Research Report

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Position: *President*

Introduction

Water secures the fabric of society. Water is, in other words, essential for life, for livelihoods that produce food and for all other livelihoods as well. Water also secures economies, serving as an input to diverse productive and service activities, which have widely different water requirements.
As it is fundamental to the social, economic, and environmental sustainability of every community and every political economy, water is a strategic resource. In political economies where water sustainability is narrowly defined as water self-sufficiency, water will be identified as a particularly strategic resource. Water insecurity can become an issue of high politics. Water politics plays a role in various areas of politics in the Middle East, and it is particularly important in one of the defining features of the region's political landscape. Concerns over water have significantly helped to shape the Middle East's political development.

Definition of Key Terms

Water Security
Water security is defined as the capacity of a population to safeguard sustainable access to adequate quantities of acceptable quality water for sustaining livelihoods, human well-being, and socio-economic development, for ensuring protection against water-borne pollution and water-related disasters, and for preserving ecosystems in a climate of peace and political stability.

The Middle East
The Middle East is a large and diverse geographical area located in southwest Asia and northeast Africa. It extends over 2,000 miles from the Black Sea in the north to the Arabian Sea in the south, and about 1,000 miles from the Mediterranean Sea in the west to the mountains of Iran. Nowadays included within the middle are Egypt, Iran, Turkey,

Iraq, Saudi Arabia, Yemen, Syria, United Arab Emirates, Israel, Jordan, Palestine, Lebanon, Oman, Kuwait, Qatar, Bahrein and Cyprus.

Riparian
Relating to or situated on the banks of a river.

General Overview

Water is integral to food security and environmental security, and food production and environmental services are the biggest users of water. They are also in mutual competition, especially in economies where food needs accelerate in response to rising populations, such as in the Middle East. The impacts of such competition can be felt within a political economy where environmental services are impaired by the withdrawal of water from the environment for food production. Or they can impact a neighbouring riparian region, where additional irrigation reduces the flow of water across a border, affecting the environmental services and economic security of a neighbouring state.
Middle-Eastern states want to achieve food self-sufficiency, food security or other social and regional development objectives, claiming them to be strategic national goals and so securitising water relations.
This region has a history of political conflict, making effective cooperative water management difficult. And there have been recent conflicts over water usage. At the same time, climate change is reducing the supply of water, and groundwater is being unsustainably mined.
In the Middle East, water consumption is increased, while water availability is reduced. If this continues, deep water insecurities will grow alongside their counterparts of food and energy breakdown.
So the region of the Middle-East is very "water insecure," but no politician will admit that the region's political economies are water insecure. Water security has definitely entered into "high politics" in this region.
Clearly, water security in this region is and will remain a high priority, and a solution should be found.

Major Parties Involved

Iran
Iran's problems with water stem from a rapidly growing population that is disproportionately located respective to the water sources, development projects that trade off long-term water security for short term economic gains, and a deeply fragmented and politicized water management system. Also, long gone are the days where there was a sustainable groundwater management, because now energy to pump water is deeply and perversely subsidized to be used for inefficient agriculture. Iranian water security is surely pivotal to the rest of the region as well, because Iran's place in the region as a broker of power between Russia, Hamas, Iraq, and Syria—all of which are centres of conflict right now— should not be underestimated.

Israel and Palestine

Water issues reflect a central aspect of the nature of the Israeli-Palestinian conflict; namely, the original influx of an additional large population mass to a relatively fragile geographical area of land, and the massive expansion of previously existing populations.

Riparian states in the Euphrates-Tigris Basin
Water security of riparian states in the Euphrates-Tigris Basin is increasingly under threat. Continuing conflict over the allocation of water is failing to produce a tripartite agreement between Turkey, Syria and Iraq. Massive hydro-development in southern Turkey threatens to reduce Syrian water on the Euphrates by over 40 percent, and Iraqi water by over 80 percent. In Syria and Iraq there have been recent conflicts over water usage. The riparian countries of Turkey, Syria, and Iraq states gained independence from 1923 to 1946, and this launched ambitious hydraulic missions in each country. However, as more dams were built, tensions grew from the 1960s onward, making it difficult to establish effective institutional rules to settle water disputes and establish guidelines for river water flowing between the borders, and even in the agreements that were made, little progress was made in dealing with fluctuations of water flow and failed to accommodate the variations from climate change. In the end, talks between the countries deteriorated.

Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and the United Arab Emirates (UAE)
Again, large population growth alongside increased economic growth, urbanization, and industrialization, the area has seen enormous stress placed on the fragile water resources. Like Iran, these countries have large oil revenues that have helped spur these development projects. Each of these countries are using "hundreds to thousands times more water than sustainable recharge would allow" while climate change is reducing the overall supply of water.

Previous Attempts to solve the issue

There have been made several short-term economic projects at the expense of long-term water sustainability. These large water projects may build capacity domestically, but they change the social context for using water and they also export pressures across borders in a region that has a long history of violent conflict and humanitarian crises.

Possible Solutions

A solution for Middle Eastern governments is to ameliorate their water deficits by importing "virtual water". Virtual water is the water embedded in water intensive commodities such as grain. It requires 1000 cubic meters of water to produce one cubic meter of wheat. By importing a cubic meter of wheat, a water-poor economy avoids all the economic costs and political stress of mobilizing 1000 cubic meters of water. The Middle East imported about 25 per cent of its water requirements as virtual water in the year 2000. Virtual water will provide 50 per cent of the region's doubled water requirements in 2050. Virtual water provides an economically invisible and politically silent solution to what would otherwise be very painful high political issues of water insecurity. However, this solution will have negative effects to some farmers in this

region. Furthermore, the de-emphasis of the actual water predicament of the region through the accessibility of virtual water slows the adoption of sound economic and environmental approaches to the use and allocation of water.

Other solutions are desalinization and investment in foreign land for food. However, these solutions come with important social and ecological costs that cannot be justifiably ignored, including the ecological costs of salt deposits from the plants, and the challenge of equitable land tenure in foreign investment in agriculture.

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