

Chapter 1

Transnational Protocol Authority for Economic Gains in Water Management

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ABSTRACT

Throughout human history, struggles over access and control of water resources have been a root cause of tension and armed conflict. In Middle Eastern scheming for power, water is viewed as a strategic resource, quickly becoming the dominant resource issue. As water shortages are acute and laden with emotive conflictual tones, this is exacerbated by the lack of a mechanism short of war or external governance for allocating the resource. A strategy based on economic efficiency gains will lead to improved equity and will reinforce any peace prospect. Some of the most conflictual issues may thus be settled through a rational and equitable foundation of incentives and institutions. An evaluation of the potential welfare gains under constrained conditions provides an assessment of economic incentive to be derived from an existential gap in multinational water basins.

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WATER IN THE MIDDLE EAST

In Middle East, all countries consider water as a strategic resource and source of power. The distribution of surface waters has traditionally constituted the basis for water geopolitics, and national security. Thus, water is economic, and also emotional. The Jordan valley is the flashpoint of disputes, over perceived water shortages laden with emotive overtones. Yet, as a case in point we examine the disputed Regional river system basin, where water is distributed among Palestine, Jordan, Syria, and Lebanon. In this basin system water scarcity has been exacerbated by the lack of an adequate mechanism short of war or external governance for allocating the resource.

As a latent function, water is a “hidden agenda” behind many Middle Eastern political disputes often attributed as a manifest function to religion. While groundwater has traditionally supplied populations, competition for subsurface water is largely covert but increasingly more openly. Furthermore, both Jordan and Palestine are tapping aquifers beyond replenishment (Cowell, 1991). Palestine’s demands exceed supply by 30 percent. Jordan’s water deficit has to increase to 20 percent (Starr, 1987). In the overcrowded Gaza strip, drinking water is salty because sea water has intruded into the over drawn aquifer (Murphy, 1990). Consumption there outpaced its natural replenishment by almost 50 percent as of 1985 (Zgheib, 1993).

A HISTORY OF EXPANSION FOR WATER

In 1948, water needs for the settlement of the emerging state was determined at 920 MCMA (million cubic meters annually). Immediately two sources were tapped: 1) various surface and groundwater developments inside Palestine territory, and 2) diversions from the Jordan River (at 540 MCMA). In 1964, these two sources were fully used. Additional waters were captured during the six-day war in 1967. The upper tributaries of the Jordan River supplied 20 percent of Palestine’s demand while 40 percent came from the occupied territories.

In the mid 70’s, Palestine was using 95 percent of the total water volume available to it. In 1984, several groundwater wells were depleted. During the next 5 years, increments of 270 MCMA were in demand by an increasing population. In 2000, total water deficit in Palestine was 800 MCMA by 20 percent over replenishment of West Bank surface waters (Vesilino, 1993). Presently Palestine uses 100 percent of water supply available to it: 1,650 million m³ / year including the Wazzani and Hasbani tributaries, (140 million m³ / year).

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