COMMENTARY • The Next Steps for Environment, Population, and Security

From Environmental Peacemaking to Environmental Peacekeeping

owhere is the notion that water causes conflict more widespread than in the Middle East. Former Secretary General of the United Nations Boutros Boutros Ghali warned in 1985, "The next war in the Middle East will be fought over water, not politics" (Vesilind, 1993, page 53). More than any other environmental resource, water is used to bolster claims that environmental degradation and resource scarcity produce conflict (e.g., Homer-Dixon, 1994). Over the last few decades, scholars have sought to identify how competition over fresh water leads to interstate conflict (Gleick, 1993; Ohlsson, 1995; Elhance, 1999).

The emphasis on conflict, however, has overshadowed the less provocative—but no less major-premise that water is more likely to induce cooperation than conflict, even in arid regions with scarce or unevenly distributed freshwater supplies (Wolf, 1998). For example, contrary to predictions that water might spark interstate conflict in post-Soviet Central Asia (Panarin, 1994; Smith, 1995), water motivated cooperation among the five newly independent states of Kyrgyzstan, Kazakhstan, Tajikistan, Turkmenistan, and Uzbekistan (Weinthal, 2002). And despite all the hype about the Middle East's incipient water wars (Gleick, 1994; Starr, 1991), Israeli and Palestinian water managers continued to cooperate—even as other forms of economic and security cooperation collapsed—after the second intifada began in 2000 (Rinat, 2001).

While conflict and violence still dominate the environmental security discourse, new research focusing on environmental peacemaking has challenged the assumed link to conflict. Conca & Dabelko (2002) suggest, "Environmental cooperation can be an effective general catalyst

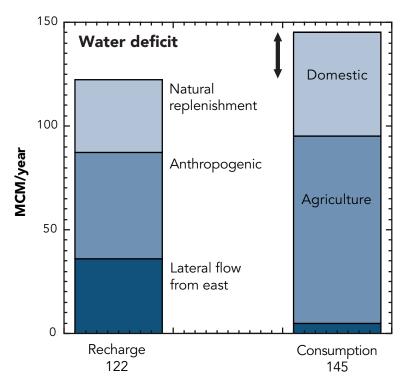
for reducing tensions, broadening cooperation, fostering demilitarization, and promoting peace" (page 9). While it is still not clear if environmental cooperation can lead directly to peace, we should explore the environment's potential as a peacemaking tool in this increasingly unstable and conflictual world. During the next decade, three areas deserve our attention:

- Are water resources more likely than other resources to provoke conflict and/or engender peace? Intentionally or not, the essays in Environmental Peacemaking (Conca & Dabelko, 2002) largely focus on water. Are other environmental resources also positioned to foster peace?
- Most of the security threats that emerged in the 1990s are intrastate threats (e.g. civil war, genocide, political instability, and state collapse), suggesting that we should focus on this lower level of analysis. Could we use the environment as a peacemaking tool *within* states and along tenuous border regions?
- Can researchers, policymakers, and practitioners move away from conflict scenarios and environmental peace *making* towards environmental peace *keeping*? To date, the environment has largely been promoted as a mechanism to mitigate hostilities and therefore bring about peace; yet, the environment might also offer opportunities in the postconflict resolution phase to sustain a fragile peace and prevent a return to violence.

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The Water Crisis in the Gaza Strip



Source: Data from UNEP (2003)

Central Asia and the Aral Sea: Interstate Cooperation but Local Conflict

International donors (e.g., the World Bank, the European Union's Tacis Programme, and U.S. Agency for International Development) sought to mitigate threats to regional stability in the Aral Sea Basin following the Soviet Union's collapse in 1991, given the region's small-scale, violent conflicts over land and water scarcity in 1989-1990. Due to this proactive intervention, the newly independent states established new institutions to jointly manage and protect the basin's water bodies (see Weinthal, 2002; Micklin, 2000). The prospects for acute interstate conflict faded, and the Central Asian states currently maintain a low level of formal cooperation through the 1998 agreement on water and energy use in the Syr Darya Basin. Nevertheless, local water disputes (especially along the Kyrgyzstan-Tajikistan border and in the Fergana Valley between Kyrgyzstan and Uzbekistan) are still unresolved, with no real movement in either direction (International Crisis Group, 2002).

The locus of potential conflict and political instability shifted from the interstate to the local level for a number of reasons:

- Early donor programs trying to instigate cooperation in the Aral Sea Basin failed to build local capacity; stakeholders like local and international NGOs, for example, were initially excluded from large-scale donor projects;
- Large multilateral organizations have directed aid primarily to large-scale infrastructure projects, such as a drainage collector in the Amu Darya Basin, rather than smaller-scale projects in densely populated areas and border regions;² and
- The first phase of donor assistance sought to reform the water and energy sectors at the expense of cotton farming, which consumes the most water in the region. Cotton cultivation is not only the backbone of Central Asian economies, but also a mechanism for social and political control through which governments exchange social protection for political acquiescence (Weinthal, 2002).

The case of the Aral Sea Basin underscores the need for future research on environmental peacemaking at the subnational level and in border regions. While peacemaking may start at the interstate level, conflicts may fester at the intrastate level, unless local stakeholders are included in the efforts to build peace. To use the environment as a vehicle for building trust and cooperation, policymakers should invest in building local capacity, by strengthening local water user associations and civil society groups, for example. Moreover, if policymakers and practitioners want to ensure that conflict will not erupt at both the interstate and intrastate levels, they must understand the broader social and political context. Water-sharing problems at both levels cannot be effectively resolved unless the Central Asian states diversify their agricultural economies by turning away from water-intensive crops like cotton. To encourage this diversification, donors must push for political and economic reforms that would support family farms at the local level.

Lastly, researchers and practitioners should assess whether they could use other environmental issues, besides water, to reduce interstate and intrastate conflicts. Water has overshadowed efforts to combat desertification and the loss of biodiversity in Central Asia. Peace parks along the border of Turkmenistan and Uzbekistan, for example, might provide innovative opportunities for local communities to work together—both within states and across borders—to promote biodiversity, regional cooperation, and economic development.

The Middle East: Peacekeeping

Water cooperation in the Middle East—unlike Central Asia—has proved daunting because political problems dwarf the region's environmental concerns. Conventional wisdom, which holds that larger political issues must be resolved for cooperation to emerge, exacerbates pessimism about the potential for environmental peacemaking in the region (see Lowi, 1993). Yet, once the hostile parties embark upon the road to peace, environmental issues could be used to sustain the journey. The Middle East could be a striking example of moving from environmental peacemaking to environmental peacekeeping. While the environment will not bring Israel and the Palestinian Authority to the bargaining table, it might provide one of the few opportunities to foster interdependence and hence sustain peaceful relations once the two parties agree to end the conflict.

After Kuwait, the Gaza Strip is the most "water poor" region in the world, with only 52 cubic meters available per person each year (International Atomic Energy Agency, 2003). It is also one of the most densely populated areas in the world: over 1.3 million Palestinians are crowded into approximately 400 square kilometers (U.S. Bureau of the Census, 2004). The

Gaza Strip faces a mounting water crisis; water used in the Gaza Strip is not replenished, and groundwater quality has severely deteriorated as saline water rapidly replaces fresh water.

Resolving this crisis will require Israel's cooperation, since the Gaza Strip shares the southern Mediterranean Coastal aquifer with its upstream neighbor. Although the poor water quality is caused by intrusions of natural saline groundwater, overuse in the Gaza Strip exacerbates the problem by lowering the water table and increasing the flow rate of natural saline water from Israel to the Gaza Strip (Vengosh et al., forthcoming). Even though its upstream consumption does not contribute to the aquifer's deterioration, Israel could help mitigate salinity downstream by increasing pumping along the border region, which would reduce the flow of natural saline water, while the Palestinians simultaneously limit or reduce pumping within the Gaza Strip (Weinthal et al., in press). The international community should encourage Israel and the Palestinian Authority to develop a joint management plan to implement this solution. With international assistance, desalination plants along the Israeli-Gaza Strip border could treat the groundwater pumped by Israel and transport it to the Gaza Strip.

This mutually beneficial plan would fortify relations, especially after political borders are established to separate the two parties. The Palestinian Authority would obtain another source of drinking water for its growing population and remediate the Gaza Strip's salinity problem. For Israel, the groundwater transfer could serve as a goodwill gesture. While the upstream-downstream scenario and the region's political tension would argue against cooperation, a joint water management plan to solve the Gaza Strip's water crisis could instead help keep the peace after an Israeli withdrawal.

Conclusion: Local Environmental Peacemaking and International Peacekeeping

Environmental peacemaking promises to transform our understanding of the link between the



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environment and conflict. However, two major arenas remain relatively unexplored: using the environment to prevent local conflicts and to maintain peace. Researchers and policymakers seeking to expand environmental peacemaking over the next decade should pursue the following agenda:

- Explore using other environmental resources—not just water—as a source of cooperation (e.g., peace parks);
- Focus more on intrastate—not just interstate—conflicts;
- Donor programs should pay attention to the social and political context and encourage local capacity building instead of simply emphasizing technical cooperation; and
- Recognize that conflict resolution also requires maintaining peace. Therefore, environmental peacemakers should conceptualize a new approach—environmental peacekeeping.

Notes

- 1. For a critique of the environmental security literature focusing on conflict, see Peluso and Watts (2001).
- 2. After activists criticized this approach, the international community invested in some local projects, such as supporting water user associations and retrofitting local canals.

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