



Water Snags in the Middle East: International Relationships from Water Perspectives

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ABSTRACT

The major rivers of the Middle East: Jordon, Euphrates and Tigris, are jointly shared among Syria, Iraq, Jordan, Israel, and Turkey. Adequate supplies of good quality water are an essential element for the survival, economic welfare and prosperity of these countries. But unused water resources became less and less, then water for one user means lack of water for the other; this led, in recent years, to competition over these resources and to armed conflicts in certain cases. At the same time, as a result of dependence on the agriculture, due to the lack of industries, 80% of water is used in most Middle East countries for irrigation purpose, which is becoming expensive. An alternative approach is the "demand Management" but it need a wealthy urban population. A more fundamental approach would seek to reduce population growth rates.

INTRODUCTION

"Many of the wars of this [20th] century were about oil "but the wars of the next century will be about water."

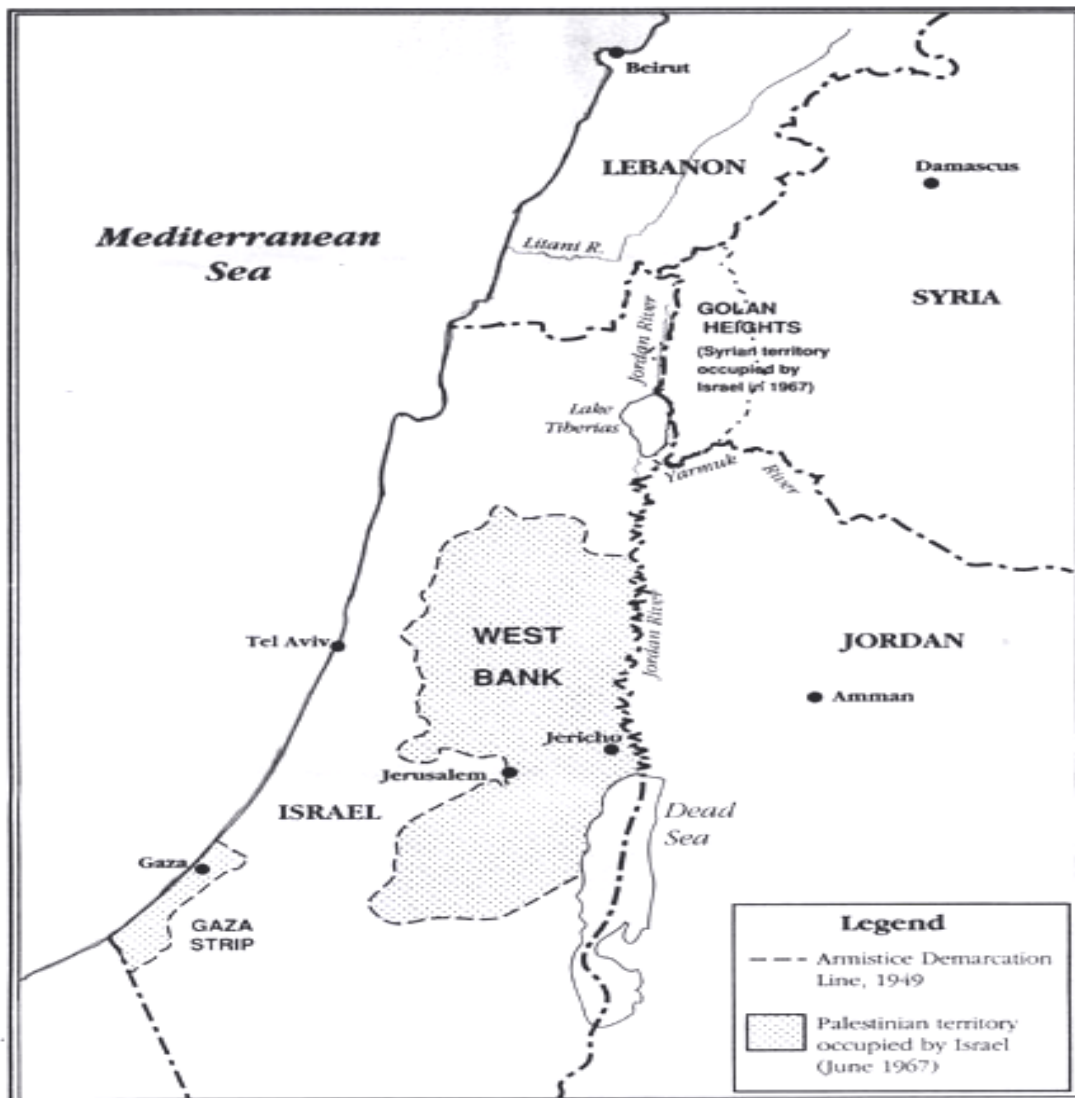
World Bank Vice President Ismail Serageldin

1. In the Middle East, unfortunately, water is often scarce, and over the last century its consumption has increased faster than the population. The river Jordan, so famous in history and religion, is now nothing more than a creek. By the time that long-suffering stream reaches its end, most of the water has disappeared into a wide variety of pipes, pumps, and fields to sustain the ever growing demands of the human population in its vicinity. The reasons for the shrinking of the Jordan reflect the overwhelming problem of the whole region in obtaining sufficient water. The plight of the Jordan and other water sources of the area and a brief examination of the recommendations as to what can be done to improve it will reveal one of the more serious situations facing human beings in the twenty-first century.
2. Water, oil, technology, and population increase, are the main factors in the Mid-Eastern actual and future equation for which solutions have not been found yet. Middle East is one of the regions where the most important resource may be water, not oil. Water scarcity is most apparent there, it is an important consideration in the peace process between Israel and the Arabs; it has been one obstacle in Syrian-Iraqi-Turkish relations; and, if it is not addressed, it could become a wider problem affecting the Islamic Republic of Iran, Iraq, Israel, Jordan, Lebanon, the PNL, Syria, and Turkey.
3. The most important resource in the Middle East may be water, not oil. In this entire area, where the fate of some nations has depended on secure control of their water supply; the only three countries that are self-sufficient in water are Iran, Turkey and Lebanon; all the others depend on river water that flows into their territory from another country, or on ground water that they are using faster than it is being recharged. Israel depends on water originating from Arab states, while 67% of the Arab world depends on water from non-Arab states. These three facts make the Middle East, long-term as well as short-term, one of the most Volatile region in the world, especially as the hostilities are fanned by religious fanaticism. Boutros Boutros-Ghali, an Egyptian diplomat and former Secretary-General of the United Nations, has warned that the next war in the Middle East will be fought for water.

HISTORICAL OVERVIEW

Period of Bargaining For Water (1918-1948)

6. The map gives a general view of the region. There is a little rain sometimes along the coast. Further inland is a strip of dry forest upland, grading into semi-desert and beyond that is full desert. To the South lies a huge expanse of desert, stretching from Saudi Arabia into Egypt. Northwards, is a temperate area with more rainfall, but further to the East is the Syrian Desert. The countries we are considering, lie in a transition zone between the hot and arid Southwest Asia and the cooler, wetter North Mediterranean. This causes a wide variation in rainfall and temperature. Customarily, the rain tends to fall in the winter in the highlands while the summers are hot, long and dry. In the generally cloudless summer months, surface water evaporates very quickly. Far less rain falls on the area East of the Jordan valley than to the West. Furthermore, our area contains the extension of the Great Rift Valley, which extends from eastern Africa all the way to northern Israel. Its lowest point



is the Dead Sea which is 1,312 feet below sea level, the lowest point on the surface of the Earth if eighty year old lady boldly dashed into its highly saline waters fully intending to enjoy a nice swim, she could only bob around like a cork and finally had to let herself be hauled out in defeat. From the early years of Zionism as a political movement, water has been centrally important in delimiting the desired territories.

7. Soon after WW1 in 1918, and following Balfour's promise of the national home for the Jews in Palestine, Zionist leaders demanded to include the headwaters and tributaries of the Jordan River, the Lower Litany, and the Lower Yarmuk, embracing all the Palestine lands, southern parts of Lebanon and Syria, and the Jordan valley in the borders mentioned in the Sykes-Picot accord.

8. The French position, which separated Litany River from Palestine, did not prevent comprehensive hydrological investigation and assessment of the region. Among several studies conducted in this field, the Zionists welcomed Lowdermilk's plan and considered it as their "water constitution".

9. By the end of the WW2, the problem of accommodating the needs of the native Palestinians and the new Jewish immigrants crowding into Palestine became acute and the Arab-Israeli wars of 1947-8, which resulted in Israel's creation, further complicated the efforts for a regional water solution. With sovereignty came the power to control water resources. Israel became determined unilaterally to tap, develop, and exploit any available water resource.

Period Of Developing National And Shared Water Resources (1948-1967)

10. In 1950, the amount of water in Israel was insufficient to meet the needs of the newcomers. Arab waters were not a surplus. The Jordan-Yarmuk watershed was then shared by four sovereign states.

11. After the failure of several proposals for regional water sharing in this period, especially that of President Eisenhower's special envoy Eric Johnson, because of the Israeli, Syrian and Lebanese rejection, Israel announced her "conditional agreement", to which Arabs responded with their own convenience plans.

12. Israel, in return, considered the Arab response a danger to its national security and decided to use all its powers including military to impede it. Arabs, likewise, took the same stand. The first military action by the PNL Movement "Fatah" targeted the Israeli National Water Carrier. Israel retaliated by hitting the Syrian construction sites; this led to war in June 1967. Israeli victory enabled it to fulfill much of its strategy aiming at controlling waters not only in Palestine, but also in Jordan, southern Lebanon, and southern Syria.

Period Of Developing The Occupied Territories' Water Resources (1968-1990)

13. For Israel, the central problem following the 1967 war was to preserve its diminishing domestic water supplies and to make efficient use of water resources captured from its neighbours. This could help him with the increase in agricultural demands, and the rise in arriving immigrants' numbers.

14. By the early 1980s it was quite clear that the Negev Desert reclamation could not be achieved without additional water resources. Israel invaded Lebanon in 1982 under the pretext of security. But the hidden agenda for this invasion was to establish a security zone and secure the access to the Litany River waters.

15. To meet Israel's long-term water requirements, the best answer appeared to lie in harnessing a proportion of the major rivers of the Middle East - the Nile, the Euphrates or the Seyhan and Geyhan rivers in Turkey. Getting access to only 1% of the Nile waters was part and parcel of the Camp David talks. President Sadat, however, was eventually forced to abandon this idea because of severe domestic opposition to it.

16. In 1991, some 55% of Israel's total water supplies came from non-Israeli sources. At the same time, Syria planned to convey 40% of the Yarmuk's flow into its irrigation system, which would seriously reduce the downstream, supply and increase its salinity. These threats of water shortage and the possibility of new conflicts over water heralded both a basic change and a breakthrough in the region's water diplomacy.

Period Of Return To Bargaining Tactics (1991- Present)

17. The break-up of the Soviet Union and the Gulf War of 1990-1991 reshaped the basic political order of the Middle East. The US-backed changes made most of the Arab countries reassess their attitude towards Israel. For its part, Israel seized upon this opportunity to offer a series of bilateral peace negotiations with its immediate neighbours and multilateral talks with other Arab countries to build "the New Middle East". Water and other environmental issues have been among the most important key points in such negotiations.

18. In bilateral talks between the Israelis and the Palestinians, and in a final settlement, Israel would have to give up the West Bank, which provides about 25% of its fresh water supplies, and give its control of the southern portion of the Jordan River. But Israel seems unlikely to agree to this.

19. Since the inauguration of the Madrid talks, the Israelis have been busy working on two multilateral proposals. One was to establish a regional system to transfer water from areas of plenty to areas of need. The second was for desalination. The Israelis were well aware that over-development will aggravate the water problem (Peres, 1993), because the region's people cannot live with the status quo for another 10 to 20 years, an alternative must be found; they suggested an integrated regional development initiative.

20. Current peace negotiations seem to offer a new bargaining table on water issues for both parties. On the one hand, Arabs are trying to regain the land and water they have lost, while on the other hand, Israel is haggling to obtain access to new supplies of water without losing its regional dominance.

INTERNATIONAL RELATIONSHIPS FROM WATER PERSPECTIVES

International River

21. It's the river which crosses the lands of two or more bordering states, like Tigris, Euphrates, Nile in Asia, or a bordering river which separates two or more states, like the Reins on the Swiss- German borders and on a part of Franco- German border in Europe and Jordan River in Asia.

22. These rivers imply on the riparian states the responsibilities of organizing the use of their waters in sailing purposes, and non-sailing as for irrigation, domestic and industrial use.

International Relations Among Nile Basin

23. The relations between the countries of Nile basin are ruled by some agreements and treaties, signed previously, during the British, French and Italian colonization over Egypt, Ethiopia and the rest of the area. The Egyptian policy affirms the rights in Nile's waters and in having reasonable share in incomes resulting from decreasing the water debits on its sources, and on the necessity of negotiating with it before any of the Basin's countries starts any arrangement that could affect the actual and future incomes.

International Relations Among Jordan River's Basin

24. Jordan River's basin includes Jordan, Syria, Lebanon and Israel. The international reactions take place within it on conflict basis, because of its situation in a very hot area of the Arab-Israeli struggle.

25. For the Zionists, the extreme concern in agriculture hides the more concern in water resources as an essential factor for a successful agriculture, and thus settlement. The result was that Israel exhausted all its controlled water resources, which made some experts believe that the Israeli economy could get more benefits in abandoning the expensive and highly supported agriculture instead of seizing more Arab waters to expand its agricultural product which lacks skill. For this reason, Israel declared in May 1991, after the period of dryness (1987-1991), that it will reduce the share of irrigated agriculture water in a rate of 5% gradually.

International Efforts

26. The international community, in the 20th century, worked hard to organize the relationships between the riparian states, some of the results were :

- a. Versailles Conference (1919).
- b. Barcelona's Conference (1921).
- c. US Announcement (1933).
- d. Egypt- Sudan Accord (1939).
- e. Fair use of International Rivers' Waters Agreement.

UN Global Accord

27. Since 1970, the International law committee was assigned to formulate the "law of exploitation of the international riverbeds' waters in non-

sailing purposes". The result came on 21/5/1997 when the general assembly signed a new international accord for the non sailing use of international riverbeds, which was a "Frame Accord" for international rivers, and consisted of 37 articles in addition of a special annex for arbitration, which concentrates on the non sailing use of international water riverbeds and the three principles related to it.

ARAB, ISRAEL AND TURKEY'S WATER RESOURCES

28. **General.** In 1994, these resources have been estimated by the Arab United Economic report as 338 BCM/y, out of which only 158 billions are used. EXAD report assumes that this quantity will remain invariable, while the future needs will increase to 268 BCM in 2000, 402 BCM in 2010, 492 BCM in 2020 and 620 BCM in 2030, which will create an increasing water deficit jumping from 30 BCM in 2000 to 282 BCM in 2030.

29. Arab Orient Countries

a. **Lebanon.** Water resources in Lebanon will remain invariable (4.6 BCM/year) till 2025, showing no deficit. With the stability of resources and the population's increase from 4 millions in 2000 to 6 millions in 2025, the individual share will decrease from 1150 m³, to 767 m³, thus an appearance of a slight water deficit.

b. **Syria.** The total water resources in Syria reached 56.44 BCM in 1990. This could cover the 8.95 BCM Syrian needs of water, so there will be no deficit until 2048 when the population will reach 66 millions.

c. **Jordan.** Jordan lives a chronic and increasing deficit in water resources, with respect to the needs; the individual share is low and continuously decreasing.

d. **Iraq.** The total used water in Iraq is 42.56 BCM, The water resources in Iraq can barely satisfy the actual needs, and will be unable to satisfy the future ones, with the population increase.

e. **Nile Basin Countries.** Nile basin countries include: Egypt, Sudan, Ethiopia, Kenya, Tanzania, Uganda, Congo, Rwanda and Burundi. In this research I'll only develop the present and future situation of Egypt waters.

(1) Egypt

(a) In year 2000, the total water resources were 74.05 BCM, with a population of 62 million. While the total water needs were 70.50 BCM. The individual share recorded a decrease of 27m³/y, which could be an indication to a probable high pressure over the water resources.

f. Israel And Turkey

(1) **Israel.** Israel reduced its agricultural exploitation of water, down to 40% according to a plan laid in 2000, with an increase in other purposes up to 52%.

(2) Turkey.

(a) The total water resources in Turkey are 195 BCM/y, while water needs did not exceed 19.5 BCM in year 2000.

(b) In year 2025, the needs are estimated as 26.28 BCM, with an increase in population from 68 million to 91 million.

(c) Turkish water resources will always be able to cover the needs, thus Turkey is offering to sell water, and effectively, it's selling 500 MCM/y to Israel.

STRATEGIES OF ISRAEL AND TURKEY/ PROJECTS IN THEIR WATER WAR

Israeli General And Water Strategies And Project

30. **General.** The Zionist expansion ideology originated from their Bible, while Turkey, the rich in water resources, was encouraged by USA to play a greater political and economical role in the Middle East and to contribute in solving the water problem by supplying Israel, Syria and other countries in the region by means of huge pipelines. For this reason, Shimon Perez, ex foreign affairs minister of Israel, said in 1991: "The parameters of the new Middle East ruling equation are going to be: Gulf petrol, Egyptian hands, Turkish waters and Israeli brains"¹.

31. **Israeli Expansion Strategy.** The first Zionist conference, in Pal (Switzerland) 1897, the statements of Israeli leaders in various occasions, and the map drawn in the Israeli Knesset, in which Israel is extended from Nile to Euphrates, as the promised land, constitute a proof that the whole Palestinian territory of 27000 km², is not sufficient to contain the huge number of Jews scattered all over the world.

32. **Israeli Land Partition Strategy.** Plans were drawn to support this strategy, aiming the partition of the Middle Eastern states into religious conflicting regimes and controlling water and petrol resources and communication lines, nets and media; starting by isolating Syria, neutralizing Egypt, reassuring Jordan and containing the PNL, in order to reveal Israel as the sole allied against the Islamic danger which became the substitute of the ancient communist regime.

33. **Israeli Water Strategy.** It started by controlling Jordan River then lake Tiberias, and drying lake Houla, then extending to Egypt to reach Suez Canal, up to the red sea, then occupying sheikh mountains of Syria, which form the real water tank of Palestine, then moving towards Lebanon to control its water resources and rivers. By this we notice the full emergence of water strategy in the political- military- security strategy, based on the consideration of the Israeli rights in waters without any consideration of the international laws in this regard.

THE PROBABLE SCENERIO OF THE WATER'S FUTURE IN THE REGION

War Or Peace Probabilities

34. The series of Israeli accords with the Palestinians and the Jordanians, gave Israel control over 40% of Jordan River's waters or 565 MCM/y. Therefore, by analysing the earlier mentioned developments in the region, three scenarios could be concluded which is discussed in the subsequent paragraph:

35. **The Scenario Of "NO WAR-NO PEACE" Situation.** Before withdrawing from South Lebanon, Israel tried to keep control over the southern waters through two choices; either by withdrawing and arranging bilateral deals that can separate between the Lebanese and Syrian paths and assure its southern waters flow towards it; or by Invading and creating instability in the internal Lebanese situation; but the decision of withdrawing was adopted, since the first invasion resulted in expanding the resistance and its ability to cope with any new situation.

36. **The Scenario Of WAR.** The Zionist doctrine favours this choice, especially with the presence of an international convenient atmosphere assured by USA. This war decision can have four possibilities:

a. **War Against Syria.** Shelling and destroying the vital Syrian strategic constitutions and tactical positions could accomplish this possibility. But this method may bring negative implications over Israel itself, with a Syrian retaliation using all kinds of conventional and non-conventional weapons, which may lead to the complete destruction of some Israeli cities.

b. **War In Purpose Of Occupying Jordan.** This choice is the most likely and dangerous². Since it inflicts fewer casualties to Israel, especially if offering some reparations to some regional regimes followed it; but it may cause the Syrian adoption of the military solution to liberate Golan Heights, since all the peaceful options will then be closed.

c. **A Turkish War.** In this possibility, Turkey would be waging and managing the war, and the expected front will be the Euphrates basin against Iraq and Syria. But this war possibility is minimal, because of the Turkish concern in the internal matters, the Iraqi suffering from the implications of the second Gulf war, and the Syrian focusing on the Israeli front.

d. **War On Nile's Basin.** Ethiopia has no capability to conduct an armed conflict, in face of Egypt, or on a Sudani- Egyptian front, unless supported by a superpower or Israel.

37. **Peace Scenario.** The peace, following a future war in the region, may reflect the image of that war results, thus defining the water future in the region. Therefore, applying the deterrent Israeli peace, will definitely lead to the necessity of the creation of a mid-Eastern order, in which Israel will be the center state; thus the realization of the Israeli water project.

CONCLUSION

38. Water policy and diplomacy in the Middle East has been subjected to significant pressure in recent years from environmental and political factors. A study of the evolution and dynamics of Israel's water diplomacy indicates that its policy makers having understood the limitations of their arid environment are looking both to the sea and to the region's wetter lands to generate more water instead of coming to accept the need to live within their hydrological means. Current peace negotiations seem to offer a new bargaining table on water issues for both parties. On the one hand, Arabs are trying to regain the land and water they have lost, while on the other hand, Israel is haggling to obtain access to new supplies of water without losing its regional dominance.

39. It's the river which crosses the lands of two or more bordering states, like Tigris, Euphrates, Nile in Asia, or a bordering river which separates two or more states, like the Reins on the Swiss-German borders and on a part of Franco- German border in Europe and Jordan River in Asia. These rivers imply on the riparian states the responsibilities of organizing the use of their waters in sailing purposes, and non-sailing as for irrigation, domestic and industrial use. Adoption of this method could bring a sense of managing water in this region.

40. The continuous water deficit in the Arab countries is due to several factors, such as the increasing aridity, pollution, waste, population increase, cultivating newer lands, and especially being the downstream countries of the greatest rivers that cross them; in addition to the Israeli control over a great part of inner and superficial waters in Palestine, and Golan heights; which ties the Arab water security to the overall regional security. In the Middle East, no comprehensive water development can take place without peace, and conversely no peace is possible or sustainable without such development.

RECOMMENDATIONS

41. In order to assure the Arab water security, the following recommendations are made:

a. Identifying the real present and future Arab water needs then Laying a local water plan in each Arab country, then a regional plan, and finally an Arab common water strategy.

b. Blocking the way for any Israeli interference in the relations with Turkey and Ethiopia, by ameliorating and increasing the religious and economic levels with them.

c. Adopting the latest agricultural and irrigation technologies.

d. Building water research centres and universities, in cooperation with the international organizations, especially the UN organizations, committees and programs.

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