The state of the evidence

Susan Martin

Researchers have much to do, not only to understand climate- and disaster-induced migration but also to transmit their understanding for the use of policymakers and practitioners.

While some estimates of the number of people displaced by sudden-onset disasters exist, little is known about the patterns and cycles of displacement. Governmental tracking systems are inadequate, particularly for those who are displaced and do not go to official shelters. And many questions remain over how many times people are displaced and where people go when they leave temporary shelters and are unable to return home. An improved evidence base would help create a set of criteria for assessing the threat people are under and determining whether they can return home or should be relocated elsewhere.

More attention also needs to be devoted to the intersection between sudden- and slow-onset disasters as sudden-onset disasters can exacerbate slow-onset processes. The natural hazard often becomes the tipping point, as when drought in Somalia triggered a famine in the context of persistent political instability. What adaptation strategies in slow-onset scenarios create greater resilience in disaster situations and allow people to stay and adapt in situ?

Forecasting environmental migration remains an area of immense potential. Is it possible to identify vulnerable populations and who is exposed and at what points? There are currently no good forecasting tools to help identify who may be displaced in the future - and research shows, moreover, that trapped populations are in danger just as much as those who move. Better forecasting is essential in both sudden- and slowonset situations. Agent-based modelling methodologies, forecasting and hotspot mapping may all help to identify vulnerable populations in areas both of origin and of destination. While historical analogues and the experience of development-induced resettlement are helpful to frame discussions,

vulnerable populations may not have the opportunity to move to uninhabited places, and thus instead move to areas of risk. The scarcity of available land today could mean that comparisons with historical case studies are neither feasible nor helpful.

It is known that decisions to migrate as well as the impacts of these movements are strongly affected by family and household vulnerability and resilience. Many of those who benefit most from migration are those who are already more resilient than their neighbours. A better understanding of ways to increase social protection of particularly vulnerable households will help policymakers identify ways to increase resilience among those who stay in place as well as those who move away from areas affected by climate change. In the context of environmental migration, micro-scale analysis is important since it questions assumptions that researchers may have about human environmental systems.

Hazards manifest themselves very differently. The impact of flooding on a vulnerable population, for example, depends on geographic location and may actually be beneficial for farming practices. Including environmental and migration questions in national censuses and in Demographic and Health (DHS), Living Standards Measurement (LSMS) or Multiple Indicator Cluster (MICS) surveys may help capture household- or region-specific characteristics. Asking participants what questions they think are most relevant helps avoid imposing incorrect assumptions.

Despite the potential for using mobilephone data to study migratory patterns of people in the wake of sudden-onset events, several limitations exist. For instance, May 2015

billing information and privacy concerns complicate easy data collection while SIM cards can represent individuals, households or communities. Mobile-phone data suffers the same limitations as other types of data in that it needs to be cleaned and vetted if proper analysis is to be done. And it would be important to capture the characteristics of migrants (e.g. their motives) rather than just see where they are going.

Long-term data and studies

There is a need for longitudinal data and studies to help researchers both to understand the long-term effects of environmental change on migration decisions and to properly study the impact of migration on adaptation and resilience. Longitudinal studies are also needed to ensure that the impacts of adaptation programmes, including those involving movements of people, are assessed over time. Economic, social, cultural and other impacts are likely to change as people move through the adaptation process, and understanding the long-term effects of different adaptation strategies will help policymakers and practitioners undertake better planning and implementation.

Funding multi-year research is challenging and the use of existing datasets, therefore, may serve as a useful approach when funding for longitudinal research is restricted, even though few datasets possess all the necessary pieces, particularly longitudinal datasets that capture slow-onset emergencies. The few longitudinal studies that exist are usually funded by governments, illustrating the policy as well as the research importance of these questions.

Usefulness for policymakers

Since most migration, displacement and relocation are likely to involve movements within and between developing countries, greater understanding of internal migration – including rural-urban, urban-rural and rural-rural movements, and crossborder South-South migration – will help policymakers plan more effectively to address the impacts on both source and receiving

communities; currently very little research exists that captures the impact of migrants on the host communities. Of particular importance is research on ways to ensure greater reliability, security and use of South-South remittance flows in the context of movements linked to climate change. There is little evidence about the mechanisms for remittances to be facilitated as an adaptation strategy, and National Adaptation Plans, for instance, do not generally mention them.

The institutional frameworks for addressing migration, displacement and relocation in the context of climate change at the national, regional and global levels are not well articulated. A mapping exercise to identify effective mechanisms for cooperation and coordination among different ministries and agencies would help provide guidance to governments and international organisations as they move ahead in developing adaptation strategies involving human mobility. Continuing monitoring of the ways in which National Adaptation Plans, Poverty Reduction Strategy Papers and Disaster Risk Reduction strategies address issues related to environmental change, migration and development would also be useful in order to identify potential improvements in planning for migration, displacement and planned relocation.

Finally, research alone will be insufficient in affecting policies unless it is presented in a manner that is easily digestible and practical, for donors as well as for policymakers and operational institutions.

Susan Martin is Professor of International Migration at Georgetown University. Susan.Martin.ISIM@georgetown.edu www.georgetown.edu

This article is based on the findings and recommendations of the May 2014 Knowledge Partnership for Migration and Development (KNOMAD) symposium. The symposium report can be found at www.knomad.org/thematic-working-groups/environmental-change-and-migration.