie in the lower reaches of the Euphrates.

A retrospective analysis of the Turkish-Syrian-Iraqi relations proved the presence of a positive experience and constructive steps in the settlement of mutual claims around the use of Mesopotamia's water resources.

**Acknowledgement.** We express sincere gratitude to all members of the editorial board for consultations provided during the preparation of the article for publishing.

Funding. The authors did not receive any financial support for the publication of this article.

#### BIBLIOGRAPHY

Akanda, A., Freeman, S. & Placht, M. (2007). The Tigris-Euphrates River Basin: Mediating a Path Towards Regional Water Stability. *The Fletcher School Journal for issues related to Southwest Asia and Islamic Civilization*, 1–12. [in English]

Altınbilek, D. (2004). Development and management of the Euprates-Tigris Basin. *Water Resources Development*, 20, 15–33. [in English]

Bagis, A. I. (1997). Turkey's hydropolitics of the Euphrates-Tigris Basin. *Water Resources Development*, 13, 567–581. [in English]

Balat, M. (2003). Southeastern Anatolia Project (GAP) of Turkey and Regional Development Applications. *Energy Exploration & Exploitation, 21 (5/6),* 391–404. [in English]

**Bilgen, A.** (2020). Turkey's Southeastern Anatolia Project (GAP): A qualitative review of the literature. *British Journal of Middle Eastern Studies, 47(7),* 652–671. [in English]

**Biswas, A. K.** (Ed.) (1994). *International Waters of the Middle East: From Euphrates – Tigris to Nile.* Oxford: Oxford University Press. [in English]

**Boyarkina O.** (2017). Vodnyy faktor v turetsko-siriyskikh otnosheniyakh [The water factor in Turkish-Syrian relations]. *Mirovaya politika – World politics, 4,* 56–63. [in Russian]

Harris, L. M. (2002). Water and Conflict Geographies of the Southeastern Anatolia Project. *Society* & *Natural Resources*, *15:8*, 743–759. [in English]

Kankal, M., Nacar, S. & Uzlu, E. (2016). Status of hydropower and water resources in the Southeastern Anatolia Project (GAP) of Turkey. *Energy Reports, 2,* 123–128. [in English]

Khasun Dzhasim Al' Obaydi Khalid. (2011). Proyekt Yugo-Vostochnoy Anatolii i perspektivy ekonomicheskogo razvitiya Turtsii [South-East Anatolia Project and Economic Development Prospects for Turkey]. Prepodavatel XXI vek, 214–218. [in Russian]

**Khlopov, O.** (2019). Problema vodnykh resursov v otnosheniyakh mezhdu Turtsiyey, Siriyey i Irakom [The problem of water resources in relations among Turkey, Syria and Iraq]. Nauka bez granits – Science without borders, 12 (40), 77–84. [in Russian]

Kirschner, A. J. & Tiroch, K. (2012). The Waters of Euphrates and Tigris: An International Law Perspective. *Max Planck Yearbook of United Nations Law, 16,* 329–394. [in English]

Kliot, N. (1995). Correction: Water Resources and Conflict in the Middle East. Annals of the Association of American Geographers, 85(4), 240–242. URL: http://www.jstor.org/stable/2564456

Lorenz, F. M. & Erickson, E. J. (1999). *The Euphrates Triangle: Security Implications of the Southeastern Anatolia Project*. Washington, DC: National Defense University Press. [in English]

**Ozkahraman, C. & Gunter, M.** (2016). The Southeastern Anatolia Project (GAP): An Obstacle to Turkish Accession to the European Union? *Journal of South Asian and Middle Eastern Studies Villanova University, 40 (1), 26–45.* [in English]

**Schulz, M**. (1995). Turkey, Syria and Iraq: a hydropolitical security complex. In: *Hydropolitics: conflicts over water as a development constraint*, (pp. 91–122). London: Zed Books. [in English]

**Ünver, O.** (1997). Southeastern Anatolia Integrated Development Project (GAP), Turkey: An Overview of Issues of Sustainability. *International Journal of Water Resources Development, June,* 187–208. [in English]

**Yuksel, I.** (2006). Southeastern Anatolia Project (GAP) For Irrigation and Hydroelectric Power in Turkey. *Exploration & Exploitation, 24 (4/5),* 361–370. [in English]

The article was received October 13, 2023.

Article recommended for publishing 30/08/2024.