



Climate Change : Natural Disasters

Water Conflicts: Fight or Flight?

The spectre of international water wars is often raised as a potential result of water scarcity. But how real is the threat?



A Palestinian carries empty canisters (Photo: Reuters)

Water has always been both a blessing and a source of conflict. There are biblical accounts of fights over water. And the English word "rivalry," derived from the Latin "rivalis," basically means "one using the same river as another."

The tensions have grown with the number of people living on Earth. Recent humanitarian catastrophes, like the genocide in Rwanda or the violence in Sudanese Darfur have all been linked back to water conflicts. The potential for more water-related rivalry seems enormous.

On the international scale, the waters of a number of major rivers — such as the Mekong, Indus, Nile, and Amazon — are shared between two or more countries. International river basins cover 45 percent of the Earth's land surface. They source about 40 percent of the world's population, and account for approximately 60 percent of global river flow.

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If India wants to dam a Himalayan river that ultimately delivers water to Pakistan, tensions will arise. Likewise, Egypt has an awkward relationship with Ethiopia, in whose highlands the Nile begins its journey to the Mediterranean. Moreover, the deleterious effects of climate change — shortened monsoons, drought, rising seas, and intense rainfall causing soil erosion — could well restrict the natural supply of water just as demand is peaking.

Take comfort in history

History, however, shows that scarce water resources seldom lead

countries to war. Competition for water can lead to violent disputes at the local and regional level like in Sudan and Rwanda, but it is rarely the primary reason that countries go to war.

“Those who have studied water conflicts find almost no conflicts where water triggered the conflict,” says Daniel Zimmer, executive director of the World Water Council. “Water is ultimately a source of collaboration rather than war. It is so vital you cannot afford to have a war over it.”

Zimmer points to this month’s agreement between Turkey, Syria, and Iraq to jointly establish a water institute to study and monitor trans-border water resources. Instead taking up arms, the three countries decided to take the first steps towards a permanent, peaceful solution over their longstanding water disputes.

In the past, Iraq had frequently complained to the United Nations about Turkey’s construction of dams on the Tigris and Euphrates rivers, arguing that Turkey had failed to release sufficient water from its dams. “Contrary to what some people claim, a war over water resources in this region won’t emerge,” said Turkey’s Environment and Forestry Minister Veysel Eroğlu. “We prefer developing joint projects.”

Another potential flashpoint is the Mekong river basin, shared by Thailand, Vietnam, Laos, Cambodia, and China, countries that fought wars against each other in the 20th century.

The Mekong River Commission has thus far been able to deal with disputes peacefully, largely through its ability to distribute accurate information to all states concerned. Since 1948, approximately 295 such international water agreements have been negotiated, dealing effectively with issues such as water quantity, quality, economic development, and hydroelectric power.

Local conflict, internal migration

But at the local level relations are often more fraught. Tension over the allocation of water resources is far more prevalent within countries’ own borders. Increasing agricultural production by increasing water harvesting, for example, may leave less water for downstream users.

In Darfur, access to water and land has been a major factor in a conflict between black farmers and Arab nomads. Drought and desertification in North Darfur led the Arab nomads to move into South Darfur, where they came into conflict with black African farmers.

In China, the government has been criticized by local officials in north-western provinces for diverting water from these regions to Beijing to flush out the city’s polluted rivers and lakes in time for the Olympics. This threatens the lives of millions of peasant farmers, they argue. The average annual per capita water supply in China is 348 cubic meters, well below the United Nations definition of “water shortage,” which is anything below 1,000 cubic meters. Beijing’s supply is only 235 cubic

metres.

Despite these tensions, there is ample evidence that if water, and therefore food, is scarce, people are less likely to fight for it than pack up and go looking for it somewhere else. Environmental refugees already number some 25 million, according to the International Organization for Migration (IOM). And UNESCO expects that between 1997 and 2020, some 60 million people will move from desertified areas in Sub-Saharan Africa towards Northern Africa and Europe.

This south-north migration is nothing, says Zimmer, compared to internal migrations within Africa itself. "The Ivory Coast has almost tripled its population due to migration in the last 20-30 years, and that has caused a lot of problems," he says.

Most of these internal refugees settle in bloated megacities, a trend that is a bigger threat than any other linked to scarce water resources, says Zimmer. Trapped in a deteriorating environment without access to fresh water and plagued by rising food prices, refugees and locals alike may be prone to poverty, disease, and unrest.

Mexico's "tortilla riots" in 2007, triggered by higher food prices, resulted in violence and political upheaval. "The crisis is a food crisis, but that is, of course, very much linked to water because food is the first consumer of water," Zimmer says. Tensions related to water, it seems, are inevitable. History shows that cooperation between water rivals is the only way to overcome these tensions for water is too precious a commodity to fight over.

editor: James Tulloch

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