



One Year Review

October 2011 – October 2012

**Foresight Project:
Migration and Global Environmental Change**

Contents

Executive Summary	1
1 Introduction	4
2 Project Overview	5
2.1 Background.....	5
2.2 Aim	5
2.3 Structure	6
3 Project Outputs	8
3.1 Project Report.....	8
3.2 Evidence base	11
4 Impact	14
4.1 Government Departments and Agencies.....	14
4.2 International	19
4.3 Research	36
4.4 Academia.....	40
5 Communications	43
5.1 Media Coverage	43
5.2 Dissemination events.....	45
Annex A: Acknowledgements	48

Executive Summary

The Foresight Migration and Global Environmental Change (MGEC) Project (the Project) published its findings as the report *Migration and Global Environmental Change: Future Challenges and Opportunities* (the Report) in October 2011. This One-Year Review (the Review) sets out the Report's impact in government and other and on the work of the research and academic communities.

Foresight has set aside resource to disseminate its reports and to help ensure that the evidence and findings are used to achieve impact. This One-Year Review (Review) is not intended as a comprehensive record. Rather, it highlights the wide range of the initiatives that have been informed by the Report. The main body of this Review includes statements from the stakeholder organisations themselves.

The Project explored how human population movements across the world could be affected by global environmental changes between now and 2060; its report highlights the issues that policy makers need to take account of today so that policies are resilient to the wide range of future uncertainties.

This Review begins with an overview of the Project, including its background, aim, structure and principal conclusions in Chapters 2 and 3. Chapter 4 sets out the wide range of impact which it has had in the year since publication; in particular within international fora. Information on the dissemination of the Report is set out in Chapter 5.

Summary of impact

Government

In particular, the Report has resonated with the priorities of the **Department for International Development (DFID)**. For example, the Report has informed the debate on urban resilience as well as the Climate, Infrastructure, Environment and Livelihood advisory profession. A workshop in Ghana, organised by DFID, the Foresight team and the National Development Planning Commission of Ghana, which drew together over 40 local and international experts considered the Report's implications for the Government of Ghana, was very successful. The event resulted in three policy briefs, written by Ghanaian experts, being commissioned for the National Planning and Development Commission to consider the policy implications also. The Report's analytical framework was used to initiate research in Ghana on the impact of cash transfers which have led to important initial findings.

The study was a useful addition to **The Department for Energy and Climate Change's (DECC)** understanding of the impacts of climate change. The main impact for DECC has been an improved and more realistic communication of the links between climate change and migration. The **Department for**

Environment, Food and Rural Affairs (Defra) has used the report directly to inform the Climate Change Risk Assessment (CCRA) which was laid before Parliament in January 2012. They have also used the report to steer the further work that is currently underway and other work that is expected to be undertaken in the near future which will help inform the next CCRA. The **Home Office** will be maintaining a watching brief as thinking and evidence on the impacts of environmental change and migration evolve over the next few years.

International

The Project has had a marked international impact. For example, it has significantly influenced the **United Nations High Commissioner for Refugees (UNHCR)**'s thinking and work in seeking to bring migration issues higher on the international agenda. The Report ultimately fed into the State-led process Nansen Initiative; a bottom-up, multi-stakeholder inquiry that will focus on five of the most affected parts of the globe where mobility and displacement are already being experienced. The Population Division of the **United Nations Department for Economic and Social Affairs (UNDESA)** has used the report in a wide variety of ways to inform their work. This includes supporting discussions in the inter-agency Global Migration Group, papers being presented to the General Assembly and likely to inform a forthcoming report of the Secretary General. The United Nations Development Programme (UNDP) recognised that the key findings align with its own understanding of linkages between poverty, the environment, and migration as well as building synergies between global processes such as the **Global Forum for Migration and Development (GFMD)** and the United Nations Framework Convention on Climate Change (UNFCCC) process. The **United Nations Environment Programme (UNEP)** used the Report for the in-depth analysis to inform its own regional study and to serve as an important reference point.

The **European Commission (EC)** is also reflecting on migration and environmental change. The Report has provided valuable insight and useful input for the Commission as it prepares a Commission Staff Working Paper for early 2013, as part of the EU Adaptation Strategy package.

The World Bank's interest in the Report is twofold: first, for operational and policy engagement at regional and country level which seeks to foster discussion within relevant sector units within the World Bank, and in turn with client countries, and second in the development of its corporate strategy and global advocacy. The **Asian Development Bank (ADB)** published a report on impact of environmental change on migration focussing on policy responses to the emerging phenomenon and on the Asia-Pacific region. The ADB recognised both reports as complementary and mutually supportive in their main messages.

The Report has also informed the work of several other international organisations. For example, for the German development agency, **Gesellschaft für Internationale Zusammenarbeit (GIZ)**, the Report has contributed greatly their internal discussion regarding the nexus of migration and environmental change and the report findings will continue to inform GIZ's

work into the future. The Report has influenced the **International Organisation for Migration's (IOM)** thinking. In particular, the IOM believes that the Foresight report could be usefully translated into a series of user-friendly training models for government officials to help them develop capacities to manage migration linked to environmental change in the future.

The **Organization for Security and Co-operation in Europe (OSCE)** consider that the Report has made a major contribution to identifying the decisions that policy makers need to take today in this area.

Research

UK-based research bodies are also considering the issue of migration and global environmental change. The **National Environment Research Council (NERC)** confirms the Report's findings are very closely interlinked with the existing direction of NERC, and that it was used to inform their new strategy. The **Economic and Social Research Council (ESRC)** recognises that the report provides an important contribution to the developing agenda in migration and global environmental change. The ESRC, along with the other Research Councils, and in partnership with its research investments, will consider the key conclusions of the report in developing future research activity. The Report highlighted important outcomes with respect to environmental human displacement that align with the work of United Nations **University Institute for Environment and Human Security (UNU-EHS)** which consulted with many of the leaders and authors of the Project while building its research questions and methodologies for the 'Where the Rain Falls' project.

Academia

The Report has been well received within the academic community. It is widely regarded as being scientifically robust with a deep and well considered, peer-reviewed evidence base. Many of the Project's impacts will be difficult to define and will have indirectly contributed to driving forward further research. However, there are a number of ways in which the Report has contributed towards informing further discussions on the subject of migration in the context of global environment change. Specifically, within the academic community, the Project has engaged and informed experts who have then based other work on this research, for example, authoring chapters of the next Intergovernmental Panel on Climate Change Fifth Assessment Report.

In summary, the Report has had, and continues to have, significant impact with UK and international stakeholders. It has influenced the work of DFID and that of several international and multinational bodies such as the United Nations, the European Union and the World Bank. The Project's methods and findings have found particular resonance with policy-makers, strategic thinkers and research communities from, a wide range of stakeholder organisations.

1 Introduction

This Review records the impact which the Migration and Global Environmental Change report (the Report) has made in the year following its publication in October 2011. The Report has informed and influenced government and other stakeholder initiatives in the area of migration in the context of global environmental change by providing a robust and comprehensive evidence based analysis.

Foresight has set aside resource to disseminate its reports and to facilitate impact. This 'Follow-up Team' works with government and other organisations, particularly in the year following the publication of a report, to help ensure that its evidence base and key messages are used to inform policy making, strategic thinking, research, and investment in technology development. This Review is a record of those activities and impact. The Review is not intended to be comprehensive, recognising that some impact will be indirect or intangible and not clearly attributable to the Foresight study. A 'Mid-Term' review will be conducted between three to five years after the Report is published to provide a more comprehensive record of its longer-term impact.

Impact has been achieved by Foresight's engagement with a wide range of stakeholder organisations spanning government, research bodies and international government and non-government organisations.

Foresight invited organisations to submit summaries of the Report's impact. This Review records the progress of initiatives set in motion or influenced by the project and, for the main part, uses the contributors' text. It is important to note that the Report, like all Foresight reports, does not in itself seek to direct policy, rather it sets out the evidence to inform decision making. The breadth and depth of this particular report has led to multiple impacts involving a wide range of other stakeholders.

This Review begins, in Chapters 2 and 3, with an overview of the Migration and Global Environmental Change Project (the Project), including its background, aim, structure and principal conclusions in Chapters 2 and 3. Chapter 4 sets out the wide range of impact which it has had in the year since publication; in particular within the international organisations, the academic and research communities, and with other organisations. Information on the dissemination of the Report is set out in Chapter 5.

2 Project Overview

2.1 Background

This two-year project published its findings on 20 October 2011 under the title 'Migration and Global Environmental Change: Future Opportunities and Challenges'. The culmination of two years work, the Report brought together over 350 leading experts and stakeholders from over 30 countries covering subjects ranging from demography to economic development to ecology.

The project was commissioned by the Government Chief Scientific Adviser, Professor Sir John Beddington who chaired the Project's High Level Stakeholder Group (HLSG). The HLSG comprised UK and international experts from organisations including the UK Government, the United Nations, the European Union, and the World Bank. A full list can be found at <http://www.bis.gov.uk/foresight>. The Report was overseen by a Lead Expert Advisory Group, chaired by Professor Richard Black, which provided the best available scientific oversight for the Project.

2.2 Aim

The aim of this Report has been to use the best available science and other evidence to:

- develop a vision for how human population movements across the world could be affected by global environmental changes between now and 2060; with a focus on the diverse challenges and opportunities for migrants and populations in originating and receiving regions; and
- identify and consider the decisions and choices that policy makers need to take today so that new policies are resilient to the wide range of future uncertainties.

A global perspective

The Report takes an unequivocally global approach to the issue of migration in the context of environmental change. This has involved:

- analysing international migration on a global level, between low-income and high-income countries and among low-income countries;
- analysing internal migration, particularly in low-income countries, which are most vulnerable to environmental change;
- looking at the impact of environmental changes arising from climate change, as well as land degradation and coastal and marine ecosystems degradation;

- understanding that links between migration and environmental change are particularly important in three key global ecological regions: drylands, low-elevation coastal zones and mountain regions;
- recognising that the impact of environmental change on future migration is uncertain: different growth, governance and environmental scenarios have diverse implications for migration influenced by environmental change.

A robust and independent approach

The analysis provides an independent look at the challenges ahead and how they might be addressed. Whilst the work has been led by the UK Government Office for Science, the findings do not constitute the policy of the UK or any other government. The Report's added value is the robustness of the evidence it uses, and the scrutiny and engagement it has received from a wide range of experts:

- The Report uses cutting-edge science from the broadest possible range of disciplines: from migration studies, economics, climate and environmental change, social sciences, demography, and geography. More than 70 papers and other reviews of the state of the art of diverse areas of science were commissioned to inform the analysis.
- The development of the Report has seen the involvement of around 350 leading experts and stakeholders from 30 countries worldwide. This has been crucial in enabling diverse regional perspectives and understanding to inform the work.

2.3 Structure

The Project was divided into phases.

Phase 1: Understanding future environmental migration

To inform phase one, the project has commissioned a series of driver reviews. These reviews draw on the best available evidence to evaluate (qualitatively and quantitatively) how environmental factors could influence the patterns of migration globally, out to 2060.

These reviews draw on existing evidence and also consider possible future uncertainties around environmental migration. This set of reviews combines cross disciplinary work with a futures perspective; they look at generally understood drivers of migration and consider the influence of environmental change. They represent a comprehensive review of the environment-migration nexus.

Phase 1 includes reviews, modeling, and development of future scenarios.

Phase 2: Refining understanding and addressing the challenges and opportunities

Phase 2 of the Project identified what new science, interventions, innovations and policies would be appropriate to address the most important challenges and development opportunities identified in Phase 1.

To do this the Project has commissioned three sets of reviews on: **1) Policy development, 2) state of science, and 3) case studies**

Phase 2 reviews identify and assess a range of science and technology interventions and broader policy options.

Nearly all the evidence outlined above in phase 1 and phase 2 was peer reviewed in line with standard academic process. The only exceptions were the four workshop reports and four working papers. A substantial proportion of the evidence base is also published in academic journals. Eleven of the driver reviews were published in **Global Environmental Change** at the time of launch.

3 Project Outputs

3.1 Project Report

The Report represented the main body of output from the Migration and Global Environmental Change project, signifying a synthesis of the evidence reviews, futures work and systems analysis.

The report has the following key conclusions:

- **Environmental change will affect migration now and in the future, specifically through its influence on a range of economic, social and political drivers which themselves affect migration.** However, the range and complexity of the interactions between these drivers means that it will rarely be possible to distinguish individuals for whom environmental factors are the sole driver ('environmental migrants'). Nonetheless there are potentially grave implications of future environmental change for migration, for individuals and policy makers alike, requiring a strategic approach to policy which acknowledges the opportunities provided by migration in certain situations.
- **Powerful economic, political and social drivers mean that migration is likely to continue regardless of environmental change.** People are as likely to migrate to places of environmental vulnerability as from these places. For example, compared to 2000, there may be between 114 and 192 million additional people living in floodplains in urban areas in Africa and Asia by 2060, in alternative scenarios of the future. This will pose a range of challenges to policy makers.
- **The impact of environmental change on migration will increase in the future.** In particular, environmental change may threaten people's livelihoods, and a traditional response is to migrate. Environmental change will also alter populations' exposure to natural hazards, and migration is, in many cases, the only response to this. For example, 17 million people were displaced by natural hazards in 2009 and 42 million in 2010 (this number also includes those displaced by geophysical events).
- **The complex interactions of drivers can lead to different outcomes, which include migration and displacement.** In turn, these types of outcomes can pose more 'operational' challenges or more 'geopolitical' challenges. There are powerful linkages between them. Planned and well-managed migration (which poses operational challenges) can reduce the chance of later humanitarian emergencies and displacement.
- **Environmental change is equally likely to make migration less possible as more probable.** This is because migration is expensive and requires forms of capital, yet populations who experience the impacts of environmental change may see a reduction in the very capital required to enable a move.

- **Consequently, in the decades ahead, millions of people will be unable to move away from locations in which they are extremely vulnerable to environmental change.** To the international community, this ‘trapped’ population is likely to represent just as important a policy concern as those who do migrate. Planned and well-managed migration can be one important solution for this population of concern.
- **Preventing or constraining migration is not a ‘no risk’ option.** Doing so will lead to increased impoverishment, displacement and irregular migration in many settings, particularly in low elevation coastal zones, drylands and mountain regions. Conversely, some degree of planned and proactive migration of individuals or groups may ultimately allow households and populations to remain in situ for longer.

The challenges of migration in the context of environmental change require a new strategic approach to policy. **Policy makers will need to take action to reduce the impact of environmental change on communities yet must simultaneously plan for migration.** Critical improvements to the lives of millions are more likely to be achieved where migration is seen as offering opportunities as well as challenges.

Measures that **prevent harmful environmental changes**, reduce their impact, and build resilience in communities will diminish the influence of environmental change on migration but are unlikely to fully prevent it.

Migration can represent a ‘transformational’ adaptation to environmental change, and in many cases will be an extremely effective way to build long-term resilience. International policy should aim to ensure that migration occurs in a way which maximises benefits to the individual, and both source and destination communities.

Cities in low-income countries are a particular concern, and are faced with a ‘double jeopardy’ future. Cities are likely to grow in size, partly because of rural–urban migration trends, whilst also being increasingly threatened by global environmental change. These future threats will add to existing fragilities, whilst new urban migrants are, and will continue to be, particularly vulnerable. Yet this report argues against trying to prevent rural–urban migration, as this could lead to graver outcomes for those who are trapped in vulnerable rural areas.

In summary, the key message of this report is that migration in the face of global environmental change may not be just part of the 'problem' but can also be part of the solution. In particular, planned and facilitated approaches to human migration can ease people out of situations of vulnerability. In light of this, international policy makers should consider the detailed evidence from this report in a range of areas, with the following of particular priority:

1. Many of the funding mechanisms for adaptation to environmental change are currently under discussion. It is imperative that these mechanisms are not developed in isolation from migration issues and, furthermore, that the transformational opportunities of migration is recognised.
2. Whilst the twin challenges of population growth and environmental change will pose an increasing threat to urban areas in the future, cities in many countries are already failing their citizens. Action is required before the situation becomes irreversible, to build urban infrastructure that is sustainable, flexible and inclusive.

The cost of inaction is likely to be higher than the costs of measures discussed in the Report, especially if they reduce the likelihood of problematic displacement. Giving urgent policy attention to migration in the context of environmental change now will prevent a much worse and more costly situation in the future.

3.2 Evidence base

A comprehensive set of cutting-edge reviews of future developments in science, technology, policies and practices relevant to the migration challenges in the context of global environmental change. These reviews form part of the independent evidence base commissioned for the Project, which sets out to answer the central question:

How will global drivers affect human migration and what are the implications for policy makers?

These reviews span the natural and social sciences and were authored by leading experts in their fields from across the world. They were commissioned around the five drivers identified by the Project as critical to the migration system: environmental, political, demographic, economic and social. These evidence reviews cover both current 'state of the art' developments and likely future trends in science, technology, policy and practice.

Scenarios

The Report uses scenarios of the future to understand how migration may be influenced by future global environmental change and other factors. The four scenarios that were developed as part of the Project were constructed to illustrate outcomes associated with different political and economic drivers while recognising uncertainty in other areas. These scenarios are not predictions; their purpose was simply to propose four contrasting but plausible ways in which political and economic factors would combine to influence migration. These scenarios then served to explore possible policy options.

To tackle problems inherent in the consideration of future migration and environmental change, this report developed scenarios to portray stylised representations of reasonable and possible futures, even if precise likelihoods could not be subscribed to each narrative. Among all drivers, the evidence suggests that two are crucial to scenario building as they have significant impact on other migration drivers, and are subject to dramatic and unpredictable changes:

- The economic drivers of migration, specifically the evolution of the world economy, driving the opportunities for migration, both nationally and internationally; and
- The political drivers of migration, specifically how they impact local governance of social and economic circumstances, and of migration.

Driver reviews

These reviews draw on the best available evidence to evaluate (qualitatively and quantitatively) how environmental factors could influence the patterns of migration globally, out to 2060.

This includes:

- Developing an in-depth understanding of how environmental factors will interact with other drivers of change to affect the migration system globally;
- Assessing future uncertainties in consequential migration flows;
- Identifying the most important challenges and opportunities that could face policy makers in countries and international organisations, and assessing the case for action and policy development now.

These reviews draw on existing evidence and also consider possible future uncertainties around environmental migration. This set of reviews combines cross disciplinary work with a futures perspective; they look at generally understood drivers of migration and consider how environmental change might influence them.

State of Science reviews

These papers review the current state of science or knowledge in important areas for the future of the environmental change-migration system. To help ensure the Project's scientific rigour, and to consider how new science, policies and interventions might best address those future challenges, 20 short reviews from leading experts on a number of topics were commissioned. The state of science reviews were essential in the understanding of future developments in science, technology, techniques, policies and practices relevant to the global migration system in the context of environmental change. Some of these were published in the journal *Global Environmental Change* Volume 21, Supplement 1 (2011).

Policy Development Reviews

These papers identify and evaluate current and future migration policies, with an emphasis on cutting-edge policies and interventions and potential developments likely to occur over the next 20 years. Given the Report provided a comprehensive overview of the migration in the context of environmental change, 23 policy development reviews were commissioned to provide an overview of the issues facing policy makers. For example, the reviews included '*Environment, migration and the demographic deficit to Mitigating conflict and violence in Africa's rapidly growing cities*', '*The European Union's role in migration up to 2030 and then 2060*', and '*Developments in the UNFCCC climate negotiations and potential for future action*'. These policy development reviews provided a foundation for the Report's conclusions and provided the basis for the strategic framework for policy (chapter 5 of the main report).

Case Studies

To complement the evidence and analysis of Phase 1 and 2, the project commissioned a series of case-studies. These drew on examples and experiences of specific locations or environmental changes to inform the Project's understanding of future global environmental migration, illustrate policies/interventions/practices that have worked in particular situations, and assess how applicable they may be elsewhere

Modelling Reviews

To provide plausible scenarios, nine modelling reviews critically analysed key aspects of the drivers and underpinning forecasting models. These modelling reviews included the '*Economic drivers of international and internal migration*' and '*Bayesian forecasts of environmental migration*'.

Workshops

Four workshops explored the effects of the key drivers identified from the driver reviews on four global ecological regions, of which drylands, low-elevation coastal zones and mountainous regions were featured in the MGEC report as the most vulnerable. The workshops took place in Kathmandu (Nepal), Johannesburg (South Africa), Istanbul (Turkey) and Dhaka (Bangladesh).

Working papers

To support high level stakeholders' own priorities and work, four working papers were commissioned. They comprised: 'The USA and the global environmental system', 'Lessons to learn from Curitiba', 'Climate change adaptation and migration; implications for migration' and 'The stated motivations for migration across household surveys'.

4 Impact

4.1 Government Departments and Agencies

Department for International Development (DFID)

The Report has been used extensively in DFID to inform policy, research and practice over the past year. This has entailed dissemination meetings for specialist advisers and staff, a joint policy workshop with DFID partners in Ghana in March 2012 (with a similar event planned in India in 2013), and DFID-funded research on the impact of cash transfers on migration patterns in sub-Saharan Africa.

Dissemination

The Report was circulated extensively in DFID following the October 2011 launch through hard copies and CD versions, staff circulars and the DFID intranet site. A major launch of the Foresight report was held in DFID's headquarters in January 2012, led by Sir John Beddington and the Foresight team. The launch event drew in 70 staff across the organisation in London and country offices and senior managers in DFID's Research and Policy Divisions.

The findings of the Report were used to stimulate a debate in the professional development conference in November 2011 for 100 Climate, Environment, Infrastructure and Livelihoods (CEIL) advisers around urbanisation, migration and climate change and the environment. Professor Neil Adger from UEA (and a member of study's Lead Expert Group) and David Satterthwaite from International Institute for Environment and Development were key contributors.

The Report was welcomed by the Asia climate change network and seen as having great relevance to South Asia by advisers and heads of offices. A regional CEIL conference is planned in Delhi in February 2013 and would be a useful forum for the Foresight team to engage DFID advisers from the region. A Foresight team plans to visit India in early 2013 to pursue engagement with the Government of India and a DFID partner state government. This would draw on the approach developed in Ghana to build policy interest in the Report findings with partners in government, civil society and the private sector in India (see Policy section below).

Findings of the Report have also fed into DFID thinking about urban resilience and have indirectly informed the evidence base for the development of an Asian urban resilience programme. The Report is very useful in the evolving agenda on urbanisation and migration and climate change more generally. One of the recent sessions at the DFID Urbanising Development seminar series drew on research undertaken for the Report, focusing on the status of urban migrants and climate change adaptation.

Ghana workshop

The most influential policy work to date resulting from the Foresight report has been with the Government of Ghana. DFID's Ghana office helped to broker a successful high-level workshop in Accra in March 2012 on migration and environmental/climate change. This was a joint event for about 40 policy makers and practitioners organised by the Foresight team and the National Development Planning Commission, with 4-5 Commissioners attending both days, along with many other actors, including national and regional institutions. There was very strong input from UN system in a panel chaired by UN Resident Representative and representatives from WHO and IOM in attendance. Civil society was also represented among the 40 participants. An exhibition by two accomplished Ghanaian photographers on the impacts and human face in eroding coastal areas and slums sparked off extensive interest and discussion.

The main objectives of the workshop were to explore the implications of the Foresight report findings for Ghana; to consider lessons arising from local and central government initiatives to date; and to identify entry points for policy action in Ghana. The workshop generated a number of useful policy implications. First, it highlighted how policies affected sectors which they were not originally designed to do. For example, social protection policy has important implications for migrants, while policies affecting migrants have knock-on effects for home communities who received remittances. This highlights a need to understand inter-sectoral linkages, remove policy distortions and ensure policy coherence. Second, migration policy needs to interact effectively with Ghana's decentralisation agenda. Migrant sending communities may be in different regions to receiving communities, yet strong and coherent policy must reach across regional boundaries to maximise benefits for both. Third, the need to focus on the implementation of policies in areas such as social protection, where migrants may have rights to services but are unable to access them, illustrate the importance of a coherent approach to implementation.

DFID Ghana subsequently commissioned three policy briefs and synthesis report to feed into the Ghana national social protection refresh and policy framework with the Ministry of Employment and Social Welfare, on migration policy and with the Ministry of Interior, and on a climate policy framework with the Ministry of Environment, Science and Technology.

The workshop also highlighted a series of data and research gaps. These include the need for a better understanding of internal migration in Ghana, especially the importance of rural-urban flows compared to urban-urban and urban-rural migration; and better data and forecasting capability to deal with major climatic events such as the recent floods which caused widespread devastation.

Research

The Adaptation Team in DFID Policy Division's Climate and Environment Group used the framework developed by the Report to kick off a deeper analysis of the impact of cash transfers on improving choice for poor people in vulnerable environments, particularly the choice to migrate away from areas of declining productivity related to climate change and/or increased climate variability. They were looking at the possibility of 'trapped populations' raised in the Report, and testing ideas that cash transfers would improve life choices, notably the ability of poor people to move away from degraded environments.

In developing the business case for the Adaptation for Smallholder Agriculture Programme evidence from the Report was used to identify possible

maladaptation to climate change. This was in relation to the risk of investing and supporting smallholder farmers to adapt to current climate risk and remain in areas that, in the long term, may no longer be viable for agriculture due to changes in rainfall patterns and higher temperatures or from inundation due to sea level rise.

The investigation was led by researchers from both the University of Sussex migration unit, and the Adaptive Social Protection team in IDS working closely with a team of field researchers in four East African pilot countries (Ethiopia, Kenya, Tanzania and Malawi) based on a small sample of qualitative interviews. The final report was circulated to staff across the social protection and climate teams prior to a launch in DFID at the end of October. A public launch in London for a broader audience is also planned.

The report points to some important initial findings. Interviews with a small sample of project beneficiaries in Ethiopia, Kenya, Tanzania and Malawi found that cash transfers have had little impact on the decision to migrate. In the few cases where cash was used for migration, this was in very poor cash-constrained households in remote areas (the case of rural Ethiopia) where the costs of migration were high; or in areas where households had exceeded their ability to adapt to a deteriorating environment (Kenya). However, in most other cases, both the amount of cash awarded and/or the costs of migration were too low for cash transfers to have any significant effect on facilitating migration.

There is also some evidence that cash transfers have reduced mobility in Ethiopia, but this concerns relatively older people who did not want to move away from their native villages. Arguably this last observation could have negative impacts in the longer term (mal-adaptation) by trapping people in livelihood strategies that are not sustainable in the context of deteriorating conditions for farming brought about by shifts in climate patterns. This predicament is somewhat tempered by the fact that some of the cash recipients staying behind have succeeded in diversifying out of agriculture, through e.g. investing in non-farm activities such as petty trade. But these tend to be the relatively better-endowed, with the aptitude for risk-taking and entrepreneurial skills.

The research has generated important findings from a relatively small sample. These findings would need to be tested further through comparative studies in several locations and field sites to ensure robustness and reliability of the initial set of evidence.

Home Office

The Home Office's interest in the project was on the implications of global environmental change at the UK border. The research shows that the areas under most potential pressure from environmental change are some of the poorest countries and areas in the world. People from these areas have developed their own adaptation strategies over the years to cope with environmental change. These are local level adaptation strategies, with people in poverty using their local networks to 'get through'. The Report does not

present evidence of people coming to the UK to escape environmental pressures, and does not suggest this happening in the foreseeable future.

The Home Office will be maintaining a watching brief as thinking and evidence on the impacts of environmental change and migration evolve over the next few years.

Department for Energy and Climate Change (DECC)

The study was a useful addition to DECC's understanding of the impacts of climate change. The main impact for DECC has been an improved and more realistic communication of the links between climate change and migration. The report pulled out the complexities of the problem and showed DECC the importance of nuancing its messaging – in particular that there is little evidence that climate change has caused, or will cause mass migration across borders, but that it can act as an additional pressure on people to move.

An indirect impact is within the growing number of studies focussing on climate change and security, where there is often now a focus on the climate change-migration-security nexus. The Report has provided useful input to HMG considerations of climate change and security.

Department for Environment, Food and Rural Affairs (DEFRA)

The Climate Change Risk Assessment (CCRA) Evidence report draws from the Report in its analysis of the risks around climate induced migration especially in terms of the potential impacts to the UK on its demographics and the influence on the health needs of the UK population (see page 189 of Evidence Report).

http://randd.defra.gov.uk/Document.aspx?Document=10067_CCRAEvidenceReport16July2012.pdf

The CCRA is the UK's first risk assessment of potential climate change impacts and is a statutory assessment which was laid before Parliament in January 2012 (as required by the 2008 Climate Change Act). The CCRA gives a direction to the development of the National Adaptation Programme (NAP) which must be laid before Parliament in 2013. Both the CCRA and NAP have a five-year cycle.

Not only has the Report been an important part of the evidence used in the CCRA Evidence report; it has helped to steer the further work that is currently underway and other work that is expected to be undertaken in the near future which will help inform the next CCRA.

The findings of the Report were used to inform the section "Climate induced migration" within the Health and Wellbeing chapter of the CCRA. This section explores how climate change related migration might affect UK demographics and influence the health needs of the population. Although the evidence on how an increase of global migration might affect the UK is weak, CCRA reflects on Foresight's findings regarding how the influx of new immigrants might change

the composition of ethnic groups in the UK if large overseas areas become severely affected by climate change and uninhabitable.

The Report is also referenced in the Government report (page 9):

<http://www.defra.gov.uk/publications/files/pb13698-climate-risk-assessment.pdf>

Foreign & Commonwealth Office (FCO)

The Report has assisted the FCO in its overarching goal to raise awareness about the “threat multiplier” effect of climate change, which when it interacts with other stress factors, can have second and third order consequences, such as migration, loss of land or livelihoods, and health issues.

More specifically, the Report has helped to inform our cross-Whitehall climate and resource security work on the impacts of climate change on the UK’s security and prosperity as well as our on-going dialogue with international partners on migration, development and climate and resource security issues.

4.2 International

European Commission (EC)

The publication of the Report in autumn 2011 has coincided with an on-going process of policy reflection on this issue within the European Commission. This was launched following the European Council's invitation to the Commission to present an analysis of the effects of climate change on international migration, going beyond its effects on immigration to the EU, and is likely to culminate with the adoption of a Commission Staff Working Paper on the topic in early 2013, as part of the EU Adaptation Strategy package.

The Report has provided much useful input to Commission services work on this issue. Thanks to its solid grounding in scientific evidence and the sophisticated conceptual framework it employs to assess the role which environmental drivers play in affecting migration decisions, it has provided valuable insight on the ways in which climate change is likely to influence human mobility in future decades, and the ways that preventing displacement as well as managing migration can be seen as adaptation to climate change. The Commission services also appreciated the cross-disciplinary approach and global focus of the report, which meant that its policy recommendations have been of interest to a wide spectrum of Commission Directorates-General (DGs), including Home Affairs, Development & Cooperation, Climate Action and the EC Humanitarian Office. The attention which the Foresight report has brought to the issue of populations that are likely to be 'trapped' by the effects of climate change and the challenges which cities will face as major destination areas are also welcome.

The Commission services are also grateful to Foresight for the input which it has provided to two consultation meetings organised as part of preparations of the Commission Staff Working Paper. The first of these focused on migration as an adaptation strategy to climate change and was held in Brussels in July 2012 as a joint event of Foresight, the European Commission's DG for Development and Cooperation, and the International Centre for Migration Policy Development (ICMPD). Foresight provided a discussion paper building on the findings of the report in a variety of areas such as the role of migration and remittances in strengthening the resilience of communities in areas of origin, the cost-effectiveness of migration compared to other adaptation strategies, and the role of relocation measures in assisting trapped populations. Together with other participants, attending Foresight experts provided useful input on policy measures which could be supported through EU development cooperation in each of these areas.

The second consultation took place in Brussels in September 2012 and focused on the development impacts of environmentally induced migration for destination areas such as cities in the developing world. Foresight again provided a discussion paper for the event which built on the findings of the main report regarding challenges faced by cities in the context of climate change and policy measures to effectively manage urbanisation.

United Nations High Commissioner for Refugees (UNHCR)

Current and future work

From 2010-2012, UNHCR used commemoration of the 60th anniversary of the 1951 Convention relating to the Status of Refugees and the 50th anniversary of the 1961 Convention on the Reduction of Statelessness as a vehicle to sensitize States and other stakeholders, including NGO partners, to new forms of displacement, especially those where environmental factors were among a complex set of drivers. The annual High Commissioner's Dialogue on Protection Challenges was organized as the first contribution to the commemoration's process in December 2010 on the theme "Protection Gaps and Responses". Participants confirmed that the Guiding Principles on Internal Displacement would be applicable to those displaced within their countries and but that those crossing borders would not benefit from the protection of the 1951 Refugee Convention in most instances, nor of any other treaty, such as the Convention of the Rights of Migrant Workers and their Families.

Publication of the Report in 2011 was a landmark in many ways. Its compilation and state-of-the-art analysis of available data from a range of sources confirmed what many in the humanitarian, disaster-risk reduction and development communities had long been affirming based on observation and experience, but without benefit of empirical underpinning. The Report provided critical confirmation that: most mobility will be internal and not across borders; the dividing line between voluntary migration on the one hand and forced displacement on the other will be difficult to draw, particularly in the case of slow-onset events; the most vulnerable members of developing country societies will be the least able to adapt by moving to more secure and habitable locations, and some may even become trapped in their present locations; and that some populations may have no other choice but to move into harm's way rather than away from it.

UNHCR's own work in this area therefore benefitted directly from briefings about the Report and its findings during the Principals Meeting of the Global Migration Group at UNESCO Headquarters in Paris on 15 November 2011 and at the 10th Coordination Meeting on International Migration in New York on 10 February 2012. It is worth highlighting that the report drew high praise from migration and displacement specialists in these forums. This prompted UNHCR to request the Foresight team to give a briefing on the report at UNHCR Headquarters in late 2011, as part of its 'Food for Thought' series of lectures, and to begin strategizing with them about how the report might influence States to move from rhetoric to action in this area.

In conclusion, the above analysis makes clear that the Report, and UNHCR's engagement with the Foresight team, have markedly influenced UNHCR's thinking and work in seeking to bring these issues higher on the international agenda. The report ultimately fed into a State-led process known as the Nansen Initiative, which is a bottom-up, multi-stakeholder inquiry that will focus on five of the most affected parts of the globe where mobility and displacement

are already being experienced. Foresight has been asked to join the Nansen Initiative Consultative Committee and has the opportunity, in that capacity, to continue to influence legal and policy developments in this area. UNHCR is grateful to the Foresight team and looks forward to continuing its close and productive partnership with Foresight.

Foresight and the Nansen Initiative

The Foresight project contributed very directly to the launch of the Nansen Initiative by submitting a report entitled, 'The Nansen Initiative, UNHCR and the Foresight Report on Migration and Global Environmental Change'. This report examines the 2011 Foresight report and considers its relevance for the Nansen Initiative. In addition, at various points throughout the report, external evidence and analysis is juxtaposed with the Foresight report and the work of UNHCR, so as to identify possible future areas of inquiry.

Background

In the context of activities commemorating the anniversaries of the Refugee and Statelessness Conventions three key events on climate change and displacement took place, which were part of UNHCR's broader effort to place the issue of displacement on the international agenda:

(1) The Bellagio Expert Roundtable on Climate Change and Displacement of February 2011 was organized by UNHCR with funding from the McArthur Foundation and examined legal and other gaps and potential responses to climate-induced displacement, and developed a number of broad understandings on the issue;

(2) The Nansen Conference on Climate Change and Displacement, hosted by the Norwegian Government in June 2011 as a contribution to UNHCR's commemorations cycle, developed 10 principles to guide future responses. Now widely known as the Nansen Principles, two of the ten principles are particularly relevant here. Principle II restates the primary responsibility of States to protect their populations, including the displaced and those at risk of displacement, for example through the development of relevant legislation, policy and institutions. Given the legal gap identified in the protection of persons displaced across borders, Principle IX recognizes the need for a more coherent and consistent approach at the international level to meet the protection needs of cross-border displaced persons. States are invited to work with UNHCR and other relevant stakeholders to develop a guiding framework or instrument in this regard;

(3) The Ministerial Meeting of UN Member States facilitated by UNHCR in December 2011 was another important step. The ministerial event was a culmination of a series of expert and other meetings in UNHCR's programme of commemoration-related activities and elevated the topic of displacement and climate change to an inter-governmental forum attended by 150 States – over 75 per cent of all UN Member States. While the majority of States were hesitant explicitly to recommend taking action on this issue, they expressed in the Ministerial Communiqué adopted at the close of the meeting a certain, albeit very general, readiness to engage in a soft dialogue and to collect and share experience and practices in handling such displacement.

In the run-up to the ministerial event, UNHCR had encouraged States to announce changes in policy and legislation aimed at improving the situation of refugees and stateless persons on their territory. It was in this context that Norway and Switzerland (joined by Costa Rica, Germany and Mexico) made the following pledge: "A more coherent and consistent approach at the international level is needed to meet the protection needs of people displaced externally owing to sudden-onset disasters, including where climate change plays a role. We therefore pledge to cooperate with interested states, UNHCR and other relevant actors with the aim of obtaining a better understanding of such cross border movements at relevant regional and sub-regional levels, identifying best practices and developing consensus on how best to assist and protect the affected people."

This is the genesis of the "Nansen Initiative", which both countries launched during UNHCR's Executive Committee on 2 October 2012. The overall goal of the Nansen Initiative is to build a consensus on key principles and elements regarding the protection of persons displaced across borders in the context of natural disasters that sets the agenda for future action at domestic, regional and international levels. The outcome should be an Agenda for the protection of people displaced across international borders in the context of natural disasters.

United Nations Department for Economics and Social Affairs (UNDESA)

The Report has informed the UNDESA's work and that of the wider United Nations community in many ways.

Both, the Report and its numerous background papers are written from a global perspective, well researched and balanced. Some of the key messages have clearly influenced the debate within the Division and the wider United Nations community. For example, the report links migration in the context of global environmental change to overall global international and internal migration trends. Thus, the analysis is not conducted in isolation but embedded in a broader study of the influence of environmental change on economic, social and political drivers which themselves affect migration.

Therefore, the Report is countering any argument that environmental change alone will cause mass migration. Instead, the Report presents a much more nuanced analysis differentiating between geographic areas affected differently by environmental change and making the argument that most migration will be internal. The Report also raises the important point that many people will continue to migrate towards environmentally vulnerable areas. Further, an increasing number of people will be trapped in some of these areas and if forced to leave, will have fewer options for safe migration. Thus the Report convincingly appeals to the international community, governments and civil society to address the complex challenges of migration in the context of environmental change in a forward-looking and strategic way with migration not only viewed as part of the problem, but possibly as part of the solution.

Regarding specific activities at the Population Division that were influenced by the Report, the study informed discussions within the Global Migration Group - the United Nations interagency group (including the International Organization for Migration (IOM)) tasked with fostering coherence in the inter-agency response to the challenges and opportunities of migration. These discussions centred on the drafting of a joint statement on the impact of climate change on migration which was presented at the meeting of the Global Forum on Migration and Development in Geneva in December 2011.¹

Further, the Report was presented at the Tenth Coordination Meeting on International Migration, organised by the Population Division and held in New York in February 2012, where it received considerable attention from the nearly 160 participants. It was posted on the meeting's website, and a summary of the presentation and ensuing discussion will be included in the forthcoming proceedings of the meeting.²

The Report also served as the basis for a brief discussion of migration and environmental change in the report of the United Nations Secretary-General on International Migration and Development prepared for the sixty-seventh session

¹ See www.unmigration.org.

² See <http://www.un.org/esa/population/meetings/tenthcoord2012/tenthcoord2012.htm>.

of the General Assembly in the fall 2012.³ It has been printed in six languages and will be the basis for discussions in the General Assembly later this year.

Lastly, the report will most likely also inform a forthcoming report of the Secretary-General which will be prepared for the forty-sixth session of the Commission on Population and Development. The Commission is a functional commission of the Economic and Social Council of the General Assembly and will address demographic aspects of new migration trends in the spring of 2013.

United Nations Development Programme (UNDP)

The Report and its key findings are in line with UNDP's understanding of the interlinkages between poverty, the environment, and migration.

The issue of climate change has emerged as a central concern for UNDP, because its effects threaten to undermine human development and the expansion of opportunity, especially for the world's poorest. UNDP recognises that environmental hazards linked to climate change may perpetuate existing inequalities among and within countries. The poorest countries and poorest people – those with the least resources, power, and capacity – are likely to be hit the hardest; whereas developed countries have the means and resources to climate-proof their infrastructure and the capacity to cope with and recover from climate shocks.

Reducing poverty and fighting climate change must therefore go hand-in-hand. Vulnerability is a function of both: the increased severity of environmental hazards as a result of climate change, combined with low levels of human development and often precarious livelihoods, translating into low levels of resilience. Unless people have basic access to water, sanitation, food and energy, institutions that work, and a say in the decisions that affect their lives, they will not be able to cope with or adapt to the effects of a changing climate.

Migration can play an important role in alleviating poverty and contributing to the human development of those who move, their families, and communities. Far from being a future scenario, migration is already used as a household coping strategy for dealing with environmental risks. As the Report confirms, existing patterns of mobility in the world are unlikely to change dramatically due to environmental factors. People will likely continue to move along familiar routes, using existing networks to facilitate their movements. This means most movements will continue to be internal, typically from rural to urban areas, or within regions.

The most vulnerable communities may be unable altogether to use migration as an adaptation strategy. Background research on migration patterns in Nicaragua during Hurricane Mitch, carried out for the 2009 Human Development Report on human mobility, found that rural families in the bottom two wealth quintiles were less likely to migrate than other families in the

³ United Nations (2012). Report of the Secretary-General on International Migration and Development (A/65/254). New York.

aftermath of the Hurricane. This corresponds with the Report's observation that many poor people faced with environmental hazards risk being trapped in dangerous conditions.

UNDP recognizes the need for a coordinated response – both internally and with other agencies – so as to provide options for those living with risk. These options include on the one hand, enabling people to move out of harm's way if necessary as an adaptation measure and to do so in a safe manner; and, on the other hand, making it possible for people to stay where they are, by building resilience *in situ*, helping them adapt to a changing environment, and reduce the risks of fatalities when disaster strikes.

The Report was presented at UNDP headquarters in New York in December 2011, hosted by UNDP's Energy and Environment Group. It was met with the recognition that its findings are of relevance to a number of different work areas in UNDP, including climate change adaptation, disaster risk reduction and early recovery, poverty reduction and resilience, and migration and development.

Since then, practical follow-up engagement has happened on two levels: In Ghana, Foresight has organised a national workshop on the topic of 'Migration, Development and Environmental Change in Ghana' in collaboration with DFID, the National Development Planning Commission and the Ministry of Education, Science and Technology. The UN Resident Coordinator / UNDP Resident Representative Ms. Ruby Sandhu-Rojon participated in one of the workshop panels.

At the global level, Foresight has been involved in a preparatory workshop for the 2012 Global Forum on Migration and Development (GFMD) in Mauritius on the topic of "Factoring migration into development planning" that was co-organized by UNDP. The report's main findings and the follow-up undertaken with the Government of Ghana were presented at the workshop. The inclusion of the Foresight perspective influenced the workshop discussions and findings in several ways, leading to an enhanced focus on:

- The need to strengthen consideration of rural-urban migration dynamics in the global migration and development debate;
- The added value of including local authorities in that debate;

The opportunities that may derive from building synergies between global processes such as the GFMD and the United Nations Framework Convention on Climate Change (UNFCCC) process.

Consequently, the workshop outcomes, which will influence the discussions at the GFMD summit in November 2012, include the following recommendations:

- At the programmatic level, the GFMD could explore linking up the migration and development portfolio with the adaptation portfolio and developing projects that are eligible for funding under the UNFCCC Cancun Adaptation

Framework. Similarly, the GFMD could explore developing joint “Voluntary Contributions” for the implementation of the Rio+20 agenda, as per paragraph 283 of the Rio+20 Outcome Document.

- Governments should consider giving greater consideration to internal migration and urbanization dynamics in migration mainstreaming processes, including the need for coordination between national and local level governments on migration and development. They may also wish to consider establishing a dialogue between the GFMD and city networks.

Through its Poverty Reduction Group, UNDP is currently involved in a global pilot project on the topic of “Mainstreaming migration into national development strategies”, which is implemented jointly with IOM. The issue of environmental change and migration could be integrated into the project at country-level, hinging on demand for support on this issue from national governments. So far it has not emerged as a priority concern in the current pilot countries (Bangladesh, Jamaica, Moldova, and Tunisia).

UNDP identified two potential avenues for follow-up to the presentation of the Report in New York in 2011, which remain valid entry points for further engagement. These include: a) an e-consultation of UNDP country offices to gauge the resonance of the Report’s key findings and learn about interest for follow-up at the country level; and b) the exploration of possible options for integrating migration as an issue for consideration in UNDP programming related to climate change adaptation.

United Nations Environment Programme (UNEP) Post conflict and disaster management branch

The United Nations Environment Programme (UNEP) in cooperation with the International Organization for Migration (IOM), the Office for the Coordination of Humanitarian Affairs (OCHA), the United Nations University (UNU) and the Permanent Interstate Committee for Drought Control in the Sahel (CILSS), with technical input from the University of Salzburg’s Centre for Geoinformatics, was conducting a regional study on a related topic at the same time as the MGEC study was being finalised. The report entitled “Livelihood Security: Climate Change, Migration and Conflict in the Sahel” was published at the Durban Climate Change Conference in November 2011.⁴

As this UNEP led study was being conducted in parallel with the Foresight study, there was little input from Foresight to this report. Looking at the findings, it is, however, interesting to note that the two studies, Foresight with its global focus and the UNEP led study with its regional focus, support most of each other’s findings and conclusions. It is also of great value to us to be able to refer

⁴ The UNEP report can be found at:
<http://www.unep.org/disastersandconflicts/Introduction/EnvironmentalCooperationforPeacebuilding/EnvironmentalDiplomacy/SahelReport/tabid/55812/Default.aspx>

to the Report for more in-depth information on the analysis of the inter-linkages between migration and environmental change, as well as the various policy responses that was recommend. Also, in the future the Report will serve as an important reference point for UNEP activities on these issues.

The Report also highlights some key issues that are of utmost importance to take into consideration for any future follow-up work by the international community at large. This includes the often overlooked issues of migration into areas of environmental risk as well as the consequences when poor and vulnerable parts of an affected population become trapped and cannot move as a result of various social-, economic- or political reasons, although the environment no longer supports their livelihoods. As noted in the Report, conflict over increasingly scarce natural resources can occur both when people become “trapped” or when migration takes place and amplify political or geopolitical problems or raise the exposure and vulnerability to conflict or ecological disasters. Addressing conflict risks as a result of environmental change or increased competition over natural resources is also one of the goals of UNEP’s Post-Conflict and Disaster Management Branch.

United Nations Children’s Fund (UNICEF)

Environmental change and its potential impact on migration, particularly the migration of vulnerable populations, has become an area of policy concern to many countries and the international community at large. The 2011 Statement of the Global Migration Group (GMG) on the Impact of Environmental change on Migration, which was endorsed by 16 GMG Principals, noted that migration and environmental change “require urgent action through gender-sensitive, human rights and human development-oriented measures to protect affected populations”.

The Foresight Report has provided UNICEF useful policy insights regarding environmental change and migration:

- First, while it has been asserted that there are a number of environmental/climate change migrants, the Report argues that these numerical estimates are methodologically unsound because environmental change induced migration is a multi-causal phenomenon. It is not appropriate to attribute migration solely to environmental change as environmental change induced migration interacts with a range of economic, social and political drivers which themselves affect migration.
- Secondly, a number of people live in ‘at-risk’ zones, which include floodplains, coastal areas, areas prone to drought, and developing countries. People will often migrate for reasons other than environmental change. The Report also notes that people, including young people are likely to migrate from one from place to another place of environmental vulnerability. For example, it mentions that there may be between 114 and 192 million additional people living in floodplains in urban areas in Africa and Asia by 2060. Thus, to presume that this mass migration is due to environmental change ignores other complex drivers, which play a role in migration. These findings and projections indeed

imply that human mobility is likely to continue regardless of environmental change and emphasizes the need for strategic policy and programmatic approaches in addressing the implications of future environmental change for migration.

Following the publication of the Report, Foresight met UNICEF staff working on environmental change and migration related issues at the UNICEF House Autumn 2011. The Report was deemed relevant to UNICEF's on-going policy work in the area of migration and human development as well as environmental change and urbanization. During this meeting UNICEF/Division of Policy and Strategy (DPS)/ Policy, Advocacy and Knowledge Management Section (PAS) - Migration stressed the need for further research and policy work to assess the impacts of environmental change on migration and vulnerable populations, in particular, on children, adolescents, and youth. This suggestion was welcomed by the Foresight project team.

Despite the growing interest in the relationship between environmental change and migration, UNICEF has noted there is a dearth of research, knowledge and policy work on the impacts of climate change and environmental degradation on migration and vulnerable populations. In particular, there is a dearth of policy research on children, adolescents and youth.

A short summary of how the Report has informed the work of UNICEF-DPS/PAS Migration:

The Foresight Report on Global Environmental Change and Migration has proved to be a useful policy research material for UNICEF's migration policy work which has a special focus on children, adolescents, youth and the gendered dimensions of migration. The Report has informed UNICEF/DPS/PAS-Migration policy work with the GMG as well as the Rio+20 preparatory inputs and its follow-up with the UNICEF Inter-divisional Task Team on Sustainable Development and post 2015. In particular the Report has been useful in the following activities:

1. The Report has served as a practical reference document demonstrating the link between migration and environmental change. The analysis and the findings of the Report have been extremely helpful for UNICEF-DPS/PAS-Migration's work on the impact of environmental change on vulnerable populations, which includes children, adolescents and youth, in the context of migration.

UNICEF is currently coordinating the GMG Joint Thematic Report on Adolescents/Youth and Migration. A chapter of this forthcoming publication addresses the issue of environmental change and adolescents/youth migration. The Foresight Report has been a vital report, providing in-depth information on migration and environmental change as well as policy response that will be useful in the GMG's main policy recommendations and key messages for policy makers and relevant stakeholders working on adolescents/youth migration and development.

2. The findings in the Report have been a platform supporting UNICEF's research and policy agenda on environmental change induced migration. The report has resonated UNICEF- DPS/PAS/Migration perspective on looking beyond a disaster risk management perspective to focus on environmental change adaptation from a rights based sustainable human development perspective.

UNICEF's DPS/PAS/Migration has developed a research and policy draft proposal on *Children, Adolescents and Youth in the Context of Environmental Change and Migration*. This policy research seeks to address some of the current knowledge and policy gaps in the area of environmental change and migration, particularly from a national adaptation, equity and sustainable development perspective.

In particular, UNICEF will seek to address key issues, such as:

- a) the lack of statistical data and rigorous research on the impact of environmental change on children's, adolescents', and youths' drivers and patterns of migration; and
- b) the need to develop targeted policy recommendations that will minimize the costs associated with migration, while simultaneously enhancing the effectiveness of environmental change adaptation strategies.

Additionally, this policy initiative will seek to complement the policy perspectives and UNICEF's on-going policy research work to assess the impacts of environmental change on children and promote effective social protection policies for children at risk due to environmental change. For instance, UNICEF- Indonesia and the UNICEF-East Asia and the Pacific Regional Office have already conducted studies on this particular theme. UNICEF- Jakarta conducted a study on the Impact of Climate Change on Migration and Nutrition Affecting Children. In addition, UNICEF-East Asia and Pacific Regional Office has published research on children in the context of environmental change, including a report on Children's Vulnerability to Climate Change and Disaster Impacts in East Asia and the Pacific.

3. UNICEF also found the Report useful in the drafting process of the GMG joint statement on Climate Change and Migration. Key insights including the need to focus on vulnerable and trapped populations affected by climate change were in line with UNICEF substantial suggestions for the development of the joint statement.

Climate change is often associated with drought, extreme heat, sea level rise, and natural disasters such as hurricanes, cyclones, storms and floods. These events will often have high impacts on vulnerable populations including children, adolescents, youth, women and the elderly.

In light of these findings, the GMG joint statement recommended several actions points which include the following:

- To pay close attention to all displaced persons regardless of their legal status, when they are displaced.

- To explore the complex relationship between climate change and migration in an attempt to collect data to study this phenomenon further.
- To allow immigration policies to take in to account environmental factors for cross-border movement.

4. Most recently, UNICEF in its preparatory inputs for the UN Secretary General report, called attention to the importance of considering migration and environmental change issues related to vulnerable populations, in particular, on children, adolescents, and youth. The 2012 UN Secretary General's report on International Migration and Development emphasizes the relationship between environmental change and migration.⁵

In conclusion, the activities noted in the draft research and policy proposal on *Children, Adolescents and Youth in the Context of Environmental Change and Migration* will include work with select UNICEF country offices, key institutional partners, and policy centers in the global South, focusing on policy and programs concerned with environmental change and migration as it relates to children, adolescence and youth with equity, rights, and gender based approaches (including in urban settings). If implemented, these efforts will help to stimulate UNICEF field offices' engagement in the area of environmental change and migration, particularly the migration of young people. UNICEF hope that these efforts will promote evidence-based policy advocacy in the lead up to the 2013 HLD, the 2014 and 2015 Global Forum on Migration and Development to be held in Sweden and Turkey respectively, and other related events.

Furthermore, UNICEF's policy findings will be critical to the input for the next UNICEF Mid-Term Strategic Plan (MTSP) 2014-2017, as well as UNICEF's follow up reports on the Rio+20 outcomes and the post 2015 agenda.

World Bank

The World Bank hosted the US launch of the Report on December 13, 2011, in an event co-hosted by the Social Development Department and the Migration and Remittances group spanning the Development Research Group and Poverty and Economic Management Network. Keynote presentations were delivered by the Bank's then Special Envoy for Climate Change, Andrew Steer, and UK Executive Director Susanna Moorehead, in addition to Professor Richard Black, chair of the Project's Lead Expert team, and Professor Sandy Thomas, Head of Foresight.

The World Bank's engagement on the Project's High-Level Stakeholder Group has continued beyond the launch event itself along two distinct lines:

1. Operational and policy engagement at regional and country level. This seeks to foster discussion within relevant sector units within the World Bank, and in

⁵ United Nations. (August 2012) A/67/254. General Assembly Sixty-seventh session. Item 22 of the provisional agenda Globalization and interdependence. International migration and development. Report of the Secretary-General Retrieved from: <http://daccess-dds-ny.un.org/doc/UNDOC/GEN/N12/452/13/PDF/N1245213.pdf?OpenElement>

turn with client countries, on appropriate country-level entry points for operational and policy support that would result in greater attention being paid to internal and/or cross-border migration issues in response to global environmental change. For example:

In **India**, the *Rajasthan Rural Livelihoods Project* is the first state-level rural livelihoods support operation that includes specific provision for measures to foster internal, seasonal or circular wage-labour migration as part a broader approach to climate change adaptation. The same approach is now being scaled up through the *National Rural Livelihoods Mission* that aims to support the livelihoods of hundreds of millions of India's rural poor over the next five years.

In **Middle East and North Africa region**, including in **Yemen**, a regional study drawing on analysis of household survey data is nearing completion that seeks to better understand the role of environmental factors in migration-related decisions throughout the region.

In order to further advance such operational and policy discussions with sector units within the World Bank, Foresight is assisting with the elaboration of succinct notes that provide regionally tailored interpretations of the findings of the Foresight report. On the basis of these notes, it is intended that more focused discussions can be arranged with sector units, subject to demand, including presentations in department meetings in sectors as diverse as agriculture and rural development, urban development, social protection, social development, and public sector management. The notes in turn could also be used by regional and sector colleagues to support their ongoing dialogue with country clients.

2. Corporate strategy and global advocacy. The evidence and arguments of the Report are frequently drawn upon to support comments made on corporate strategy documents within the World Bank, such as sector strategies, flagship reports (such as the recent report on Inclusive Green Growth), and World Development Reports (e.g. WDR2012 on Gender Equality, WDR2013 on Jobs, WDR2014 on Risk). It is difficult to attribute 'impact' in the formulation of such strategies to any individual source, but the ideas behind the Report are gaining traction in relevant spheres. They have been used in World Bank statements and presentations at recent global climate change negotiations, for example, and in the context of the World Bank's new Social Protection and Labour Strategy.

A new, multi-disciplinary partnership group is currently in the inception phase, sponsored by the World Bank that aims to advance knowledge for designing policy options in the field of migration and development. Known as KNOMAD (Global Knowledge Partnership on Migration and Development), this partnership also draws on the ideas and evidence laid out in the Report on Migration and Global Environmental Change, offering a further avenue for realising impact through engagement with client countries and development partners.

Asian Development Bank (ADB)

ADB engaged the Foresight Team working on their publication as both organisations were preparing major reports on the impact of environmental change on migration. Although the ADB report was focused on policy responses to the emerging phenomenon, and naturally focused on the Asia-Pacific region, the reports are very complementary and mutually supportive in their main messages.

ADB's report - Addressing Climate Change and Migration in Asia and the Pacific - was launched in March of this year, and the Asia-Pacific Climate Change Adaptation Conference. Anecdotal evidence suggests that in addition to receiving considerable media attention, it was also read with interest by researchers, policy analysts and decision makers. The ADB report draws upon the Report, and indeed cites it as a reference in the bibliography.

ADB and Foresight have explored the possibility of a joint workshop to deliver the results of their reports and raise awareness of officials in one or more countries in Asia and the Pacific. As of now, however, no concrete plans have been made for a specific activity. ADB remains open to exploring a shared knowledge sharing event on environmental change and migration.

International Organization for Migration (IOM)

IOM helped to organise a number of high-level launch events for the Foresight team in New York and Geneva. At the New York event the Director-General of IOM was on the panel. In Geneva, the launch was a side-event for governments participating in the Global Forum on Migration and Development.

IOM believes that the Foresight report could be usefully translated into a series of user-friendly training models for government officials to help them develop capacities to manage migration linked to environmental change in the future. IOM would be interested in developing such a partnership with the Foresight team with its 146 member states around the world.

There is little training material currently available which is tailored to meet governments' needs, and no short courses have been developed which specifically focus on the management of migration linked to climate change.

IOM also believes that there is a need to promote policy coherence in this area by developing new forms of regional consultation fora which bring together policymakers dealing with development, migration and the environment. Too often policy in these areas is developed in separate domains.

The Foresight report is an excellent study which has influenced IOM thinking, but in practical terms the report has had little impact on its activities to date. IOM would like to explore how it might possible to develop a partnership between IOM and the Foresight team to develop joint programmes in the future.

Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ)

The launch of the Report on Migration and Global Environmental Change in October 2011 was welcomed by GIZ personnel working in the fields of climate change, migration, disaster risk management and other relevant sectors at the GIZ.

Upon announcement of its launch, the Climate Protection Program at GIZ approached the Climate Division at the German Federal Ministry for Economic Cooperation and Development (BMZ) to discuss the possibility of organising a workshop to disseminate the results of the report and consider its implications for international development cooperation.

As a next step, the Climate Division at BMZ approached other relevant divisions within the ministry, including those focused on Migration and Development and Disaster Risk Management issues, to propose a cross-sectoral workshop that would also have the goal of helping BMZ develop its own position regarding migration and environmental change. The GIZ was requested by the ministry to prepare an input paper as a basis for the workshop.

For the preparation of the input paper, GIZ colleagues drew heavily on the conclusions and pathways for managing environmental migration, which were laid out in the Report. GIZ used Foresight's proposed management options as a yardstick for measuring where BMZ and more broadly the German government is contributing positively to either reducing pressure to migrate, planning and responding to migration, and/or supporting migration as an adaptation strategy.

The input paper was presented to BMZ in January 2012 along with the offer to invite experts from the Foresight Team to lead the proposed workshop and help BMZ arrive at possible new management options for migration in the context of environmental change.

In addition to the Input Paper prepared for BMZ in German, an English-language discussion paper was also produced by GIZ which lays out some pathways for working at the nexus of migration and environmental change and roles for development cooperation. The paper also draws on the Foresight report and benefited from a peer review by Foresight. The paper has been distributed and its content presented during at least three expert meetings on the subject.

To date, and in part due to personnel changes within BMZ, the proposed workshop to discuss roles for development cooperation and brainstorm ideas for BMZ's role in the context of environmental change and migration has not taken place. GIZ is currently focusing efforts on organizing one or possibly two events in Germany that will focus more on awareness-raising rather than position-building within the Ministry.

Finally, and as a result of the analysis that GIZ conducted of BMZ activities in the field of environmental change and migration, a study was supported and conducted by GIZ's Climate Protection Program to look more closely at

Foresight's conclusion that migration itself may be the best adaptation strategy. In collaboration with ICIMOD in Nepal, a GIZ intern and Master's student conducted an empirical analysis of data collected by ICIMOD on causes of migration in two regions of Nepal and Pakistan. The study focused on migrants that moved following a water-related disaster (either flood or drought) and was able to conclude that in the majority of cases, the decision to migrate was strongly influenced by water-related factors, the majority of migrants were satisfied with the decision to migrate, income increased at destination and households benefitted from migration-experience either through diversified incomes or increased resilience to environmental change. In addition, the link to climatic trends in the affected regions provides reason to study more closely the drivers of migration and the influence of climate change.

In conclusion, the Foresight Report has contributed greatly to the discussion within GIZ regarding the nexus of migration and environmental change and the Foresight Report findings will certainly continue to inform GIZ's work into the future.

Organization for Security and Co-operation in Europe (OSCE)

The Foresight report is a major contribution to identifying the decisions that policy makers need to take today to ensure that migration in the context of environmental change does not cause major conflicts over the next 50 years. We are using the report's findings to strengthen the case for implementing an Environmental migration project in Central Asia, and have distributed the report

to OSCE's 56 participating States, 12 Partners for co-operation and 15 Field Operations.

Other international organisations

The Report has also had resonance with other international organisations which have not been directly involved in the Project. A number of these have commented on the project's timeliness and the support is provided to their own work;

"The report included key findings that support those from our own work in the field and with local partners, dispelling the popular image of 'floods' of displaced persons from developing to developed countries and placing an emphasis on migration as a means of adaptation."

Environmental Justice Foundation

Organisations have also commented on the quality of the evidence base, comprehensiveness of the analysis and the report's impact on the focus of discussions in the topic.

"The [Foresight] Report has given us the nuanced and robust data needed to move the discourse away from... simplifications, and to answer the more policy relevant question of 'why' people move."

International Alert

This includes policy-makers both in the UK and outside, providing a basis from which to continue policy discussions.

"The report demonstrates that the UK Government is giving this issue serious and well researched consideration. This is important for two reasons. First, it means that internationally other governments are paying closer attention to this issue, when in the past many had not. It also provides a spring board for policy action within the UK government."

UK Climate Change and Migration Coalition

4.3 Research

National Environment Research Council (NERC)

The Project and Report are directly relevant to NERC's strategic goal to deliver world-leading environmental research at the frontiers of knowledge: enabling society to respond urgently to global climate change and the increasing pressures on natural resources; contributing to UK leadership in predicting the regional and local impacts of environmental change from days to decades; creating and supporting vibrant, integrated research communities.

Consequently, many of the key issues highlighted in the Report are areas that NERC is already seeking to address. For example, NERC is already funding research into the social drivers and consequences of environmental change in the developing world through its Ecosystem Services and Poverty Alleviation (ESPA) programme. Building resilience into planning is also an area of common interest.

Another example of considerable overlap between the findings of the report and drivers for NERC-funded research is in the marine sector. The socio-economic impacts of a changing climate, sea level rise and growing human population are reflected in the UK Marine Science Strategy and the National Marine Policy Statement and feed into NERC research as highlighted in the National Oceanography Centre 'Setting Course' document:

<http://noc.ac.uk/f/news/downloads/2011/Setting%20Course%20document%2013-12-11.pdf>

The fact that the Project findings are so closely interlinked with the existing direction of NERC science makes it difficult to articulate the exact impact of the Report. However, although the report was not directly referenced, it was used as a source of information in preparing for the NERC strategy workshop in July 2012, feeding into the new NERC strategy. For example, the strategy panel for Natural Hazards considered the impacts of the movement of people away from an area subject to environmental degradation, but also the inability of people to move away from vulnerable areas.

Economic and Social Research Council (ESRC)

The Report provides an important contribution to the developing agenda in the areas set out below. The ESRC, along with the other Research Councils, and in partnership with its research investments, will consider the key conclusions of the Report in developing future research activity. In addition ESRC would welcome response mode proposals that address the issues raised in the Report, one advantage of response mode being that, with no closing date, applicants can submit proposals when they are ready to do so against the largest single budget line in ESRC.

The Economic and Social Research Council (ESRC) supports vigorous and authoritative research that is independent, high-quality, and relevant to society. Its three strategic priorities (economic performance and sustainable growth;

influencing behaviour and informing interventions; and a vibrant and fair society) encapsulate the big issues for Britain, the wider world and for social science. The issue of migration in the context of environmental change is integral to these priorities, and activity is taking place at both an ESRC and Research Councils UK (RCUK) level to address this issue. Along with the six other Research Councils, the ESRC contributes to the delivery of multidisciplinary research under the cross-Council research challenge area; 'Living with Environmental Change' (LWEC). Human activities, most notably worldwide fossil-fuel demand and rapid population and economic growth in the developing world, are accelerating environmental change and increasing pressure on ecosystems and services, challenging our social and economic well-being. LWEC is a major interdisciplinary research and policy partnership to tackle environmental change and the societal challenges it poses, and so to provide a firmer basis for people to deal with the unprecedented changes that the world will face over the next century.

The ESRC supports a broad range of other research activity in this area. For example, research being conducted by the Centre on Migration, Policy and Society (COMPAS) is currently addressing the issue of migration in the context of environmental change, and has recognised that the rise in immigration levels, with its implications for population projections, has fuelled the idea that Britain's demography is not 'sustainable', including a widespread belief that England is 'overcrowded'. The underlying rationale for these concerns is relatively self-evident. A larger population consumes more natural resources (e.g. energy supplies), pollutes more, requires building new homes and infrastructures and expanding public service provision. Moreover, migration has a negative impact on resource depletion and carbon emissions at the global level when people move from developing to developed countries because they increase their levels of consumption. Despite the lack of comprehensive evidence on the specific impact of migration in these fields, some data clearly point to the significant contribution of migration to the demand for accommodation, services and infrastructure. COMPAS research done to date engages with the limitations of the evidence base when assessing the environmental impact of migration, such as capacity, density and the ready availability of the requisite data.

Research being conducted by the Centre for Climate Change Economics and Policy (CCCEP) is also addressing the issue of migration in the context of environmental change, and has already made valuable contributions in this area through a research projects focusing on 'Vulnerability hotspots: linking food security and climate change' and 'Understanding and estimating the impacts of climate change on human development: India'. Other ESRC activity, including the ESRC-DFID joint scheme for research on International Development, and the appointment of ESRC Climate Change leadership fellows, highlights the ESRC commitment to addressing some of the issues that are central to this research agenda.

United Nations University (UNU)

The United Nations University Institute for Environment and Human Security (UNU-EHS) has been involved in research on global environmental change and

different forms of human mobility since 2005. UNU-EHS has designed and implemented global research projects and studies that addressed the topic, such as the Environmental Change and Forced Migration Scenarios (EACH-FOR) project, and the “Where the Rain Falls” project carried out in partnership with CARE.

UNU-EHS has both benefited from and contributed to the Project. The Report has highlighted important outcomes with respect to environmental human displacement that goes in line with the work of UNU-EHS. UNU-EHS consulted with many of the leaders and authors of the Project while building its research questions and methodologies for the “Where the Rain Falls” project: In part because of the valuable input of colleagues like Dominic Kniveton, Richard Black, Neil Adger, Susan Martin, Sarah Collinson, Stephen Bennett, Alex de Sherbinin, Andrew Geddes and many others, the UNU-EHS benefit from insights and challenges that Foresight highlighted around this topic. UNU-EHS is now attempting to build upon the meta-review that was one of the many contributions of the Foresight work to address some of these gaps. UNU-EHS has developed field oriented qualitative (expert interviews and Participatory Research Approach) and quantitative research methodologies (household questionnaires and Agent-Based Modelling) and came up with outcomes that confirm the work done in Foresight. UNU-EHS has contributed to the Foresight process by inviting colleagues from the foresight project to its scientific events to exchange views on the current debate on the issue and foresight project consulted with UNU-EHS in various events and workshops as well, contributing a paper on paragraph 14(f) of the Cancun Adaptation Framework, and other consultations with the Foresight team.

Using the Agent-Base Modelling approach, UNU-EHS developed future scenarios for human displacement, based on the data collected from the field.

The outcomes of the Where the Rain Falls project will be launched officially in the UNFCCC 18th Conference of Parties (COP18). Case studies of the Where the Rain Falls project as well as a Global Policy Report that summarizes all the case studies with the respective policy recommendations will be presented in the meetings, in order to move the process forward and provide the Delegates and Parties with the answers they need about the topic.

CARE International (CARE)

CARE International is preparing the launch of its programme research on ‘Where the Rain Falls’ for the UNFCCC conference in Doha (November 2012). CARE and its research partner the United Nations University have closely examined the Report. The Report provided critical contextual and policy-related information and it will be cited in CARE’s global policy report. Perhaps the most useful insight from the Report was its focus on potentially trapped populations. While in all CARE’s research sites CARE found significant mobility, there are indeed certain types of households unable to use migration as a risk management strategy, even when conditions may warrant. CARE’ partners at UNU have identified four different household profiles through the research based on climate-induced migration. The first household group is able to use

migration to enhance resilience. Two other household groups use migration, but either to just maintain the status quo or in ways that have negative long-term consequences. The fourth profile is for trapped populations, including households headed by women with small children, households with high dependency ratios, and households with other specific vulnerabilities that preclude movement. Also in line with the findings of Foresight, CARE found the great majority of migration in almost all sites to be local/national in character, both rural-rural and rural-urban.

The Report will continue to inform CARE's policy work in this area and we look forward to working with the UK government and other stakeholders on the critical area of climate related risk and vulnerability which includes forced displacement.

4.4 Academia

The following is a brief summary of the perception of the Report in the academic community with contributions from academics from a range of institutions. This includes, for example, individuals who attended workshops and Report reviewers. A full list of acknowledgements can be found in Annex A.

In general, the report has been well received within the academic community. It is widely regarded as being scientifically robust with a deep and well considered, comprehensive and peer-reviewed evidence base. Based on a broad spectrum of natural and social scientific research by contributors from 30 countries, the Report provides strong evidence for the principle that nearly all migration is linked to a range of factors, of which environmental change is only one.

“The 2011 Foresight report on Migration and Global Environmental Change has made a very important contribution to knowledge and public discourse.”⁶

The project’s nuanced conclusions regarding the interaction of migration drivers and the likely future effects of these on internal migration and urbanisation trends were particularly well received.

Evidence base and influence

The cross-disciplinarity of this topic and the scientific papers commissioned by the Project, have ensured that the study has been widely cited; for example, it has been considered in discussions within the Independent Science and Partnership Council’s Consultative Group on International Agricultural Research (CGIAR).

Authors of the SR10⁷ report have also co-developed the ‘UN White Paper on Vegetation Fires and Global Change’⁸ which also aims to address the changes of fire regimes globally as a consequence of socio-economic and demographic changes and climate change.

In addition, the findings have been incorporated in public events organised by the Brookings Institution (in collaboration with the London School of Economics) and the Report is cited in the Brookings 2011 Annual Review on Natural Disasters.⁹

⁶ Professor Stephen Castles, University of Sydney

⁷ SR10 is a State of Science Review, this forms part of the evidence base and can be found at: <http://www.bis.gov.uk/foresight/our-work/projects/published-projects/global-migration/reports-publications>

⁸ Johann Goldammer (Ed.) ‘UN White Paper on Vegetation Fires and Global Change’

⁹ See footnotes 99, 138, and 144 in

http://www.brookings.edu/~media/research/files/reports/2012/3/natural%20disaster%20review%20ferris/03_natural_disaster_review_ferris

Regional

The report has had significant impact within the Asia-Pacific region by providing a sound evidence base and placing the urgency of action on climate change in the broader context of the complex set of relationships between migration and economic and social change.

“The Foresight report has provided sound empirical evidence and has materially changed the level of the debate in the Asia-Pacific region.”¹⁰

Whilst the bulk of impact within the Asia-Pacific region has been in the academic community there is further scope for engaging other key regional stakeholders including national governments, national development agencies and the media.

Also, part of the Report’s evidence base forms the basis of a chapter on Europe in the forthcoming book from the Institute of Migration: *“People on the Move in a Changing Climate - The Regional Impact of Environmental Change on Migration”* accepted for publication by SPRINGER in the series Global Migration Issues.

Further action Policy

The Project gives the issue of climate change and migration more visibility at the science-policy interface. The Report provides strong arguments for action on a range of measures for governments and civil society groups in the future.

“Its main conclusions...are accepted as the bottom line for both science and policy related to this topic.”¹¹

Academic collaboration

Many of the Project’s impacts will be difficult to define and will have indirectly contributed to driving forward further research. For example, many of the academics involved with the project have briefed groups on the Report, published findings in major journals, and participated in discussions with national and international organisations (stakeholder and academic).

“I have recommended (the project) as the most authoritative source on environmental migration. I also serve as a Lead Author for the IPCC Fifth Assessment Report, and it was circulated amongst our team for review.”¹²

It is not possible to list all instances in which the Project has indirectly resulted in further discussion. However, certain instances have resulted in more tangible and measurable outputs. For example, attendees’ participation in the

¹⁰ Professor Stephen Castles, Department of Sociology and Social Policy, University of Sydney

¹¹ Thomas Wilbanks, Oak Ridge National Laboratory

¹² Dr Katharine Vincent, Kulima Integrated Development Solutions. A number of the Project’s Lead Expert Group members and Report contributors have been involved in the IPCC Fifth Assessment Report.

workshops undertaken during the project resulted in further collaboration between researchers at the University of Neuchatel and the University of Sussex regarding the issue of migration and climate change in mountainous areas.

5 Communications

5.1 Media Coverage

Two press conferences were held on 19 October 2011. The first for UK based journalists was held at the Wellcome Trust. Prof. Sir John Beddington shared a platform with a selection of the Project's Lead Experts to publicise the findings of the report. This was attended by journalists from a range of publications, including BBC, FT, Press Association, the Times, the Guardian, Reuters, Channel 4, Nature and the Telegraph.

The second was aimed at international journalists and took place, with Sir John Beddington and the Project's Lead Expert Group, at the Department of Business, Innovation and Skills.

The report was launched at a stakeholder reception at Royal Geographical Society by Prof. Sir John Beddington and a selection of the Project's Lead Expert Group on 20 October 2011.

A list of UK and international coverage is set out below:

Climate change refugees could end up trapped - Euronews

Hundreds of millions of people fleeing storms, droughts or floods caused by global warming could end up trapped in disaster areas, according to a report from the British government's Foresight Group.

<http://www.euronews.com/2011/11/01/climate-change-refugees-could-end-up-trapped/>

Major migration challenge by 2060, experts warn - Telegraph

Climate and other environmental changes will cause "major challenges" for world leaders over the next 50 years as mass migration threatens to create new humanitarian crises, a major new report says.

<http://www.telegraph.co.uk/earth/environment/climatechange/8836567/Major-migration-challenge-by-2060-experts-warn.html>

Alert sounded on 'environmental migration' - FT

Tens of millions of people are moving to places that are more vulnerable to environmental disaster, particularly the urban flood plains of Asia and Africa, according to a UK government report.

<http://www.ft.com/cms/s/2/676d3f22-fa51-11e0-b70d-00144feab49a.html?ftcamp=rss#axzz1bJPhRlyN>

Climate-driven migration challenge underestimated - Reuters

The challenges of human migration due to climate change have been underestimated as millions of people will either move into or be trapped in areas of risk by 2060, rather than migrating away.

<http://www.reuters.com/article/2011/10/19/us-climate-migration-idUSTRE79I89720111019>

Climate change migration warning issued through report - BBC

Governments and aid agencies should help the world's poorest to move away from areas likely to be hit by flooding and drought, a UK report says.

<http://www.bbc.co.uk/news/science-environment-15341651>

Climate change could trap hundreds of millions in disaster areas, report claims - Guardian

Report says refugees forced to leave homes by weather caused by global warming may end up in even worse afflicted areas.

<http://www.guardian.co.uk/environment/2011/oct/20/climate-change-millions-disaster-report>

Millions Will Be Trapped Amid Climate Change, Study Warns - New York Times blog

Millions of people are expected to become trapped in places that are extremely vulnerable to environmental change in the course of this century, according to a British government study.

<http://green.blogs.nytimes.com/2011/10/20/millions-will-be-trapped-amid-climate-change-study-warns/>

5.2 Dissemination events

Date	Event
26 October 2011	Parliamentary Launch (London)
26 October 2011	UNESCO General Conference Side event (Paris)
9 November 2011	Organisation for Security and Co-operation in Europe (Environment and Energy Working Group) (Vienna)
15 November 2011	“ Global Migration Group ” meeting of the UN Principals (Paris)
16 November 2011	DFID Conference for Climate, Environment, Infrastructure and Livelihoods worldwide staff Session entitled “Sustainable Growth, Sustainable Climate: migration, urbanisation and climate change (Sunningdale)
29 November – 1 December 2011	Global Forum on Migration and Development (GFMD) Internal Displacement Monitoring Centre (IDMC) United Nations International Strategy for Disaster Reduction (UNISDR) United Nations High Commissioner for Refugees (UNHCR) International Confederation of the Red Cross (ICRC) (Geneva)
8 December 2011	Joint Research Council event: “Scientific Analysis of Migration and Global Environmental Change” Bilaterals with Commissioners and senior Commission officials, including from DG Home Affairs, DG Climate Action, DG Development Cooperation, DG Humanitarian Aid and Civil

Date	Event
	Protection (Brussels)
9 December 2011	Presentation to the Swiss Government Swiss Commission for Research Partnerships with Developing Countries (KFPE); Forum for Climate and Global Change (Proclim) (Bern)
13 December 2011	Institut du développement durable et des relations internationales (IDDRi) at the Science Po (Paris)
12 – 16 December 2011	United Nations Environment Programme (UNEP) Department for Political Affairs United Nations Children's Fund (UNICEF) United Nations Development Programme (UNDP) US Government (US State Department and USAID) Migration Policy Institute World Bank Brookings Institution UN Women UN Office for the Coordination of Humanitarian Affairs (UNOCHA) United Nations Population Fund (UNFPA) The International Organisation for Migration (IOM) (Washington and New York)
19-20 March 2012	DFID Ghana Workshop (Accra)
29 May 2012	GIZ Roundtable (Brussels)
12 -13 June 2012	Global Forum on Migration and Development (Mauritius)

Date	Event
5 July 2012	DFID seminar on Urbanisation
9 July 2012	European Commission Roundtable on adaptation (Brussels)
5 September 2012	European Commission Roundtable on environmental migration (Brussels)
2 October 2012	First meeting of the Consultative Committee, Nansen Initiative (Geneva)

Annex A: Contributions to the academic summary

Professor Nigel Arnell	Director, Walker Institute for Climate System Research
Professor Stephen Castles	Associate Director of the International Migration Institute
Olivia Dun	School of Geosciences, University of Sydney
Elizabeth Ferris	Brookings Institution – LSE Project on Internal Displacement
Dr Kees van der Geest	University of Amsterdam
Dr Johann Georg Goldammer	Max Planck Institute for Chemistry
Professor Douglas Gollin	Department of Economics, Williams College
Professor Graeme Hugo	University of Adelaide
Dr Mark Mulligan	Department of Geography, King's College London
Michael Oppenheimer	Professor of Geosciences and International Affairs, Woodrow Wilson School of Public and International Affairs
Professor Etienne Piguet	University of Neuchatel
Alex de Sherbinin	CIESIN, Columbia University
Dr Katherine Vincent	Director, Kulima Integrated Development Solutions
Dr Thomas J Wilbanks	Group Leader – Global Change and Developing Countries, Oak Ridge National Laboratory
Dr Ruedinger Wurzel	University of Hull

