

Climate migration myths

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77 **Abstract**

78 Misleading claims about mass migration induced by climate change continue to surface in
79 both academia and policy. This requires a new research agenda on ‘climate mobilities’ that
80 moves beyond simplistic assumptions and more accurately advances knowledge of the nexus
81 between human mobility and climate change.

82

83 **Main**

84 International migration and climate policy assume that anthropogenic climate change already
85 is, and will increasingly be, a major driver of mass migration from the Global South to the
86 Global North. The United Nations Framework Convention on Climate Change explicitly
87 specifies the need to avert, minimize and address climate displacement,¹ while the United
88 Nations Security Council warns of mass climate migration with the risk of aggravating
89 conflicts.² While the potential for climate change to disrupt livelihoods and threaten lives is
90 real, these policies reinforce a false narrative that predicts large numbers of ‘climate
91 refugees’. This self-referencing narrative within scientific literature and policy reports has the
92 consequence of entrenching climate migration as a looming security crisis without an
93 empirical scientific basis.³

94 Rather than being challenged, this securitization narrative, presenting climate change
95 and migration as a security risk, is actively being perpetuated by public funding schemes for
96 scientific research intended to inform national, regional or international policy development.

97 In doing so these funding policies, as a matter of priority, justify keeping climate migrants in
98 places of origin, so as to present no harm to populations in destination areas.⁴ Symptomatic of
99 this securitization agenda was a recent EU Horizon 2020 funding call for research on climate
100 change and migration that reflected political demands rather than research gaps to alleviate
101 “migration pressures at the source”.⁵ Similarly, a Horizon 2020 research funding call from
102 2015 used the example of climate migration to illustrate the “real threat” to European
103 security of Third Country climate-driven crises.⁶

104 The influence of this narrative is considerable, with ‘climate-induced migration’ now
105 a common rationale for measures to strengthen and protect national and regional borders in
106 the Global North. For example, the EU migration agenda aims to protect borders “with the
107 intent to keep people in their places and minimize migration”.⁷ The US Department of
108 Defence names intra- and inter-state migration associated with climate change as responsible
109 for negative human security effects in destination countries.⁸ Similarly, Australia is pursuing
110 a policy of territorial control, by either keeping borders closed or extending Australian law to
111 ‘off shore’ processing on Pacific island countries.⁹

112 New international science funding schemes, such as the forthcoming call on Human
113 Migration and Global Change by the internationally funded Belmont Forum and successor
114 programmes to EU Horizon 2020, can help in rethinking climate change and migration, by
115 offering scientists an opportunity to take a new look at what constitutes global mobility. If
116 such opportunities are not taken, there is a danger that migration policy will continue to be
117 based on weak scientific evidence that reinforces the self-perpetuating myth of climate
118 change migration as a looming security crisis.

119 A fresh approach is therefore needed, one that enables science to actively help shape
120 public funding schemes for scientific research that well captures the complex, mobile and
121 interconnected nature and key challenges of climate change and migration. To achieve that

aim, we offer the following research agenda consisting of six priorities to help science policy to move beyond its securitized outlook.

Six research priorities

First, research and research funding must enable questioning of the assumption that climate change causes mass human migration, rather than simply reinforcing it. There is already significant evidence that migration is not solely driven by climate change. It is instead influenced by a mix of climatic, socio-economic, cultural, and political factors.¹⁰ Even when climate change has a role to play, it remains difficult to determine the extent of its influence. For instance, when people have to move in the event of a cyclone, it is not always clear to what extent the cyclone can be attributed to climate change.¹¹ Moreover, a lack of measures, such as early warning systems, building codes and cyclone shelters, also play a role in shaping mobility. This means that categorizing ‘climate migrants’ as distinguishable from ‘non-climate migrants’ is not empirically possible in most if not all circumstances. As a consequence, predictions of mass climate-induced migration are inherently flawed.¹²

Second, the term migration does not capture the diverse ways in which people do or do not become mobile in response to a changing climate and should therefore be avoided. Some people may temporarily (even seasonally) move, while others may permanently relocate to nearby urban centers.^{11,13} Regardless, mobility commonly involves relatively short distances, meaning that people typically move within their country or region.¹¹ Moreover, many may also face the problem of not being able to move to safety, while others do not want to move even if facing significant risk to their own wellbeing.¹¹ To capture this diversity, research should shift its attention from ‘climate migration’ to ‘climate mobilities’. Such a program would capture the multiple forms, directions and multiplicities of human movement in the context of climate change as well as the transformative character of mobility and its

146 impact on places of origin, transit and destination.^{13,14} It would also focus on the movement
147 of people in more neutral and therefore analytical terms - neither making assumptions that
148 mobility is unidirectional or monocausal, nor inherently positive or negative.

149 Third, new research supported by scientific funding programs, should examine and
150 address ‘climate mobilities’ as the new normal rather than the exception. Movement and
151 migration are inherent to the highly interconnected world we live in and a standard element
152 of social life.¹⁵ As such, mobility will necessarily be part of the range of responses available
153 to those affected by climate change.¹¹ Instead of asking whether climate change causes
154 human mobility, research should focus on whether and if so how climate change will alter
155 existing interconnections and human mobility patterns under different scenarios of global
156 warming and mitigation and adaptation policies, and how these are in turn shaped by existing
157 mobilities.

158 Fourth, it is crucial to fund and engage in research that goes beyond attempts to
159 quantify and model new mobility resulting from climate change. Current climate migration
160 models typically reinforce linear ‘crisis’ or ‘mass’-migration assumptions.¹⁶ The news media
161 and policy alike tend to interpret the results of these models incorrectly. For example, they
162 often refer to the maximum figures of a range as ‘predictions’, which in turn may be used to
163 support the politics of border securitization. Policy instead should rely on research that better
164 accounts for the non-linear complexity of mobility in the context of climate and social change
165 in its evidence base.¹³

166 Fifth, research needs to better include affected populations in ‘climate mobilities’
167 research. Multiple knowledge systems, such as local and indigenous knowledges, exist both
168 among mobile populations and in destination areas, and should be included in building a
169 stronger evidence-base. The solutions to the challenges posed by climate change – whether
170 they imply increased mobility or not¹⁷ – should be developed and formulated with a strong

171 involvement of affected populations. With better funding opportunities, indigenous
172 organisations representing populations involved in mobility associated with climate change
173 can lead indigenous research, or participate in co-developed research. This is important if the
174 complexity of ‘climate mobilities’ is to be captured, particularly its interconnectedness with
175 related policy areas, such as indigenous rights and human development.

176 Finally, research on ‘climate mobilities’ needs to shift part of its focus from climate
177 sensitive sending areas to destination areas. Whether or not such mobility becomes a political
178 or humanitarian problem depends on the policy choices by home, host and transit states and
179 involved organisations, not on the mobility itself. As discussed in the introduction, global
180 migration policy is defined by the strict border policies of popular migration receiving areas.
181 These border policies in turn are shaped by an increasing fear of migrants among many
182 citizens, such as in several European countries, USA, Brazil, Australia and elsewhere.¹⁸ In
183 order to expand beyond the securitisation of climate-related mobility, research with support
184 of funding agencies also needs to focus on how to overcome the profound fear of the other.
185 This requires new and further collaborations across social science research into belonging,
186 the acceptance of difference and identity, and important political, cultural and historical
187 attributes of destination areas.

189 **Keeping the questions open**

190 Border securitization in current global, regional and national politics has infiltrated science
191 policy. It is biasing public discourse and scientific and policy debates, despite the paucity of
192 supporting evidence.¹⁹ To move beyond the securitization of climate-related migration, a new
193 research agenda is needed. Our six priorities offer a substantially different agenda on ‘climate

mobilities’ that prioritizes exploration rather than minimization of the complexity of the nexus between human mobility and climate change.

A new research agenda requires funding agencies to change their focus away from a securitized outlook, allowing for a more nuanced science policy on ‘climate mobilities’ to emerge. A first step in this direction can be achieved, for example, through Human Migration and Global Change under the Belmont Forum fund, coordinated by Future Earth, which actively relies on academic feedback to help shape its funding priorities. The six ‘climate mobilities’ priorities also speak to Horizon 2020 successor programs, such as possible EU ‘Mission-oriented Research and Innovation’ funding schemes, and other future, publicly funded programmes at the national level.

Instead of having policy dictate the priorities of science, resulting in self-perpetuating false claims about climate-induced migration, the science policy process needs to allow careful and critical evidence-seeking research to indicate the main challenges ahead. In doing so, a ‘climate mobilities’ research agenda can help ensure that policy addresses the right issues to start with.

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References

1. Nash, S.L. *Global Policy* **9**, 53-63 (2018).
2. Boas, I. *Climate Migration and Security. Securitisation as a Strategy in Climate Change Politics* (Routledge, New York, 2015).

- 218 3. Betts, A., Pilath, A. *Journal of International Relations and Development* **20**, 782-804
219 (2017).
- 220 4. Piguet, E., Kaenzig, R., Guélat, J. *Population and Environment* **39**, 357-383 (2018).
- 221 5. H2020. Work programme 2018-2020. Part 12 – Climate action, environment, resource
222 efficiency and raw materials. *European Commission*
223 [http://ec.europa.eu/research/participants/data/ref/h2020/wp/2018-2020/main/h2020-
wp1820-climate_en.pdf](http://ec.europa.eu/research/participants/data/ref/h2020/wp/2018-2020/main/h2020-
224 wp1820-climate_en.pdf) (2018).
- 225 6. EU Research results. DRS-22-2015 - Ethical/Societal Dimension topic 3: Impact of
226 climate change in third countries on Europe's security. *Community Research and*
227 *Development Information Service of the European Commission*
228 <https://cordis.europa.eu/programme/rcn/665095/en> (2015).
- 229 7. Trombetta, M.J. *Critical Studies on Security* **2**, 131-147 (2014).
- 230 8. National security implications of climate-related risks and a changing climate. RefID:
231 8-6475571 DoD. *United States Department of Defense*
232 [https://archive.defense.gov/pubs/150724-congressional-report-on-national-
implications-of-climate-change.pdf](https://archive.defense.gov/pubs/150724-congressional-report-on-national-
233 implications-of-climate-change.pdf) (2015).
- 234 9. Suliman, S. *Globalizations* **13**, 638-652 (2016).
- 235 10. Black, R. et al. *Global Environmental Change* **21S**, S3-S11 (2011).
- 236 11. Foresight: Migration and Global Environmental Change. Final Project Report.
237 *Foresight, The UK Government Office for Science*
238 [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment
_data/file/287717/11-1116-migration-and-global-environmental-change.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment
239 _data/file/287717/11-1116-migration-and-global-environmental-change.pdf) (2011).
- 240 12. Gemenne, F. *Global Environmental Change* **21 S**, S41-S49 (2011).
- 241 13. Wiegel, H., Boas, I., Warner, J. *Wiley Interdisciplinary Reviews: Climate*
242 *Change* DOI: **10.1002/wcc.610**, (2019).

- 243 14. Sakdapolrak, P., et al. *Die Erde* **147**, 81-94 (2016).
- 244 15. Urry, J. *Mobilities* (Polity Press, Cambridge, 2007).
- 245 16. Missirian, A., Schlenker, W. *Science* **358**, 1610-1614 (2017).
- 246 17. Arnall, A., Hilson, C., McKinnon, C. *Climate Policy* **19**, 665-671 (2019).
- 247 18. Foner, N., Simon, P. eds. *Fear, anxiety, and national identity: Immigration and*
- 248 *belonging in North America and Western Europe* (Russell Sage Foundation, New York,
- 249 2015).
- 250 19. Baldwin-Edwards, M., Blitz, B.K., Crawley, H. *Journal of Ethnic and Migration*
- 251 *Studies* **45**, 2139-2155 (2019).