Migration and environmental change: myths and reality

Richard Black
SOAS, University of London, June 2014
Climate change 'will make hundreds of millions homeless'

Carbon dioxide levels indicate rise in temperatures that could lead agriculture to fail on entire continents
Alert sounded on ‘environmental migration’

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 crisis, a new report says.

Climate-driven migration challenge underestimated

Millions Will Be Trapped Amid Climate Change, Study Warns

Climate Change to Force Mass Migration,

Una catástrofe migratoria anunciada
Net migration to coastal areas, 1970-2010

Source: CIESIN (2011) for Foresight
Remittances Compared with Other Resource Flows

Remittance Flows Are Large and Resilient

US$ billions

- FDI
- Remittances
- ODA
- Private debt and portfolio equity

The Drivers of Migration

Many factors influence whether a person or family will migrate. Their effects are closely intertwined, so it makes little sense to consider any of them in isolation.

Social Drivers
- Education, family/kin

Environmental Drivers
- Exposure to hazard
- Ecosystem services such as land productivity, habitability
- Food/energy/water security

Political Drivers
- Discrimination/persecution
- Governance/freedom
- Conflict/insecurity
- Policy incentives, direct coercion

Personal/Household Characteristics
- Age, sex, education, wealth, marital status
- Preferences, ethnicity, religion, language

Economic Drivers
- Employment opportunities
- Income/wages/well-being
- Producer prices (such as in agriculture), consumer prices

Demographic Drivers
- Population size/density
- Population structure
- Disease prevalence

Intervening Obstacles and Facilitators
- Political/legal framework, cost of moving
- Social networks, diasporic links, recruitment agencies, technology

Decision

Migrate

Stay

Source: Black et al. (2011) Nature
Understanding ‘trapped’ populations

Source: Adapted from Foresight (2011)
Regional Outlooks of Migration

Net migration to dryland ecosystems, 1970-2010

- 95% confidence intervals based on 13 imputation runs for rates of natural increase
- Color codes:
  - Blue: Africa
  - Red: Asia
  - Green: Europe
  - Yellow: Latin America and the Caribbean
  - Pink: Northern America
  - Dark Blue: Oceania
Regional Outlooks of Migration

Net migration to coastal areas, 1970-2010

Net Migration

Decades

1970-1980
1980-1990
1990-2000
2000-2010

90,000,000
80,000,000
70,000,000
60,000,000
50,000,000
40,000,000
30,000,000
20,000,000
10,000,000
0

I = 95% confidence intervals based on 13 imputation runs for rates of natural increase

Africa
Asia
Europe
Latin America and the Caribbean
Northern America
Oceania
Regional Outlooks of Migration

Net migration to mountain ecosystems, 1970-2010
Livelihoods: comprise social, financial & other forms of capital.

Migration / remittances can build this capital.

A sustainable livelihood is better able to cope with & recover from stress and shocks.

Perceived importance of remittance utilization for different household expenses across case studies in mountain regions in China, India, Nepal and Pakistan.

Source: Banerjee et al. (2011)
Hurricane Katrina (2005):
• Wealthier able to anticipate and escape
• Poorest trapped in Superdome during crisis
• Higher subsequent long-term displacement of poor
• New in-migration associated with recovery
Internal migration and environmental change in India

Delhi

Mumbai

Bangalore

Chennai

Kolkota
Are there protection gaps? How can they be filled?

- Protocol on ‘environmental migrants’ unlikely to be effective and would miss key ‘at risk’ populations
- Importance of building on existing institutions and legal agreements
- Promoting regional solutions

Case study: New Zealand:
- Pacific Access Scheme
- 75 migrants per year from Tuvalu / Kiribati
- 250 per year from Tonga
- Not linked to the environment
- Seasonal migration encouraged
The Importance of Remittances

- 2009: international remittances = US$307bn, compared to US$120 ODA
- Africa: remittances quadrupled to US$40bn between 1990-2010
- Remittances account for 28% of Tonga’s GDP, 22% of Samoa’s

People living in urban coastal flood zones in 2060

- **South Central Asia**
  - 4.1 million in 2000
  - 17 million in 2030 (high)
  - 59 million in 2060 (high)

- **Sub-Saharan Africa**
  - 0.7 million in 2000
  - 5 million in 2030 (high)
  - 25 million in 2060 (high)

*Explanatory note: Scenario B is lowest and Scenario C is highest, therefore representing the full range from these scenarios.*
Climate change and migration: some realities

• Climate change *is* happening, with potentially severe consequences
• Migration is occurring even without climate change
• People are moving *towards* as well as away from areas of risk
• People are differentially able to move – that means that some people are almost certainly *trapped* in the face of climate risk, not displaced
• There are a range of possible and actual mobility outcomes – some of which are unexpected
• Migration *can* be part of the process of adaptation to climate change, not simply a (negative) reaction
• Public policy can respond to these issues