

Institution: University of Sussex

Unit of Assessment: UoA 17 Geography

Title of case study: From 'climate refugees' to climate adaptors

1. Summary of the impact

Sussex research has contributed to a shift in public policy away from seeing climate-induced migration as an imminent security, health and public order risk (c.f. the *Stern Review*) towards an understanding that migration can be an important adaptive response to climate vulnerability. Specifically, reference to migration as a potential adaptation to climate change in Paragraph 14f of the *Cancun Agreement* of UNFCCC in 2010 reflects the nuanced approach stressed in Sussex research; through their work with GO-Science and DFID, and international organisations including the Global Forum on Migration and Development, UNHCR, IOM and the European Commission, Sussex researchers have contributed to the development and implementation of this paragraph, and to a re-framing of international debates.

2. Underpinning research

The underpinning of research on migration and global environmental change at Sussex has taken place over a period of more than 15 years, and has been both conceptual and empirical. At a conceptual level, early work by Black [see Section 3, R1, R2] conducted during and after a period of secondment to the UNHCR (1996–97) has been widely cited as challenging conventional narratives of 'environmental migration' as a problem. Recent work (since 2008) has elaborated a more-detailed conceptual framework that is at the core of a major 'Foresight' report which ran from 2009–11 and was published by the UK Government Office of Science in 2011. Building on initial conceptual developments at Sussex (Black *et al.* 2011, the Foresight Project involved over 70 commissioned and peer-reviewed papers, and has led to a Comment in *Nature*, and four special issues of leading journals, including one that contained the core conceptual approach [R4], which stresses how environmental change does not simply 'drive' migration in a straightforward way but rather is embedded in a wide range of other 'drivers' of migration, and so is linked with migration in complex direct and indirect ways.

The major findings of this work are threefold. First, the work suggests that there is a significant and hitherto overlooked category of people who, far from being vulnerable to migration as a result of global environmental change (including climate change), are actually 'trapped' in vulnerable areas, unable to migrate. Second, it notes that migration – especially from rural areas to vulnerable and often low-lying neighbourhoods in the world's growing mega-cities – is already substantial and ongoing, and is taking people towards, rather than away from, places that are vulnerable to global environmental change. Third, it identifies the ways in which – both practically and theoretically – migration can be a form of adaptation to global environmental change, rather than a negative consequence arising from it.

Alongside this work, empirical analyses have been conducted in Burkina Faso, Mexico and Bangladesh that have contributed to the development, consolidation and extension of this approach. In Burkina Faso, research with poor communities affected by climate change has contributed to the development and validation of an Agent-Based Model that provides an innovative methodology to potentially predict migration influenced by climate change into the future [R5]. In principle, this provides a basis for the accurate prediction of migration over a 20–30-year timeframe into the future, and an initial 'proof of concept' is now being taken forward through a funded Marie Curie fellowship focused on Vietnam. In Mexico, empirical research in two provinces – Zacatecas and Veracruz – has explored the varied responses of agricultural communities to climate stress, and has challenged modelling evidence that predicts a large growth in Mexican migration to the US as a result of future climate change. Both these studies frame migration as an

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adaptation strategy to climate change, and similar research is nearing completion in a further case study in Bangladesh (funded by the Climate and Development Knowledge Network).

Sussex researchers involved in this work were:

- Professor Ronald Skeldon: Department of Geography, 2000–present
- Professor Richard Black: Department of Geography, 1995–2013
- Professor Dominic Kniveton, Department of Geography 2001–present
- Dr Kerstin Schmidt-Verkerk, Department of Geography 2007–present
- Dr Christopher D. Smith, Department of Geography 2009–2012
- Mr Soumyadeep Banerjee, Department of Geography 2011-present

3. References to the research

- R1** Black, R. (1998) *Refugees, Environment and Development*. London: Longman.
- R2** Black, R. (2001) *Environmental Refugees: Myth or Reality? New Issues in Refugee Research*. Geneva: United Nations High Commissioner for Refugees, Working Paper.
- R3** Black, R., Kniveton, D. and Schmidt-Verkerk, K. (2011) 'Migration and climate change: towards an integrated assessment of sensitivity', *Environment and Planning A*, 43(2): 431–450.
- R4** Black, R., Adger, W.N., Arnell, N.W., Dercon, S., Geddes, A. and Thomas, D. (2011) 'The effect of migration on global environmental change', *Global Environmental Change*, 21(1): S1–S2.
- R5** Kniveton, D.R., Smith, C.D and Black, R. (2012) 'Emerging migration flows in a changing climate in dryland Africa', *Nature Climate Change*, 2: 444–447.
- R6** Schmidt-Verkerk, K. (2010) "Buscando la vida". How do perceptions of increasingly dry weather affect migratory behaviour in Zacatecas, Mexico?', in Afifi, T. and Jäger, J. (eds) *Environment, Forced Migration and Social Vulnerability*. Springer Berlin Heidelberg, 99–116.

Outputs can be supplied by the University on request

4. Details of the impact

From its early genesis in the 1990s, Sussex work on migration and climate change has had an influence in international policy circles, contributing to the UNHCR resisting calls to extend international protection to 'climate refugees', and leading to a much more nuanced view of the likely impact of migration on climate change in the 4th *Assessment Report* of the IPCC in 2007, compared to previous reports. Since 2008, this impact has been consolidated and strengthened through the direct involvement of Black, Skeldon and Kniveton in a range of international fora, and through the direct and indirect influence of Sussex research on the Foresight *Migration and Global Environmental Change* report in 2011 (GO-Science 2011; 2012).

Perhaps the most substantial policy change since 'climate migration' was first raised as a matter of concern in the 1980s has been the adoption by the UNFCCC of the *Cancun Adaptation Framework* at COP-16 in December 2010. In Paragraph 14f of the Framework, the UNFCCC recognised for the first time that migration represents a potential adaptation strategy in the face of climate change, in contrast to previous framings of the issue. As noted by Warner [see Section 5, C1], this was as a

result of the fact that ‘empirical research began to accelerate in the mid- to late 2000s as a crop of systematic investigation and case studies on environmental change and migration began to be published. These studies were complemented by methodological and conceptual development, as well as analyses of policy implications’. Sussex research was significantly represented in this work. FAQs for policy-makers at COP-16 produced by the Climate Change, Environment and Migration Alliance (CCEMA) were co-authored by Kniveton, whilst the COP was informed by a session on the impact of migration on climate change and development at the 2010 Global Forum on Migration and Development, also in Mexico, sponsored by the governments of the UK and Bangladesh, for which Skeldon drafted a joint UK–Bangladesh background paper.

Before and after COP-16, Sussex research has actively influenced a range of other national and international actors to approach this issue from a more-nuanced perspective. Within the UK, the involvement of Black (as Chair of the Lead Expert Group, at the invitation of HMG’s Chief Scientific Advisor), as well as Kniveton and Deshingkar in the Foresight Project of GO-Science on Migration and Global Environmental Change, resulted in an action plan that included commitments by five international organisations (World Bank, OECD, UNESCO, OSCE and IOM), three government departments (DFID, DEFRA, FCO), two research councils (NERC, ESRC) and Care International [C2]. Additional organisations, including the European Commission, UNHCR, the UK Climate Change and Migration Coalition, the Global Forum on Migration and Development and UNICEF, have since used the research to implement policy change, in part responding to extensive media coverage of the report [C3]. Thus:

- DFID has used the report’s findings to promote action at the national level in several developing countries. A follow-up workshop in Ghana in March 2012 led to an agreement with the UN Resident Representative and the Government of Norway to launch targeted assessment and support to the Government of Ghana on issues of flooding, disaster risk reduction and practical contingency planning with community groups and the Mayor’s office in slums, initially in Accra but planned to extend to other major urban areas in the country [C4 & C7].
- Following the presentation of findings by Black there in December 2011, the World Bank commissioned six further regional reports on the topic, including two from Sussex-based authors, to inform their programming.
- Following the presentation of findings by HMG’s Chief Scientific Advisor at the Joint Research Centre of the EU in Brussels, the European Commission commissioned Black and Banerjee to write a substantive briefing to inform the development of a new Commission Working Paper on Migration and Climate Change. This paper was initiated by the 2010 Stockholm Process on migration but, following an interest in the adaptation possibilities of migration stressed by Sussex research, it was put on hold until 2012, when Black and Banerjee were brought in [C5]. The final working paper [C10] drew significantly on their research.
- Following the presentation of findings by Black at the UNHCR in November 2011, a commissioned policy paper directly informed the launch of the Nansen Initiative on Disaster-Induced Cross-Border Displacement, and was included as an annex to the first meeting of the Initiative’s Consultative Committee, on which Black has been invited to serve by the Government of Norway [C6].
- The UK Climate Change and Migration Coalition has used the Foresight research in developing a briefing paper for UK NGOs which stresses that NGO communications on the issue should include migration as a ‘legitimate adaptation strategy’ and ‘part of the solution to potential displacement’, a key original finding of Sussex research [C8]. UKCCMC have also developed a ‘myth-buster’ document drawing on the same research [C9].

5. Sources to corroborate the impact

- C1** Warner, K. (2011) *Climate Change Induced Displacement: Adaptation Policy in the Context of the UNFCCC Climate Negotiations*. Geneva: UNHCR Legal and Protection Policy Research Series, No. 18. Online at: <http://www.unhcr.org/4df9cc309.html>
- C2** GO-Science (2011) *Migration and Global Environmental Change: Action Plan*. <http://www.bis.gov.uk/foresight/our-work/projects/published-projects/global-migration/reports-publications>
- C3** Press coverage of the findings of the Foresight report is provided at: <http://www.bis.gov.uk/foresight/our-work/projects/published-projects/global-migration/media-impact>
- C4** Adviser, Climate change and environmental governance, DFID Ghana (2012) email from DFID-Ghana to GO-Science, 27 April.
- C5** Project Leader, Foresight (2012) email exchange between GO-Science, European Commission and Sussex, 30 May and earlier.
- C6** Head of Foresight, (2012) email exchange between GO-Science, UNHCR and Sussex, 3 October and earlier.
- C7** Go-Science (2012) *Migration and Global Environmental Change: One Year Review*. http://www.bis.gov.uk/foresight/our-work/projects/published-projects/global-migration/one-year-review?utm_source=email&utm_medium=email&utm_campaign=migration%2Bstakeholder%2Bemail
- C8** UKCCMC (2012) *Communicating Climate Change and Migration, Report of the UK Climate Change and Migration Coalition*. Oxford: UKCCMC, <http://climatemigration.org.uk/>
- C9** Randall (2013) email from UK Climate Change and Migration Coalition to Sussex, 10 June, concerning 'myth-buster' document http://climatemigration.org.uk/wp-content/uploads/2013/06/Myth_buster_climate_migration_displacement.pdf and briefing paper http://climatemigration.org.uk/wp-content/uploads/2012/09/Climate_and_migration_UKCCMC.pdf
- C19** European Commission (2013) *Climate Change, Environmental Degradation, and Migration*. Brussels: European Commission, Staff Working Document 16/04/13, SWD 138 final. http://ec.europa.eu/clima/policies/adaptation/what/docs/swd_2013_138_en.pdf