

BRIEFER

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Eye on Iran: Lake Urmia, Water, Climate and Security in a Volatile Region

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The strategic position of Iran, straddling the energy-thruway that is the Strait of Hormuz, bordering, among other nations, Iraq, Turkey, Afghanistan and Pakistan, and sitting a mere 1,000 miles north-east of an anxious Israel, is unquestionably important. However, while the recent focus has been on whether or not Iran has the capability and the will to turn its domestic nuclear energy program into a nuclear weapons program, another human and economic disaster looms relatively unnoticed: the drying up of Lake Urmia in the country's northwest – the largest lake in the Middle East. Given the current volatile political landscape surrounding Iran, this is worth a closer look.

The lake's importance

[According to the United Nations Environment Program](#) (UNEP), “The watershed of the lake is an important agricultural region with a population of around 6.4 million people; an estimated 76 million people live within a radius of 500 km (8).” The lake is also a key source of brine shrimp, a staple of the economy in the region.

Why it's drying up

A recent study by [Hassanzadeh et al.](#), demonstrated that “65 per cent of the decline was from changes in inflow caused by climate change and diversion

of surface water for upstream use, with the remaining balance due to construction of dams (25%) and decreased precipitation over the lake itself (10%).”

Impacts

A UNEP [report](#) synthesizing a number of recent studies paints a concerning picture about the potential human consequences of a dried up Lake Urmia. As stated in the report, “...continued decline would lead to increased salinity, collapse of the lake's food chain...wind blown “salt-storms,” alteration of local climate and serious negative impacts on local agriculture and livelihoods as well as regional health...” To many, the phenomenon is worryingly reminiscent of the economic devastation that followed the drying up of the Aral Sea. And if the [Aral Sea case](#) is any guide (its drying is believed to have resulted in [shorter and drier summers](#) in the area), the lake's retreat could have a non-trivial impact on the region's climate.

In context

While it is difficult to plot the precise security consequences of this scenario, it is safe to say that the drying lake adds another element of uncertainty to the region. As agricultural lands are harmed, millions of livelihoods will be affected. This could lead, and in fact has already led, to political insta-

bility. For example, [recent protests](#) critical of the Iranian government's inaction on the lake were followed by a heavy-handed government crackdown. Furthermore, the drying lake will further inhibit legitimate economic activity that is already stressed due to international economic sanctions currently imposed on the regime.

Takeaway

For obvious and understandable reasons, the current public discourse on Iran is focused on the country's nuclear program, its activities vis-a-vis the Strait of Hormuz, and the subsequent impact on global oil prices. However, a broader awareness

of the internal dynamics of Iran is important for those in the international community making decisions about the country, and the surrounding region. The drying of lake Urmia is potentially a very important element of Iran's internal economic health and stability, and should be included in any analysis of the nation, and the surrounding states. The effect of climate change, seemingly both significant and immediate in this case, can also not be ignored.

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