

## Book Review

### CLIMATE CHANGE AND DISPLACEMENT: MULTIDISCIPLINARY PERSPECTIVES, edited by Jane McAdam<sup>1</sup>

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DRASTIC CHANGES IN THE EARTH'S CLIMATE, which has warmed nearly 0.8°C over the past century,<sup>3</sup> have had catastrophic effects on physical, biological, and social systems. Vulnerable human populations around the world now face grave threats, including dangerous sea levels, extreme desertification, and increasingly severe tropical storms. The result is a new category of displaced persons: the climate change migrant.

In *Climate Change and Displacement: Multidisciplinary Perspectives*, Jane McAdam, an expert in international refugee law, human rights law, climate-induced migration, and statelessness, brings together scholars from various disciplines to address the issue of climate change displacement. This book offers an ambitious and uniquely comprehensive perspective on climate-induced displacement, incorporating diverse fields such as geography, sociology, law, political economics, moral philosophy, public health, medical anthropology, epidemiology, international relations, and psychology.

McAdam's multidisciplinary compilation is a much-needed contribution to the study of climate change adaptation. To date, the majority of policy discussions have focused on climate change mitigation—the vitally important response of stabilizing greenhouse gas concentrations in the atmosphere.<sup>4</sup> There

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1. (Oxford: Hart, 2010) 246 pages [McAdam, ed, *Climate Change and Displacement*].
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  3. Susan Solomon et al, eds, *Climate Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change* (New York: Cambridge University Press, 2007) at 36.
  4. Ian Burton et al, "From Impacts Assessment to Adaptation Priorities: the Shaping of Adaptation Policy" (2002) 2 *Climate Policy* 145 at 147.

has been much less focus on the fact that even if successful global mitigation initiatives surpass experts' reasonable expectations, further climate change, with its resulting impacts, is unavoidable.<sup>5</sup> Optimistic climate change scenarios predict a minimum increase of 2°C in the global mean temperature at the end of the twenty-first century, which would further alter patterns of rainfall, exacerbate extreme weather events, and drastically increase the number of displaced populations worldwide.<sup>6</sup> In *Climate Change and Displacement*, McAdam and other scholars masterfully describe this dilemma, raise pressing legal issues and solutions, and call on nations around the world to enable, encourage, and plan for adaptation to changing environments.

An issue often missing from discussions on the human effects of climate change is that most populations respond to environmental variations without moving at all.<sup>7</sup> Graeme Hugo cautions against the assumption that the option of relocation is available to populations in areas susceptible to significant climate change. This assumption can become a barrier to thorough research and assessment of other adaptation options.<sup>8</sup> Failure to consider these options can be consequential to populations facing environmental change since migration may damage physical and physiological health, as well as profoundly impact societal cohesion and cultural integrity. Therefore, many of the authors correctly recognize that more research on adaptive capacity and community resilience is needed to realize the full advantages of in situ adaptation. Due to the significant consequences of migration, in situ adaptation is the preferred option, and "relocation of communities should be a strategy of last resort."<sup>9</sup>

When migration is the only option, however, international law must step in to address issues of relocation. For example, in the next century, rising sea levels may render several island countries in the South Pacific uninhabitable, forcing entire populations to relocate.<sup>10</sup> Given such looming threats of climate relocation, McAdam and Roger Zetter advocate for legal mechanisms to protect those

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5. Martin Parry et al, eds, *Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change* (New York: Cambridge University Press, 2007) at 65.

6. Solomon et al, *supra* note 3 at 70.

7. Graeme Hugo, "Climate Change-Induced Mobility and the Existing Migration Regime in Asia and the Pacific" in McAdam, ed, *Climate Change and Displacement*, *supra* note 1, 9 at 23.

8. *Ibid* at 24.

9. Jon Barnett & Michael Webber, "Migration as Adaptation: Opportunities and Limits" in McAdam, ed, *Climate Change and Displacement*, *ibid*, 38 at 53.

10. John Campbell, "Climate-Induced Community Relocation in the Pacific: The Meaning and Importance of Land" in McAdam, ed, *Climate Change and Displacement*, *ibid*, 57 at 57.

displaced by climate change.<sup>11</sup> McAdam further considers whether uninhabitable territories can exist as separate legal entities.<sup>12</sup>

The current laws that address climate relocation have proven to be inadequate. Populations able to migrate domestically are classified as “Internally Displaced Persons”<sup>13</sup> and may be protected by the Guiding Principles on Internal Displacement.<sup>14</sup> However, individuals who must leave their country have “no protection other than that afforded by international human rights law,” meaning “they have no right under international law to enter and remain in another country; thus, they are dependent upon the generosity of host countries.”<sup>15</sup> Climate migrants may be afforded some protection under article 33(1) of the *Convention Relating to the Status of Refugees*,<sup>16</sup> which prohibits returning a refugee to a territory where her life or freedom may be in jeopardy.<sup>17</sup> This law, however, provides no right to permanent relocation.

One roadblock to crafting new laws to protect peoples displaced by climate change is the question of what to call the displaced populations. Most of the authors in this compilation object to the term “climate change refugee,” explaining that to be legally considered a “refugee” the displaced person “must have moved across an *international* border on account of a ‘well-founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group or political opinion’, and be unable or unwilling to avail themselves of the protection of their country of origin.”<sup>18</sup> Climate change displacement, however, often occurs within state borders and results in great uncertainty as to whether the migration was forced or voluntary. The authors astutely argue that this ambiguity will hinder the creation of new laws and policies, and it is an important reason why existing international laws must account for climate displacement as much as possible.<sup>19</sup>

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11. Jane McAdam, “‘Disappearing States’, Statelessness and the Boundaries of International Law” [McAdam, “Disappearing States”] in McAdam, ed, *Climate Change and Displacement*, *ibid*, 105; Roger Zetter, “Protecting People Displaced by Climate Change: Some Conceptual Challenges” in McAdam, ed, *Climate Change and Displacement*, *ibid*, 131.
  12. McAdam, “Disappearing States,” *ibid* at 127.
  13. Walter Kälin, “Conceptualising Climate-Induced Displacement” in McAdam, ed, *Climate Change and Displacement*, *supra* note 1 at 86-87.
  14. United Nations High Commissioner for Refugees, UN Doc E/CN.4/1998/53/Add.2 (1998).
  15. Kälin, *supra* note 13 at 90.
  16. 28 July 1951, 189 UNTS 137 (entered into force 22 April 1954) [*Refugee Convention*].
  17. Kälin, *supra* note 13 at 94.
  18. Barnett & Webber, *supra* note 9 at 48, citing *Refugee Convention*, *supra* note 16, art IA(2).
  19. Zetter, *supra* note 11 at 140-41.

Another challenge to developing a legal framework responsive to environmental displacement is the unique causation issues that arise when a population experiences gradual but significant changes to its climate. In the case of island states, causation is easily proved because of the clear and direct relationship between climate change and sea levels. In other cases, however, slow-onset changes, such as desertification, may be more difficult to attribute to climate change. Zetter posits that the development of practical solutions to protect climate change migrants “requires the identification of links between climate change, subsequent changes to environmental conditions and the propensity to migrate.”<sup>20</sup> However, Zetter recognizes that there are “substantial conceptual and empirical problems” to identifying such a cause-effect link, especially given the difficulty of isolating climate change impacts from other environmental influences that can also cause migration.<sup>21</sup>

A final challenge in the development of climate relocation laws is to determine the best and most equitable method of assigning responsibility to compensate for the harmful effects of climate change. Critical to assessing the impact of environmental change on a given population is “the degree to which a system is susceptible to, and unable to cope with, adverse effects of climate change.”<sup>22</sup> As Anthony McMichael, Celia McMichael, Helen Berry, and Kathryn Bowen explain, “Both vulnerability and adaptive capacity are shaped by differential access to economic, political and social resources.”<sup>23</sup> This means that climate change will most severely affect those populations in the poorest parts of the world that, paradoxically, are least responsible for greenhouse gas emissions.<sup>24</sup> This disproportionate distribution of the benefits and risks of greenhouse gas emissions raises difficult ethical questions with respect to the assignment of responsibility for climate change harms. Peter Penz helpfully raises several solutions for compensating environmental injuries, which include imposing “free movement responsibilities that require richer states to open their borders” and “poverty alleviation responsibilities that require richer states to participate in global redistribution.”<sup>25</sup>

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20. *Ibid* at 138.

21. *Ibid*.

22. Parry et al, *supra* note 5 at 883.

23. “Climate-Related Displacement: Health Risks and Responses” in McAdam, ed, *Climate Change and Displacement*, *supra* note 1, 192 at 214.

24. Zetter, *supra* note 11 at 146.

25. “International Ethical Responsibilities to ‘Climate Change Refugees’” in McAdam, ed, *Climate Change and Displacement*, *supra* note 1, 151 at 151.

Although this book materially advances the discussion of climate change migration—particularly as it relates to international law and social responsibility—it understandably leaves many important questions untouched. For example, there has been little research into the effects of climate change displacement on mental health and the nations that receive displaced populations nor into whether environmental displacement is a gendered process. Although this book does not address such questions, it serves as a useful starting point for those looking to conduct further innovative research on climate change migration.

Going forward, experts must avoid, as McAdam successfully has, sensationalizing the issues of climate change and climate change displacement and must instead maintain a cautious empirical approach to environmental migration study. While environmental commentators acknowledge the high probability of climate change, the corresponding effects on populations, and the need to be prepared, most commentators also recognize other underlying factors that influence displacement. Critics further question the validity of climate change migration studies. Stephen Castles argues that to avoid such criticism, academics in this field must take care not to “present questionable data, which might undermine public trust in environmental predictions,” nor to “reinforce existing negative images of refugees as a threat to the security, prosperity and public health of rich countries in the global North.”<sup>26</sup> To paint a realistic and convincing picture of environmental migration, empirical research must be thorough and robust.

Another imperative for those studying climate change migration is to adopt and build upon McAdam’s multidisciplinary approach. Most climate change and displacement research has appeared in discipline-specific journals, reports, and publications. Given the complexity of climate change migration, the best responses will emerge from interdisciplinary collaboration.<sup>27</sup> McAdam is one of the few commentators to adopt a multidisciplinary approach, and her book therefore serves as a uniquely rich and comprehensive resource for informing international policy and laws. Although environmental relocation is most productively addressed from multiple angles, McAdam’s message is distinct and clear: Developed nations must be held responsible, must aid adaptation where possible, and must assist populations that have no option but to relocate.

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26. “Afterword: What Now? Climate-Induced Displacement after Copenhagen” in McAdam, ed., *Climate Change and Displacement*, *ibid*, 239 at 242.

27. *Ibid* at 243.