

# THE CONCEPT OF WATER RIGHTS IN ISLAM AND WATER RESOURCE STRESS IN THE MIDDLE EAST: ECONOMIC IMPLICATIONS FOR INTERNATIONAL SECURITY

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## *Introduction*

One of the major socio-economic problems facing the Middle East is the scarcity of water resources. Recently, several studies by the World Bank and the United Nations have underlined the seriousness of the problem by projecting severe water stress<sup>1</sup> in the region early next century, warning that political conflict is likely to arise over watercourses in the area.<sup>2</sup> In addition to the Euphrates, a number of internationally shared river basins (Jordan, Litany, Nile) as well as shared aquifers have stress levels

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1 Water resource stress is defined by the United Nations as a situation in which a "country's annual renewable freshwater resources fall to around 1,700 cubic meters per capita..., and that, when this rate drops below 1,000 cubic meters per capita, that country is likely to suffer chronic water scarcity, that is, to have its water availability then considered as a severe constraint on socio-economic development." See United Nations, *World Economic and Social Survey, 1996* (New York: United Nations, 1996), 259-276. We can look at the problem in another way. In the Euphrates Basin, land with a potential for irrigation is estimated at just over 6 million hectares. Water is available for irrigating about 2 million hectares (see for example, Walid A. Saleh, "Development Projects on the Euphrates", in Abdel Majed Farid and Hussein Sirriyeh, *Israel and Arab Water* (London: The Arab Research Center, Ithaca Press, 1985), 69-74.

2 World Bank, *World Bank Report, 1992, Development and the Environment*, (Washington, D.C.: 1992). See also United Nations, *ibid*.

that could develop into conflicts. A recent Central Intelligence Agency paper identified ten regions where war could erupt over water resources—most of these regions are in the Middle East.<sup>3</sup> According to the United Nations, by the year 2025 “as much as two thirds of the world population would be under stress condition.”<sup>4</sup>

The likelihood that water will persist to generate tensions among states in the Middle East remains high. Wars have already been fought in the region over water resources. Miriam Lowi identifies friction over water and Israel’s plan for achieving water security as the major causes of a series of Israel-Arab conflicts.<sup>5</sup> The warning alarm of potential water conflicts has been frequently heard in recent years. As noted by Naji Abi-Aad and Michel Grenon, the Middle East is not the only region where:

water crises and disputes exist, but it is the region in which the potential for conflict over water is at its most extreme. The disputes that divide the area over borders, religion and race today may pale into insignificance against the potential future conflicts over water. Water is so vital in this most volatile of the world’s troubled regions that it could be a force for peace, inducing old enemies to co-operate for the common good, but history shows that it is most likely to be a disruptive cause of conflict. Indeed, for those who possess water, it is usually a means of leverage and a way of projecting power, to those

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<sup>3</sup> J. Bulloch and A. Darwish, *Water Wars: Coming Conflicts in the Middle East* (London: Victor Gollancz, 1993).

<sup>4</sup> *The Guardian Weekly*, January 25, 1995.

<sup>5</sup> M. R. Lowi, *Water and Power: The Politics of a Scarce Resource in the Jordan River Basin* (Cambridge: Cambridge University Press, 1993). See also T. Naff, “Sources of Potential Conflict in the Persian Gulf: The Water Factor”, in G. Kemp and J. G. Stein, eds., *Power Keg in the Middle East: Struggle for Gulf Security* (Washington: American Association for the Advancement of Science, 1995), 297–318.