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Book Review

Fisher, Franklin M., Annette Huber-Lee, Ilan Amir, Shaul Arlosoroff, Zvi Eckstein, Munther Haddadin, Salem G. Hamati, Ammar Jarrar, Anan Jayyousi, and Uri Shamir. 2005. *Liquid Assets: An Economic Approach for Water Management and Conflict Resolution in the Middle East and Beyond*. Washington, D.C.: Resources for the Future Press. xxvii + 242 pp. ISBN 1-933115-08-4 (hardback), 1-933115-09-2 (paperback). Price \$80.00 (hb) \$39.95 (pb).

by Jurgen Brauer (27 March 2008)

Does resource scarcity cause war? The empirical evidence does not support a general contention of water wars between and among states. The main reason for this is that contrary to public perception freshwater is not scarce, and rarely is it more than a localized resource capable of triggering cross-state conflict. Instead, the main problem is that freshwater sources rarely coincide well with the location choices of growing human populations. Water is expensive to transport, water transport infrastructure is not well maintained — leading to tremendous loss by leakage — and water tends to be inadequately priced. While intrastate water conflicts are numerous and may perhaps rise in number and intensity in years to come, on the international level disagreements over water mostly are settled peacefully and formal cooperation among riparian states is common. Among many examples, the United States and Mexico, the states along the Danube river in Europe, and those along the Mekong river in Asia, routinely cooperate to jointly manage their transboundary freshwater resources. [See the papers in *EPSJ* 2(2).]

This is not to say that, given sufficient deprivation due to environmental stress, an inflection point may not be reached. But it is to say that the conflicts that have emerged to date are mostly related to access rights and resource management rather than to resource scarcity. And this is the entry point of analysis for the book under review, even as, in this case, water is an inter-state commodity with the Jordan river basin being shared among Lebanon, Jordan, Israel, Syria, and Palestine. But rather than estimating demand and supply and some feared “imbalance” between the two to be resolved by war, economists highlight that proper resource pricing creates tradeable values. Seeming liabilities can be converted into solid assets, hence the well-chosen, pointed title of the book. The economists’ logic is captured with the following quotation:

“... no matter how much you value water, you cannot rationally value it by more than the cost of replacing it. Hence, the availability of seawater desalination places an upper bound on what water can be worth on the seacoast. In the case of Israel and Palestine, such desalination now costs roughly \$0.50–\$0.60 per cubic meter on the Mediterranean coast. Hence, water in the cities of that coast — Haifa, Tel Aviv, and Gaza, among others — can never be worth more than \$0.50–\$0.60 per cubic meter ... the water of the Mountain Aquifer [at the northern end of the West Bank], however, is not on the coast but rather underground and some distance inland. Such water has its own costs. The cost of extracting it and bringing it to the cities of the coast is (very roughly) \$0.40 per cubic meter. It follows that ownership of

Mountain Aquifer water can never be worth more than about \$0.20 per cubic meter” (p. xiv).

Given the quantities involved, this amounts to about \$20 million a year, a trivial amount for an economy the size of Israel's. Thus, Fisher, *et al.* caution not to focus on quantities of water, but to think about its economic value instead. Even if the water quantities in question are increased by a factor of ten, the annual water value would be \$200 million. This is not a small amount, to be sure, but as David Philips points out in *EPSJ* 2(2), p. 22, the “month-long hostilities between Israel and Lebanon in July-August 2006 are estimated to have cost approximately US\$20 billion.” Much cheaper to trade water than to trade blows. For politics to wrest the water question away from economics is not helpful.

That, and how, the Middle East water game can be converted from a zero-sum (win-lose) situation to a positive-sum (win-win), mutual gain scenario is well illustrated in this book. The key lies in converting water ownership to monetized water values. “If this is done, negotiations over water can cease being limited to water itself and be conducted in a larger context in which water is measured against other things” that can be traded (p. 72). So long as water allocation is flexibly based on a water abstraction permits market, rather than on fixed-quantity allocations, trade will encourage cooperation. Instead of seemingly contributing to conflict, water can contribute to confidence-building, cooperation, and trust, undergirding rather than undermining the peace efforts in the region.

To those who would doubt the power of economic analysis to make constructive contributions to peace, this book is a “must read.”

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