TRANSBOUNDARY POWER OF WATERS Nature's leverage over peace, stability, and trust in Euphrates-Tigris basin

The increasing significance of the Euphrates-Tigris transboundary river basin in an environment with diminishing resources and plagued by drought obliges Turkey to lead a cooperative approach for the efficient and equitable management of water

CONTINUED FROM PAGE ONE-INDEED, Turkey needs to continue its cooperative role and institute a regulatory approach for the efficient, equitable and optimal sharing of the water resources in the Euphrates and Tigris Basin. The management of the Euphrates and

Tigris rivers, transboundary waters consist-Syria and Iraq, has been the topic of a highly contested regional diplomacy for more than

Although no final agreement has been reached at the international or regional level, apart from a number of protocols, the necessity of ensuring a multilateral cooperation Euphrates and Tigris is becoming an urgent matter given the worsening hydraulic and climatic conditions.

DAMMED DIPLOMACY: TENSIONS AMONG RIPARIAN BORDER STATES

The diplomatic rift between the border states over the management of the water resources in the Euphrates-Tigris basin was triggered when Turkey started building dams have a yearly water capacity of 88 billion cu- Law of the Non-navigational Uses of Interon the Euphrates within the framework of a \$32 billion Southeast Anatolian Project Egypt receives 55.5 billion cubic meters of did not sign the convention. He emphasized (GAP) launched in 1977, one of the world's largest and most comprehensive sustainable development projects including efficient ir- to an agreement inked in 1959. rigation methods and a water infrastructure

Before Turkey started operating its first dam Keban on the Euphrates in 1974, both Syria and Iraq had also built their dams. Iraq was the first country to develop engineering projects in the basin. The Al Hindiya and Ra- to precipitation only five to six months a year, riparian states. madi-Habbaniya dams on the Euphrates were the former ambassador said. constructed in 1914 and in 1951 respectively, As an experienced diplomat who partici- DRY, POLLUTED IRAQI both for flood control and irrigation. These pated in the negotiations of hydrodiplomacy dams were followed by canals and more dams for decades, Rende stressed that the bilirrigation and hydropower in the early 1960s. The Tabqa Dam was built on the Euphrates in 1973 with the financial support of the Soviet Union and was followed by Bath and

The first dam Turkey constructed as part equitable share of water," he added. of the GAP on Euphrates was Karakaya, which began operating in 1988. Following Keban and Karakaya, the third dam on the Euphrates River was the Atatürk Dam, whose reservoir has a capacity of 48 billion cubic meters (bcm) of water, completed in 1992. It was designed to store water for large-scale of the dams, flood water has been regulated. irrigation as well as for the generation of hy-

Building dams and canals by the three riparian border states have led to still-pend- Rende explained. ing problems since other downstream states Syria and Iraq claimed that upstream Turkey's dams deter the quality and flow of water in their part of the Euphrates and Tigris basin. But Turkey has taken initiative a number of times to ensure efficient management of water resources in the basin. Indeed, the country has claimed that its dams serve for the benefit of all states on the basin since they manage and regulate the water in rivers exposed to fluctuations in flows.

"Turkey has never overlooked the needs

SYRIA

Source: Institue for the Study of War, Bloomberg Research

Euphrates was around 100 cubic meters per proposed a three-staged plan for optimal, second. In spite of the unexpected low natural flow, Turkey was able to go on releasing transboundary waters of the Euphrates-Tigris water to downstream neighbors at a rate of basin more than 500 cubic meters per second. This proves that Syria and Iraq benefit from the water infrastructures that Turkey has built on ing of the basins of these two rivers and their the Euphrates," Turkey's former Ambassador tributaries that start in Turkey and flow into to the Organization for Economic Coopera- as a whole system, the two others wanted to tion and Development (OECD) Mithat Rende told Daily Sabah in an exclusive interview.

Rende emphatically stressed that even in dire circumstances Turkey fulfilled its com- explained mitment to the informal agreement of 1987 between Turkey and Syria that guaranteed the latter a minimum flow of the Euphrates of 500

Another transboundary basin, the Nile River is a good reference point for comparison. Originating from Lake Victoria in Burundi and flowing into the Mediterranean

talking about water wars due to rising conflict between Turkey and its neighbors, the up- Iraq and Syria. In compliance with Article 7 of stream state utilized the water resources for its the convention, Turkey claims that it engages own benefit and for the benefit of its neighbor in water management by taking measures to Syria in a semi-arid region which is exposed prevent causing any significant harm to other

lion dollar dam projects of Turkey includshared with downstream neighbors.

"Had Turkey not built these dams, it would not have been possible to regulate the unbalanced fluctuations in the flows and ensure the

On one occasion, the snow in the highlands of Euphrates melted in a very short period of time like 10 days instead of three months because of a southwester. Such incidents in the past had caused massive floods and inundation, but after the construction Even the pledged 500 cubic meters per second for Syria was increased during that pe- opened large canals to punish the Shiite riod and Syria was notified of the situation, population and the Madan people, living

"Turkey's transboundary water policy has always been consistent and transparent. Turkey's policy is aimed to efficiently utilize and share the benefits of water resources through

cooperation among riparian states," he said. He continued that the combined water potential of the Tigris and Euphrates rivers is ian states to achieve sustainable development, provided that water is used in an efficient way and the benefits are maximized through new irrigation systems and technologies throughof the downstream riparian states even dur- out the basin, Syria and Iraq included.

ing drought periods. For example, 1988 and From 1984 onward to 2009, Turkey, Syria 1989 were the driest years of the last 50 years. and Iraq had negotiated the management At the height of the summer, the flow of the of transboundary waters. In 1984, Turkey equitable and reasonable utilization of the

> Yet, the plan was rejected by Syria and Iraq since there is a difference in approach to the basin area between the three countries. While Turkey considered the Euphrates-Tigris basin categorize it as two separate basins during the negotiations after the establishment of Joint Technical Committee (JTC) in 1983, Rende

"Turkey has even scientifically proven its stance and even the historical trajectory confirms that the Euphrates-Tigris basin is a sinplatform where the bordering states share the cubic meters per second throughout the year, gle system but the downstream riparians Syrcorresponding to 15.75 billion cubic meters ia and Iraq insisted on their own solutions," per year. The total water flow in the Euphrates he said. As one of the cradle of civilizations, is estimated to reach around 35 billion cubic the Euphrates-Tigris basin has been depicted as the land between the rivers, namely the Mesopotamia, has been historically evaluated as a single transboundary river basin.

Render also underscored that Turkey is committed to the Article 5 and Article 7 of from Egypt, the Nile River is estimated to the 1997 United Nations Convention on the bic meters. Having the lion's share of the river, national Watercourses, although the country water per year from the Nile whereas Sudan is that Turkey abides by Article 5 which stipuallocated 18.5 billion cubic meters according lates that watercourse states shall in their respective territories utilize an international At a time when the international arena was watercourse in an equitable and reasonable manner in its water-sharing operations with

EUPHRATES, ARAB MARSHES

The Iraqi government more specifically gan exploiting the water of the Euphrates for ing Keban, Karakaya, Birecik and Atatürk, weakening its water quality and drying up the impounded water and the reservoirs were Arab marshes to halt the construction of the Ilisu Dam that began in 2006 with the aim of utilizing the Tigris resources as part of GAP.

These accusations moreover have found reflections on the Iraqi public as well. However, the polluted water problem in Iraq, which has been one of the triggers of the protests in the country, does not lie in Turkey's dam projects. Indeed, it has been proven that the cause of desalinization in Iraqi waters stems from the country's poorly managed

The danger of drying Arab marshes date back to Saddam Hussein's policies that in the south and east of Iraq during the 1991 uprising. Clearing the area of these marshes to gain tactical advantage during Iran-Iraq war was another method Saddam employed, and later in 1985 a part of the

Moreover, a report published by the sufficient to meet the needs of the three ripar- Save the Tigris and Marshes Campaign in February 2018 puts forward that the rate of pollution has increased in the past decade, especially from industrial and household discharges dumped into the Tigris River in Baghdad, the capital of Iraq and the admin-

Syria

Source: Journal of Hydrologic Engineering | Vol 16, No 12

Riparian contribution to flow in Euphrates–Tigris River basin Watercourses **TIGRIS (1,850 KM) EUPHRATES (2,800 KM) TURKEY** to peace, **TURKEY** 40 percent

89 percent (879, 790 square kilometers) 46 PERCENT TURKEY 22 PERCENT **IRAO IRAN** 19 PERCEN **SYRIA** 11 PERCENT 50 percent **SAUDI ARABIA** 1.9 PERCENT 0.03 PERCENT **SYRIA IRAN** 11 percent

Source: Food and Agriculture Organization of United Nations (FAO)

marshes was also drained for oil explora- City and the Daura Refinery are identified the main causes of pollution in the river.

10 percent

Major dams and tributaries of Euphrates-Tigris basin

"More than 2,000 private and government-run factories in Baghdad dispose of their waste directly into the river. Facilities of the Ministry of Oil, which include

It argues that the Medical City, a com-

istrative, industrial and population center plex of hospitals, is a prime example of polof the country. Particularly the Medical lution caused by the public service sector in Baghdad. Furthermore, the industrial discharge from the Daura Refinery, located in the southeast part of Baghdad, has been identified to contain highly toxic nitrogen, sulfur, oil and grease. This mixes with sewage water from the discharged waste and refineries, are the major source of pollution causes clogging of drainage pipes and impacts the health of aquatic species.

Shedding light on the deteriorating water condition in Iraq, Glada Lahn, a senior research fellow, Energy, Environment and Resources (EER) at Chatham House, told Daily Sabah that the lower part of the Euphrates for instance has lost at least 40 percent of its flow over the last 40 years.

"The water situation is so acute that animals die from drinking the saline and polluted water in that lower part of the river, it has caused mass displacement in addition to exacerbating food price inflation - last winter, there wasn't enough water to plant the wheat crop and many farms have been abandoned," she said.

After several bilateral and trilateral meetings and provisional agreements, Turkey inked a memorandum of understanding with Iraq and Syria in 2009. The agreement stipulated the monitoring of water resources, joint projects and protocols and fighting climate change. One of the bilateral protocols Turkey and Syria envisages the joint construction of a dam on the Asi (Orontes) River. The construction of the dam began on February 2011, but the Syrian war that broke out in March has halted the project.

Turkey should implement proactive hydrodiplomacy, boost trust among riparian states

conflict resolution and sharing emphasized that the country country can help the re-conof benefits in the region, the should continue its stance to- struction of the collapsed and promise an immediate solution key's policy on transboundary agreed by all riparians. In that waters should focus on coordibuilding trust among Turkey, and benefit-sharing, she said. Syria and Iraq is essential to start a plan on transboundary could, for example, form a netwaters in the post-conflict era. Turkey, therefore, should,

ing trust among the regional dropolitical paradigm, Yıldız

based on mutual benefits is es-

Meanwhile, regarding the

"The riparian countries should adopt frastructure development and food pro-

added, should particularly pay attention trial production once the peace is restored.

ter's value as a commodity is becoming

and rising population, the natural condi-

the better management of transboundary

that requires sharing of responsibility as

The cooperation among the states, he

well as the benefits of wealth," Rende said.

to the principle of two rivers and a single

basin while taking the hydromorphologi-

Considering the ongoing conflicts in

Turkey's southern neighbors and other

two border states of the Euphrates and

Tigris, the equitable share of the benefits

of water emerges as an essential part of

the peace-restoration and post-conflict

As the up-basin state with

cal conditions of the basin into account.

waters of Euphrates-Tigris basin.

more and more significant, drying climate phasized.

IN AN ENVIRONMENT where the wa- role in preparing the region for sustainable emphasized.

management of water resources, Lahn em-

The establishment of peace in war-torn tions dictate for an immediate solution for Syria becomes all the more important ity in the region without cooperation for

"Water resources in Syria and Iraq will

determine the settlement areas and indus-

their countries will start settlements in

areas with water security," Dursun Yıldız,

chairman of the Ankara-based Hydropoli-

tics Academy, said. "Without resolving the

possible to ensure permanent peace in the

The elimination of the material and

an established political order operation with neighbors and that coop- of the Hydropolitics Academy predict that

and will, Turkey can take a erative approach will also have to address the waters in the Euphrates-Tigris basin

region," he added.

current conditions still do not ward building confidence. Tur- ruined corporate infrastruclight, it is widely believed that nated management of the river ple for effective cooperation, "Turkey, Syria and Iraq

work of experts to improve mutual understanding of changes take a leading role in restor- in the rivers and expected new demands on them. Working fidence, the riparian states countries and adopt an open jointly on solutions to make policy to implement a new hy- efficient irrigation, pollution transparent communication, reduction, reviving riverine exchanging information at the ecosystems, agricultural trade basin level," Rende, Turkey's "For the restoration of trust, and electricity sharing would former ambassador to the an environment of cooperation be ways to build trust and im- OECD, emphasized. prove river sustainability over He also referred to the imtime," Lahn added.

Likewise, Turkey may lead issue of confidence, EER re- the preliminary work on the nism that could facilitate the searcher Lahn said that Tur- establishment of an organizakey's response to Iraq's fears of tion for cooperation on water building measures and the water shortage illustrates the management, Yıldız said, as agreement on the utilization importance of clear and timely part of its proactive hydrodi- of the water in transboundary communication about what is plomacy particularly in the basins for the benefit of all.

be central to a functioning economy, in- waters," he highlighted.

when considering that the Euphrates will efficient management of transboundary

Millions of refugees who will return to basin. A new hydropolitical paradigm,

water issue in the Middle East, it is not garding Euphrates-Tigris basin must focus

spiritual ruins of the 7-year-old war in than allocating the decreasing amount of

Syria in the post-conflict era will entail co- water," he said. He added that the studies

the issue of transboundary waters, Yıldız will decrease by 12 to 15 percent by 2035.

ALTHOUGH water is key to happening in the upstream and post-conflict era in Syria. The during the war. As an examterm training of Iraqi irrigation engineers and technicians

> "In order to build conshould engage in open and

portance of political will to start an open dialogue mechaimplementation of confidence-

"It is not possible to ensure normaliza-

Yıldız particularly drew attention to

boundary waters will ensure sustainable

regional peace. The first, he explained, is

a revision of cold-war era security politics

implemented by the riparian states in the

namely paradigm shift, featuring mutual

benefit among riparian states is the second

on efficient sharing benefits of the water

shared vision and unity of effort, rather

among the states through a shared goal,

"The new hydropolitical approach re-

necessary condition, Yıldız added.

tion of the social life and institute an en-

vironment political and economic stabil-

diplomatic developments regarding riparians in **Euphrates-Tigris** basin

1977

Launch of Turkey's Southeast **Anatolian Project**

1983

of Joint **Technical** Committee for Regional

1984

proposal of 👍 a three-staged plan

1987

Syria-Turkey informal informal agreement guaranteeing 500 m3/s of waterflow

Euphrates-Tigris

basin facts THE Euphrates-Tigris river ba- in Turkey, and flows southeast

sin is a transboundary basin with across the Syrian plateaus before a total area of 879,790 square entering the Iraqi territory near kilometers distributed between Qusaybah. Approximately 89 Iraq (46 percent), Turkey (22 percent of the 3,000-kilometer percent), the Islamic Republic river runs through Turkey and of Iran (19 percent), the Syrian Syria's contribution to the river Arab Republic (11 percent), Sau- is estimated at 11 percent. Also di Arabia (1.9 percent) and Jor- originating in Turkey, the Tigris Khabur, which also originate into the Persian Gulf.

2008

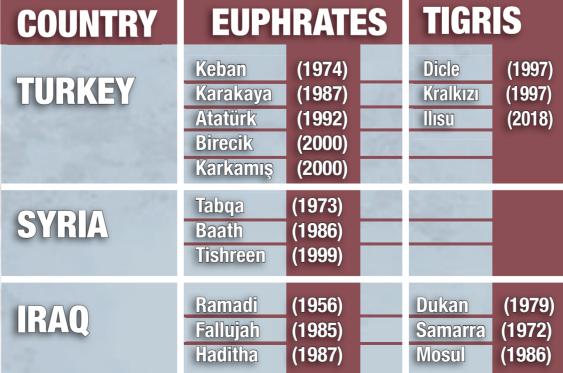
Agreement on cooperation for water issues by establishing a water institute

2009

Trilateral crisis summit attended by **♦ Turkish, Syr**ian and Iraqi authorities in Ankara

INFOGRAPHICS BY BÜŞRA ÖZTÜRK





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trust

and mutual

benefit

dan (0.03 percent). Both rivers flows through the country until originate within the territorial the border city of Cizre where borders of Turkey. The Euphra- it forms the border between tes starts in the eastern highlands Turkey Syria over a short disof Turkey, between Lake Van and tance and then crosses into Iraq the Black Sea, and is formed by at Faysh Khabur. It is estimated two major tributaries, the Murat that Turkey makes up nearly 40 and the Karasu. It enters the Syr- percent to the 1,418-kilometer ian territory at Karkamis, down- Tigris. Both rivers in fact natustream from the Turkish town rally form a confluence and flow of Birecik. It is the joined by its together into the Shatt-al-Arabin major tributaries, the Balık and southern Iraq, before emptying

JORDAN

LEBANON

Beirut

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