An aerial photograph of a river delta, likely the Nile, showing a complex network of channels and floodplains. The land is a mix of brown and green, with a prominent blue channel winding through the center. The water body at the bottom is dark blue. A white text box with a blue border is positioned in the upper left corner.

Migration and environmental  
change: myths and reality

**Richard Black**

SOAS, University of London, June 2014

## Environment

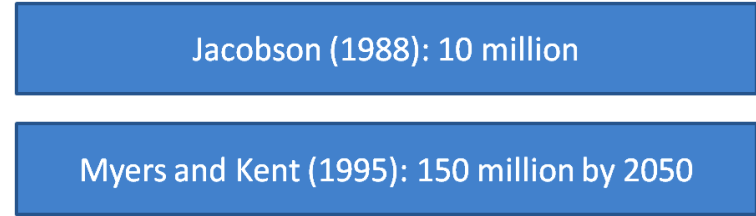
Saturday 11 May 2013 19.03 EDT

# Climate change 'will make hundreds of millions homeless'

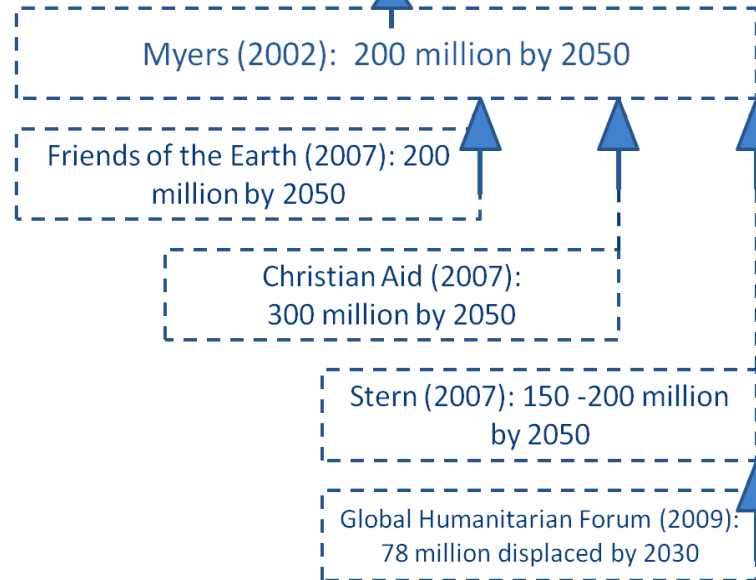
Carbon dioxide levels indicate rise in temperatures that could lead agriculture to fail on entire continents



Original estimates



Based on previous estimates





Major migration challenge by 2060, experts warn  
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.

## Alert sounded on 'environmental migration'

Climate-driven migration challenge underestimated  
Millions Will Be Trapped Amid Climate Change, Study Warns

Climate Change to Force Mass Migration, Study Warns

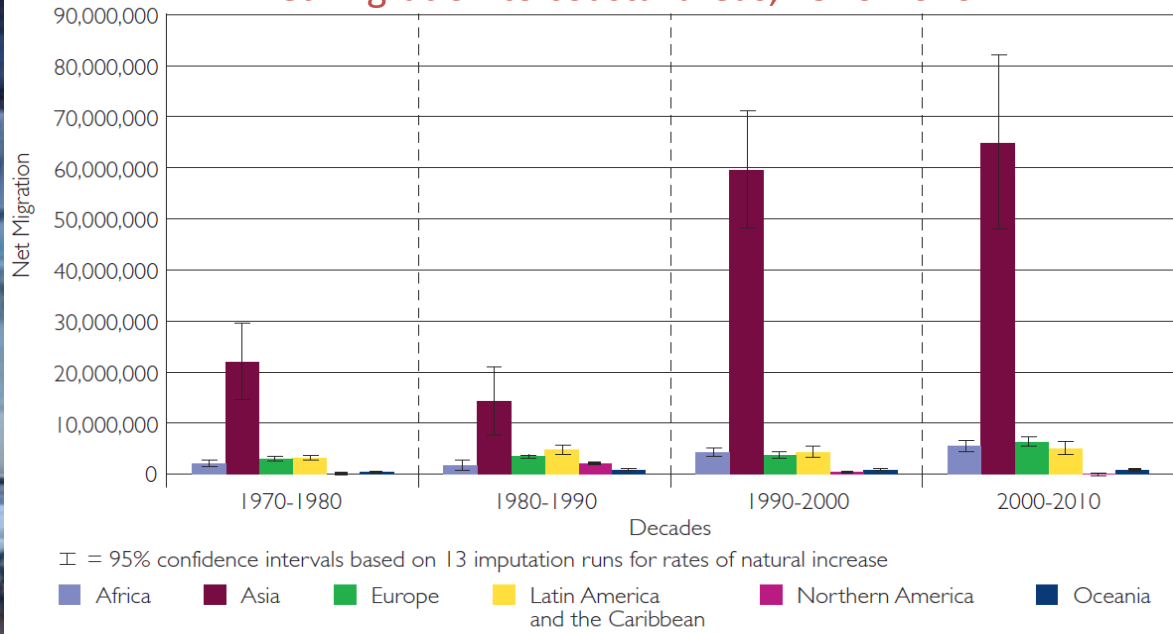
TRIBUNA: SAMI NAIR

*Una catástrofe migratoria anunciada*

SAMI NAIR 28/10/2011



## Net migration to coastal areas, 1970-2010

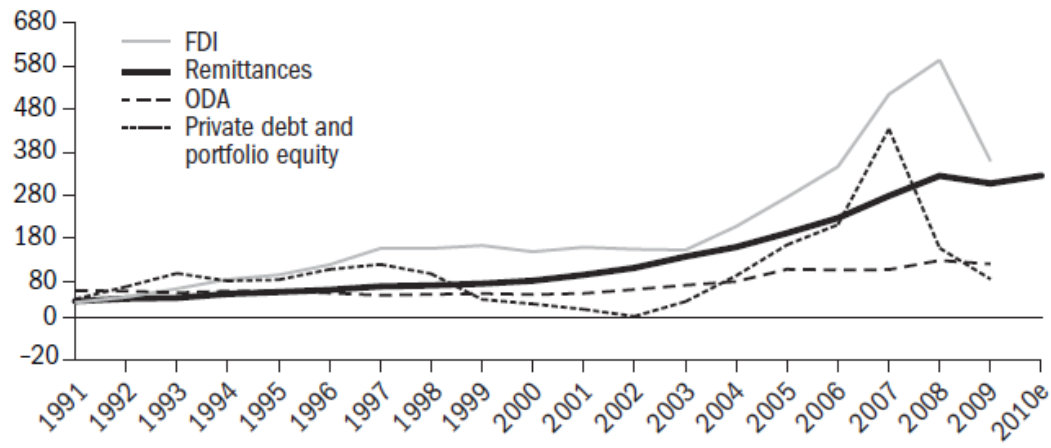


Source: CIESIN (2011) for Foresight

# Remittances Compared with Other Resource Flows

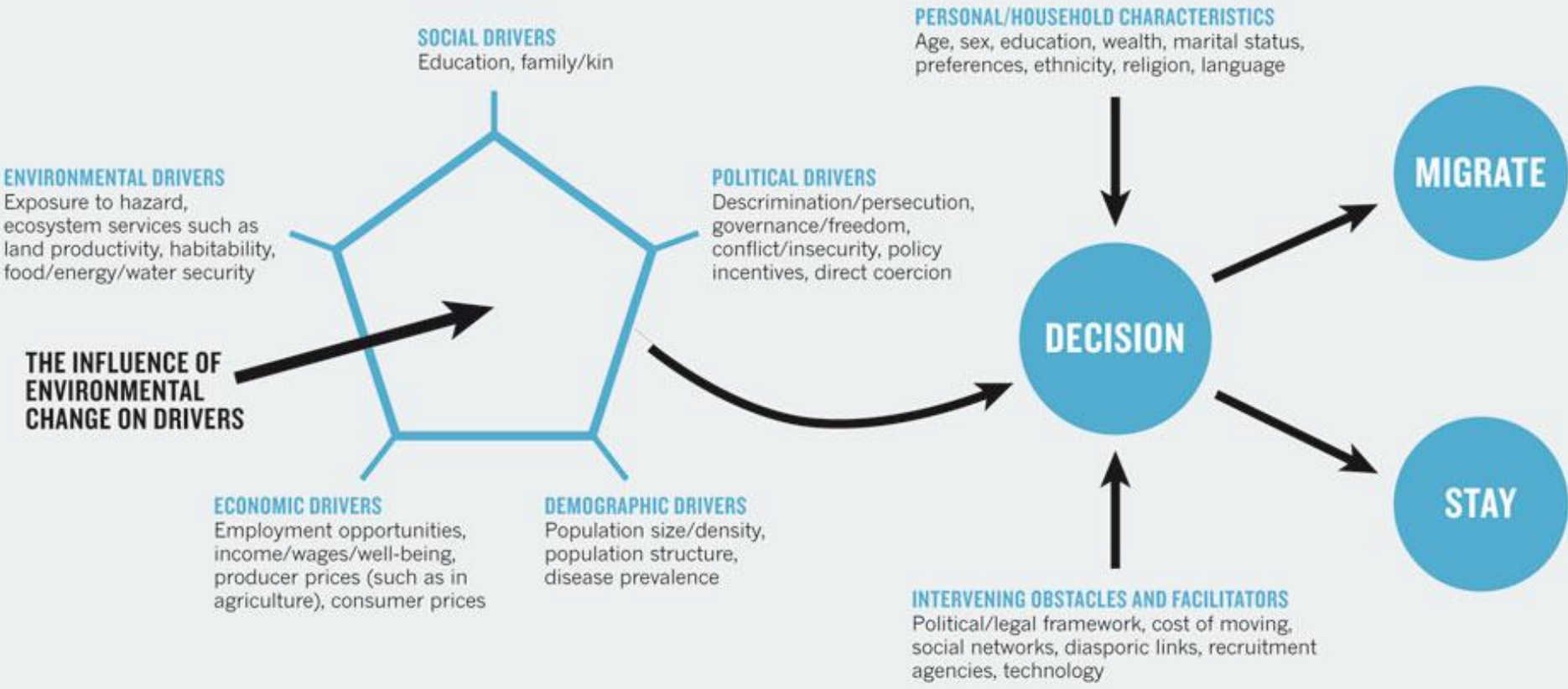
## Remittance Flows Are Large and Resilient

US\$ billions



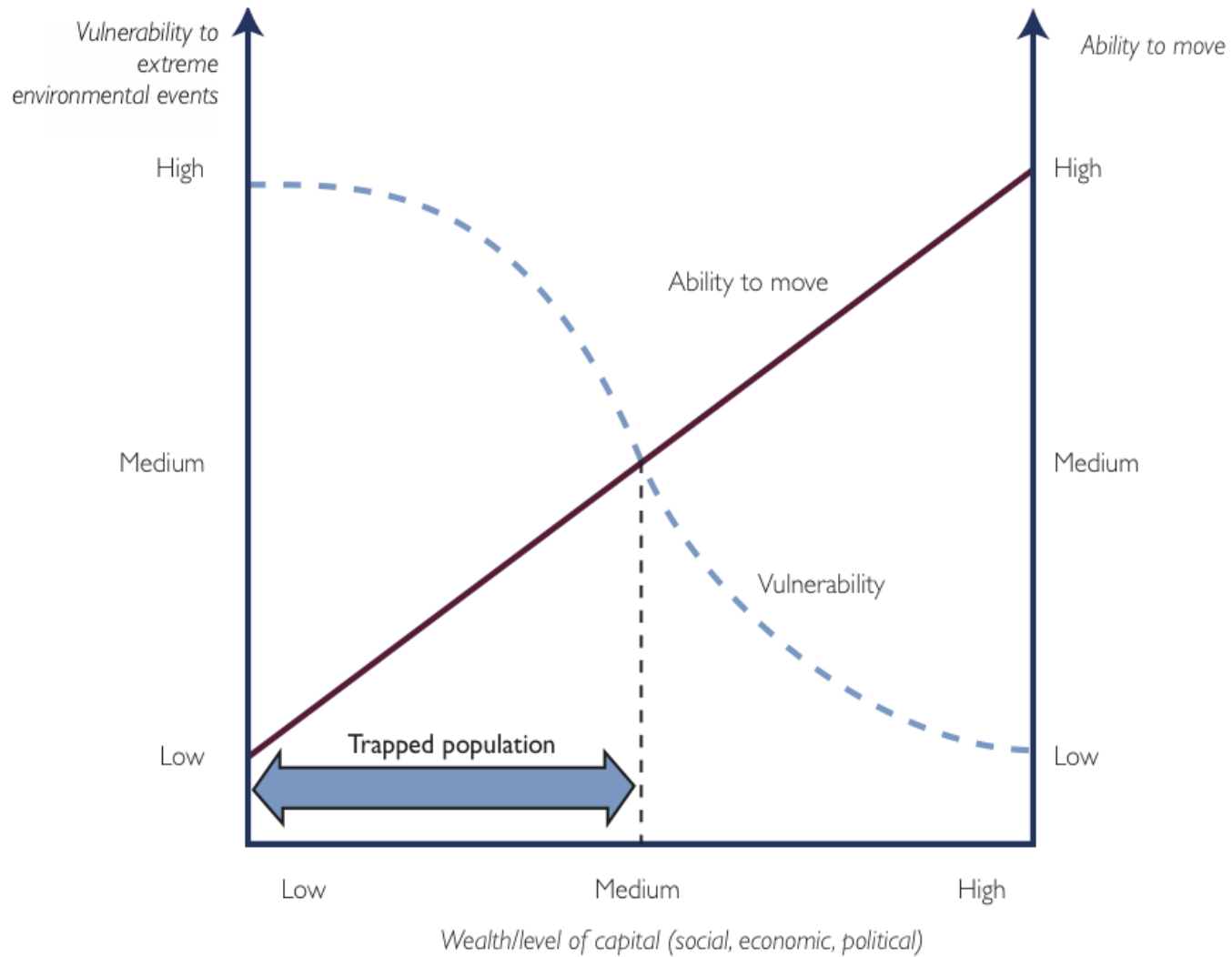
# THE DRIVERS OF MIGRATION

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.



Source: Black et al. (2011) *Nature*

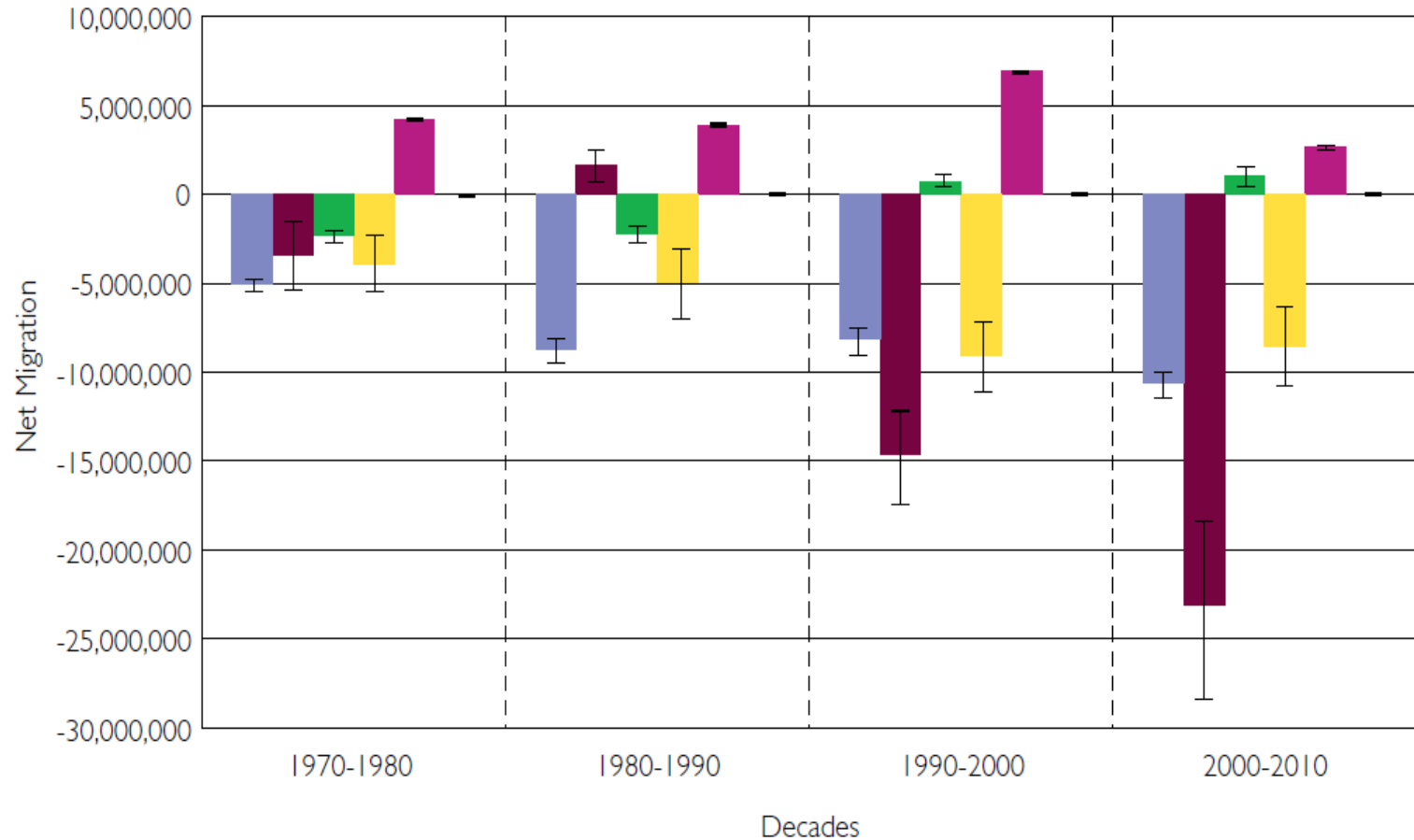
# Understanding 'trapped' populations



— Ability to move      - - - Vulnerability

# Regional Outlooks of Migration

## Net migration to dryland ecosystems, 1970-2010



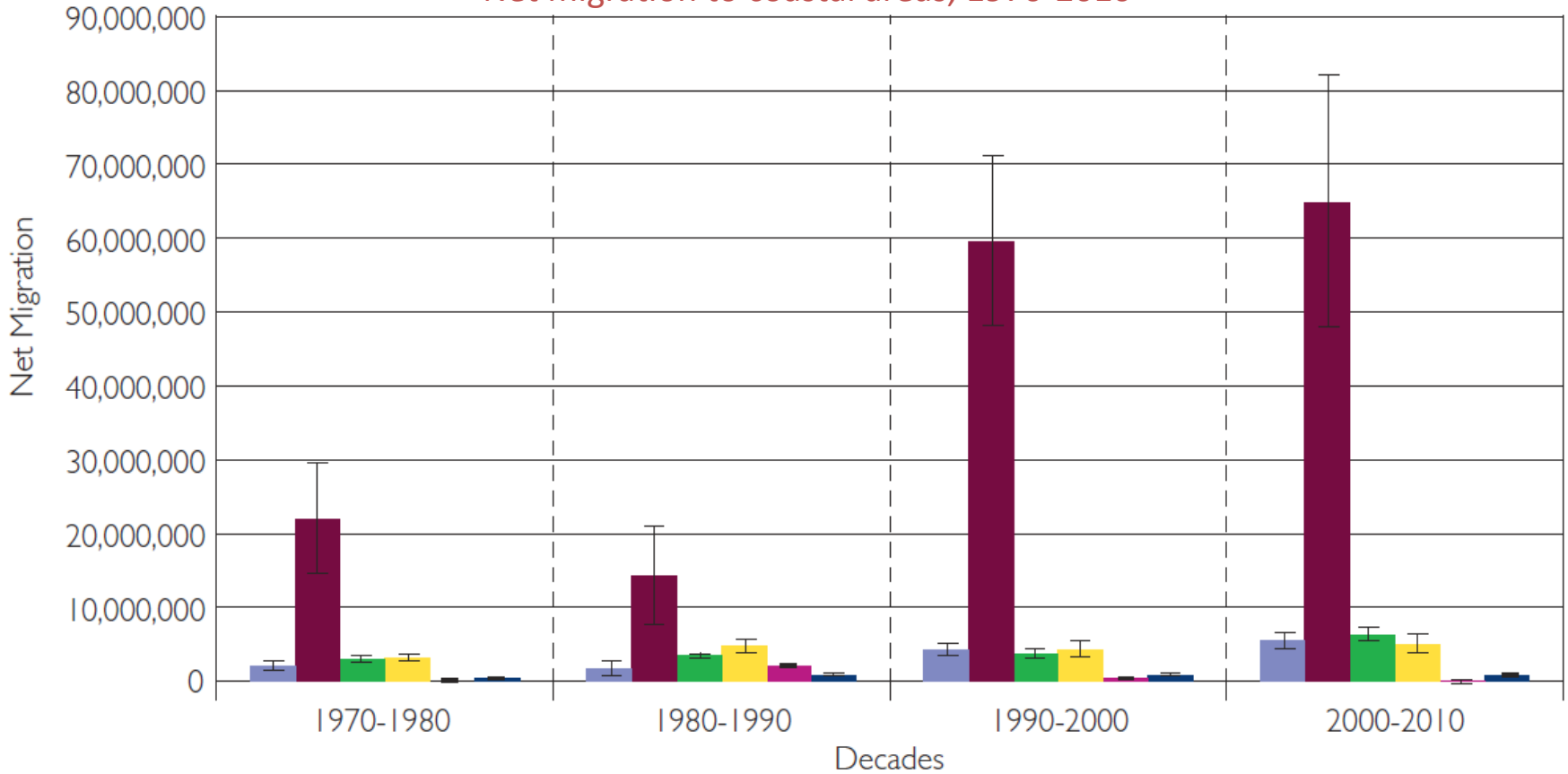
∓ = 95% confidence intervals based on 13 imputation runs for rates of natural increase

■ Africa   ■ Asia   ■ Europe   ■ Latin America and the Caribbean   ■ Northern America   ■ Oceania



# Regional Outlooks of Migration

Net migration to coastal areas, 1970-2010

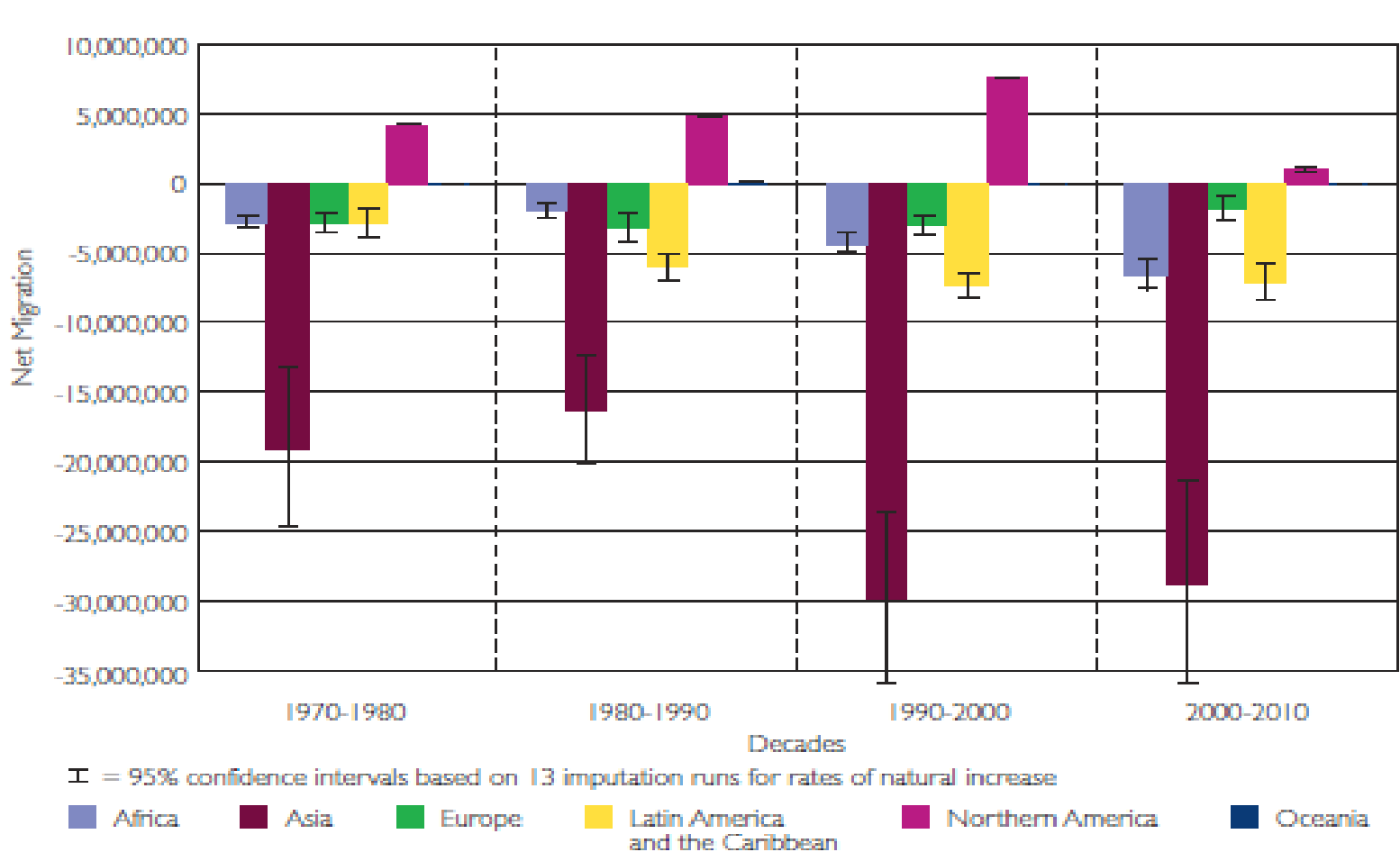


⊞ = 95% confidence intervals based on 13 imputation runs for rates of natural increase

- Africa
- Asia
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- Northern America
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# Regional Outlooks of Migration

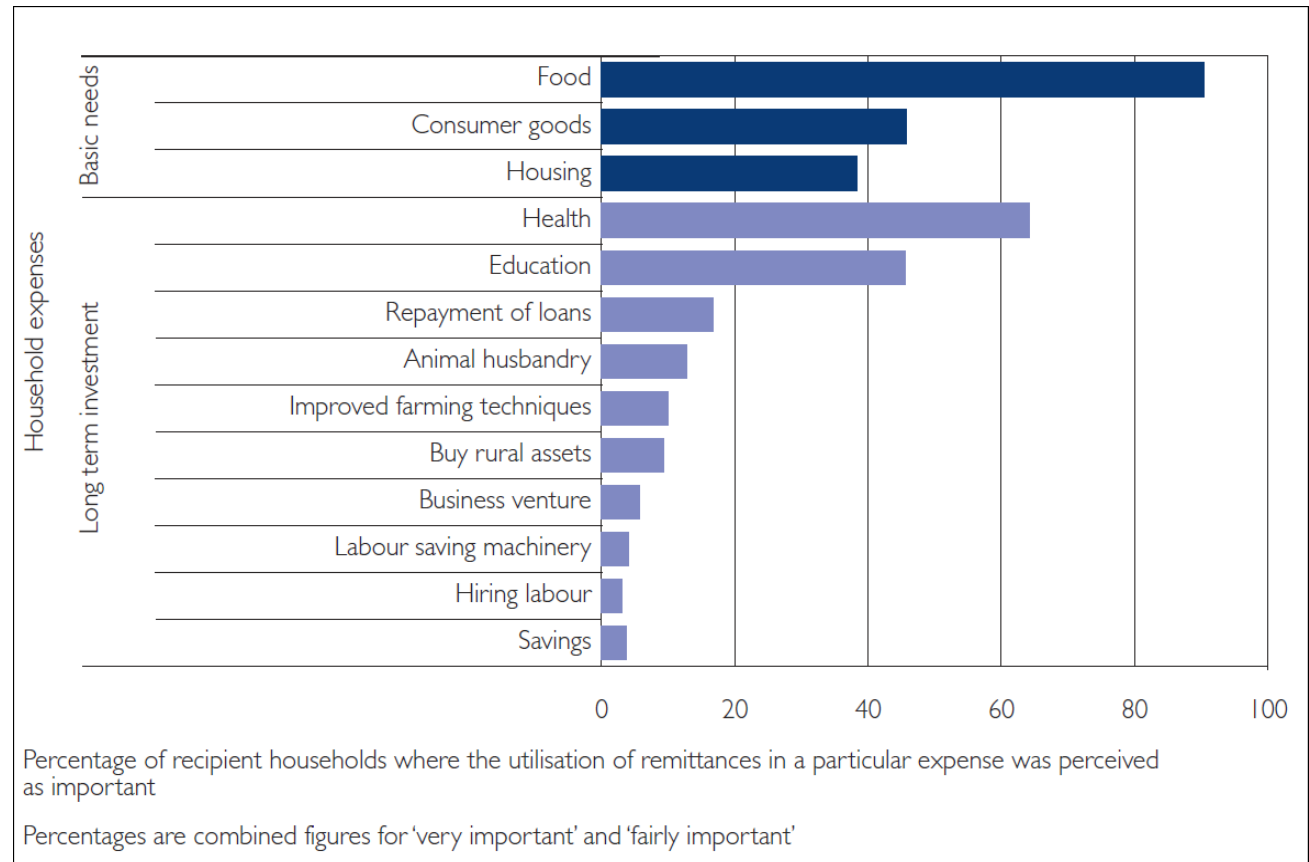
Net migration to mountain ecosystems, 1970-2010



# Migration as Adaptation

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

- 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



## **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



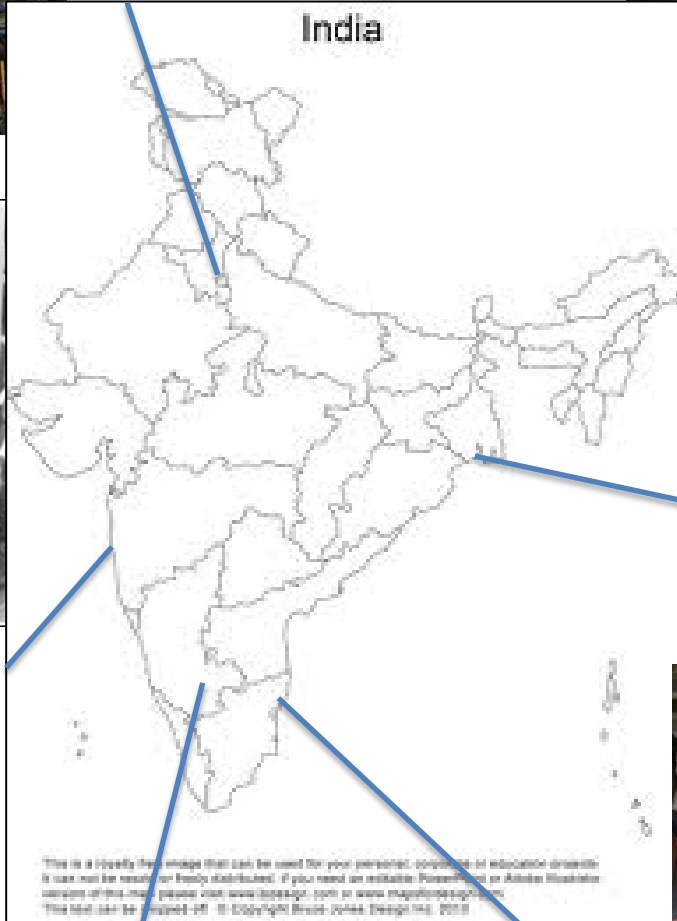
# Internal migration and environmental change in India



Delhi



Kolkata



Mumbai

Bangalore

Chennai



## 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



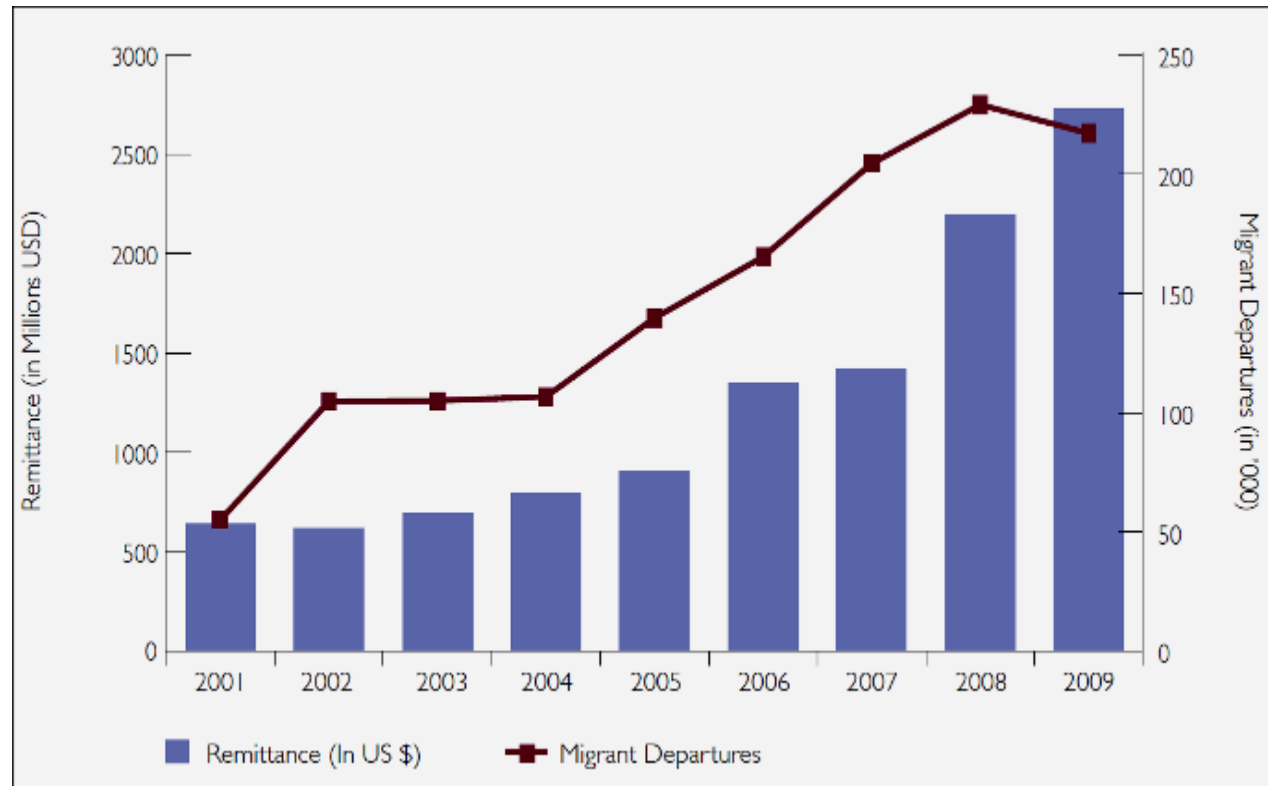
### Case study: New Zealand:

- 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

## Migrant Remittances and Departures in Nepal, 2001-09

- 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



## Migrating Towards Environmental Risks

- 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)

People living in urban coastal flood zones in 2060



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

