

# The Fight and Flight of Environmental Change

BY MEY AKASHAH

**Environmental change** can present rapid and destructive influences on traditional livelihoods.<sup>1</sup> In many contexts, environmental change compels local populations to flee their homelands with greater frequency and to take residence in unfamiliar portions of their own countries, becoming internally displaced persons (IDPs), or to take refuge in other countries, becoming international migrants or environmental refugees. This poses difficulties not only for the refugees themselves, but also for the counties that must absorb and resettle them within their borders. There are resource constraints, challenges to social cohesion, and limited infrastructure, which lead to increases in urban slums.

The United Nations High Commissioner for Refugees' (UNHCR) "Refworld" guides decision-makers dealing with many of these issues. The site includes law and policy documents on refugee status determination, internally displaced persons, statelessness, and migration.<sup>2</sup> Unfortunately, many countries that receive large influxes of refugees are limited in their ability to provide care for such refugees to the standard of international treaties and norms. UNHCR documents these norms (internationally accepted and generally practiced standards of treatment) for refugees.<sup>3</sup> For further information on the classification of refugees and the treaties governing them, one can again look to UNHCR.<sup>4</sup>

Estimates on the numbers of environmental refugees are often unreliable. According to Steve Lonergan's 1998 report to the Wilson Center, "The Role of Environmental Degradation in Population Displacement," those considered to be environmental refugees in 1998 totaled approximately 10 million. However, he noted that, because governments have not typically distinguished environmental refugees, they could have numbered closer to 25 million.<sup>5</sup> Such estimates have not improved greatly since that time, but the trend seems to be an increase in their numbers. Norman Myers of the University of Oxford discusses the trend of increasing environmental refugees in his 2002 piece, "Environmental Refugees: A Growing Phenomenon of the 21st Century."<sup>6</sup> And today scholars are predicting even stronger trends of displacement due to rising sea levels, desertification, desiccated aquifers, weather-induced flooding, and other environmental changes.<sup>7</sup> For further information on current refugee movements and statistics, please see the UNHCR's 2008 Global Trends.<sup>8</sup>

Compounding the problem, victims of environmental decline and conflict may begin to meet their subsistence needs by aligning themselves with brutal political factions. Thomas Homer-Dixon outlines this process in his book, *Environmental Scarcity and Violence*.<sup>9</sup> Environmental degradation and loss of livestock have rendered many populations' preexisting livelihood strategies virtually useless. For example, while the majority of Darfur's population previously supported themselves through goat and camel herding, subsistence farming, textiles, and labor exportation, now more than half of the male population seeks livelihood security by joining militia. Helen Young and her colleagues outline this transition in "Livelihoods, Power, and Choice—The Vulnerability of the Northern Rizaygat, Darfur, Sudan."<sup>10</sup> Though political tensions are the catalyzing events, climate change and environmental events have become force multipliers in the situation by increasing the size of the fighting contingents. Displacement can be both a cause and an effect of violence, as populations are forced to pursue new strategies to meet their basic needs.

A similar case can be seen in Somalia, where illegal fishing in Somali waters has reduced natural fish stocks and stripped local fishermen of their livelihoods. Large international fishing boats began over-harvesting fish in Somalia's territorial waters, driving subsistence-level fisherman to piracy. Former fishermen now direct their maritime skills to piracy, taking bounties and ransoms from ships that are hijacked as they pass through Somalia's traditional fishing areas.<sup>11,12</sup>

In both of these examples, environmental degradation has triggered a shift from traditional livelihood strategies to sustenance strategies involving armed conflict and violence. Despite the scale of the environmental refugee problem, ensuring that people are not forced to leave their lands has not been a policy priority. It becomes a priority only after displacement has occurred. This is problematic in that the populations of interest are already likely to be marginalized, having suffered from resource scarcity and neglect. It is probably more cost effective, and assuredly more humane, to preserve livelihoods in a given area than to respond to a crisis of environmental degradation and violence. However, it can be difficult to identify specific areas that may flare into violence.

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The field of crisis mapping attempts to increase analytical power by locating resource constraints, overcrowding, conflict areas, areas subject to flooding and drought, and population densities, among other variables. A number of organizations are working on these techniques. One example is the Harvard Humanitarian Initiative's Crisis Mapping and Early Warning System.<sup>13</sup> Meanwhile, an example of the types of crisis maps generated by those in the field through the use of mobile devices can be found at MapAction's Web site.<sup>14</sup> Tools such as these can help practitioners and policy-makers respond rapidly to calamitous events that result from environmental change. Further advancements may lead to better predictive and preventative capabilities.

There is a wealth of information available on the Web for those wanting further information on environmental refugees and related issues. The Inventory of Conflict and Environment outlines many case studies.<sup>15</sup> The UN Office for the Coordination of Humanitarian Affairs features humanitarian news and analyses of population flight events.<sup>16</sup> The U.S. government's Humanitarian Information Unit<sup>17</sup> includes maps showing population movements. The International Federation of Red Cross (IFRC) and Red Crescent Societies provides guidance for "preemptive" emergency response;<sup>18</sup> it also provides up-to-the-minute information on crises across the globe that have the potential to lead to migrations.<sup>19</sup> Decision-makers can look to these IFRC resources to view trends in population movements and climactic events (i.e., climatic hazards such as floods and droughts) in order to attempt to predict where episodes of violence may occur.

For forced migration-specific information—that is, migration that occurs in order to maintain survival, either individually or communally, and that includes environmental refugees—see *Forced Migration Review*,<sup>20</sup> published three times a year by the Refugee Studies Centre of the Oxford Department of International Development at the University of Oxford. Also see Forced Migration Online,<sup>21</sup> which offers links to journals, podcasts, videos, and working papers; the site provides helpful definitions of forced migration, the types of events leading to forced migration, and the various categories of forced migrants.<sup>22</sup>

Relief Web of the United Nations Office for the Coordination of Humanitarian Affairs (UN OCHA) is a Web site devoted to humanitarian aid workers. It provides threat-

level estimations for humanitarian emergencies and population flight.<sup>23</sup> Finally, the CDC International Emergency and Refugee Health Branch provides a list of organizations, universities, and NGOs dealing with refugee emergency response.<sup>24</sup>

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**MEY AKASHAH** is a doctoral candidate in Environmental Sciences and Risk Management at the Harvard School of Public Health, where she also received a Masters degree in Global Health and Population. She has worked on environmental issues in several post-war settings, including Kuwait and the Occupied Palestinian Territories. Currently, she is researching contamination in the Persian Gulf and the health effects of consuming fish harvested from those waters. She is also working on environmental assessment and recovery in Haiti following the 2010 earthquake.

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## NOTES

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1. <http://www.nicholas.duke.edu/people/faculty/myers/myers2001.pdf>
2. <http://www.unhcr.org/cgi-bin/texis/vtx/refworld/rwmain>
3. <http://www.unhcr.org/refworld/docid/3cd6a844.html>
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9. <http://www.worldcat.org/oclc/39478049>
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11. <http://www.dailyfinance.com/story/somali-piracy-no-fishing-no-trade-no-hope/1515339/>
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13. <http://hhi.harvard.edu/programs-and-research/crisis-mapping-and-early-warning>
14. <http://mapaction.org>
15. <http://www.american.edu/TED/ice/ice.htm>
16. <http://ochaonline.un.org; http://www.irinnews.org>
17. <http://hiu.state.gov/index.cfm?fuseaction=public.display&shortcut=JF4R>
18. <http://www.climatecentre.org/site/early-warning-early-action>
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21. <http://www.forcedmigration.org>
22. <http://www.forcedmigration.org/whatisfm.htm>
23. <http://www.reliefweb.int>
24. <http://www.cdc.gov/nceh/ierh/Links/default.htm>