

International Environmental Migration: Empirical Evidence 1990-2015

Immigration is one of the focal points of nationalist and populist politicians and parties to create fear of large numbers of migrants arriving in their state to justify xenophobic and racist policies which often constitute the core of their policy platforms. The early and exaggerated predictions of many millions of migrants in the immediate future pushed out by weather events that are linked to global climate change fed into these fears among populations (Myers 1993, 1997, 2002). While it has been established that these early predictions were significantly overestimating the numbers of international climate refugees (Flavell, Milan and Melde 2020), the debate regarding the magnitude of and conditions for international migration as climate change adaptation continues among scholars (Obokata Veronis and McLeman 2014). Most adaptive migration strategies at this point take place within countries but the increasing pressures of global climate change suggest that this is a steppingstone in a process that starts with local and internal migration but will ultimately necessitate international migration for many communities that are not involuntarily immobile. Through the innovative use ArcGIS Pro in the geospatial analysis of United Nations migration data and EMDAT climate data, we were able to find some evidence for international climate change adaptive migration in three case studies under certain circumstances such as high frequency of events and, in some cases, high numbers of casualties (Popović and Rogers 2021). While ultimately deeper analyses of geospatial aspects of migration networks will be at the core of this project, it is necessary for us to test the generalizability of our initial case study findings. In this paper, we try to quantitatively test if we can find evidence for international migration as climate change adaptation across a much larger number of cases. In addition, we also want to test the assertion that international migration as one adaptation strategy for climate change can be seen when associated weather events occur with high frequency and when these events cause significant amounts of physical damage and a high number of casualties. While establishing this baseline is important for the next steps in our research project, our findings have potentially significant policy implications by likely providing empirical evidence that international migration as climate change adaptation is only occurring to a limited degree at this point, countering the fear among populations of large numbers of climate change refugees and further delegitimizing xenophobic and racist policies. A better understanding of the conditions (frequency of events, casualties, and damage) under which international climate migration can be seen, has significant policy implications to prepare for potentially larger numbers of climate refugees in the future depending on effectiveness of climate change mitigation attempts. Lastly, in this research we are answering the call of the United Nations, the International Organization for Migration, and many others for increasing interdisciplinary research on international climate change migration by combining methodological innovation and the merging of our knowledge bases as a political scientist and an environmental scientist.

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