

Transboundary Environmental Impact Assessment of Large Dams in the Euphrates-Tigris Region: International Law Binding Iran, Iraq, Syria and Turkey

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Mesopotamia – the land between two rivers – was historically perceived as a freshwater-rich region in the arid Near East. Despite the intense fluctuations of the flow of the Euphrates and the Tigris, their water allowed the significant advance of the Neolithic and Bronze Age civilizations. Thus, while not new to the desert regions of the Middle East, freshwater scarcity is a rather recent issue on the banks of the Euphrates and Tigris, as is the international dimension of freshwater distribution and utilization. Significant international tension over the rivers' water did not occur before the first large dams were constructed in the river system. Dams impact rivers unlike any other water development. They change a river's defining characteristic: its flow. While early dams were too small to substantially affect a river, technological advances in the early twentieth century allowed for the construction of dams large enough to fundamentally alter a river's flow regime. Dams of such scale are commonly referred to as 'large dams'.

Construction of the first large dams in the Euphrates–Tigris river system began in the 1950s, with the Iraqi Dukan Dam being completed in 1959 on the Little Zap, a Tigris tributary. Turkey followed shortly after with the Keban Dam, the construction of which began in 1966 on the Euphrates. Syria finalized its first large dam, the Tabqa Dam, on the Euphrates in 1973. While neither the Euphrates nor the Tigris ever enter Iran, significant tributaries of the Tigris spring from the Iranian Zargos Mountains, making Iranian developments on these tributaries relevant in regard to the utilization of the Tigris.

Considering the river system's intensive development, there is demand for monitoring human impact. A means to assess the effects of these developments could be environmental impact assessment (EIA). EIA is a rather new concept to many domestic legal systems and international law. While the frequency and sophistication of EIA regulations deviate, their basic principles are very similar worldwide and have become increasingly relevant as regulatory tools in international law.

This article analyses international law on transboundary EIA as binding between the four riparian States of the Euphrates and the Tigris, and examines how it regulates the implementation and operation of dams on the rivers. The article first provides an outline of the use of dams in the Euphrates–Tigris region. This is followed by an analysis of how the dams implemented and operated on the two rivers are regulated by domestic and international law governing transboundary EIA.

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