# RESILIENCE AND ADAPTATION IN A CHANGING RISK ENVIRONMENT

World Food Programme Seminar
Rome, 23 October, 2012

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# WHY DO WE NEED A CULTURE OF RESILIENCE?

- In the past 30 years, disasters have killed over 2.3 million people
- Low-income countries account for only 9% of disasters but 48% of fatalities
- Drought across the Horn of Africa over 2008-2010 left 13.3 million people short of food
- Flooding in Pakistan in 2010 claimed almost 2,000 lives and caused $10 bn in damages
- Half of the world's population now lives in cities, with expansion into flood- and storm-prone areas putting the poorest most at risk
- By 2050, the urban population exposed to storms and earthquakes alone could more than double to 1.5 billion

# RESILIENCE IN WORLD BANK STRATEGIES

- Social Protection & Labor Strategy 2012-2022
- Africa regional strategy: ‘Opportunity and Resilience’
- World Development Report 2014: ‘Managing Risk’
- Global Facility for Disaster Reduction and Recovery & Sendai Dialogue
- Social Development Strategy: social inclusion, accountability, cohesion and resilience

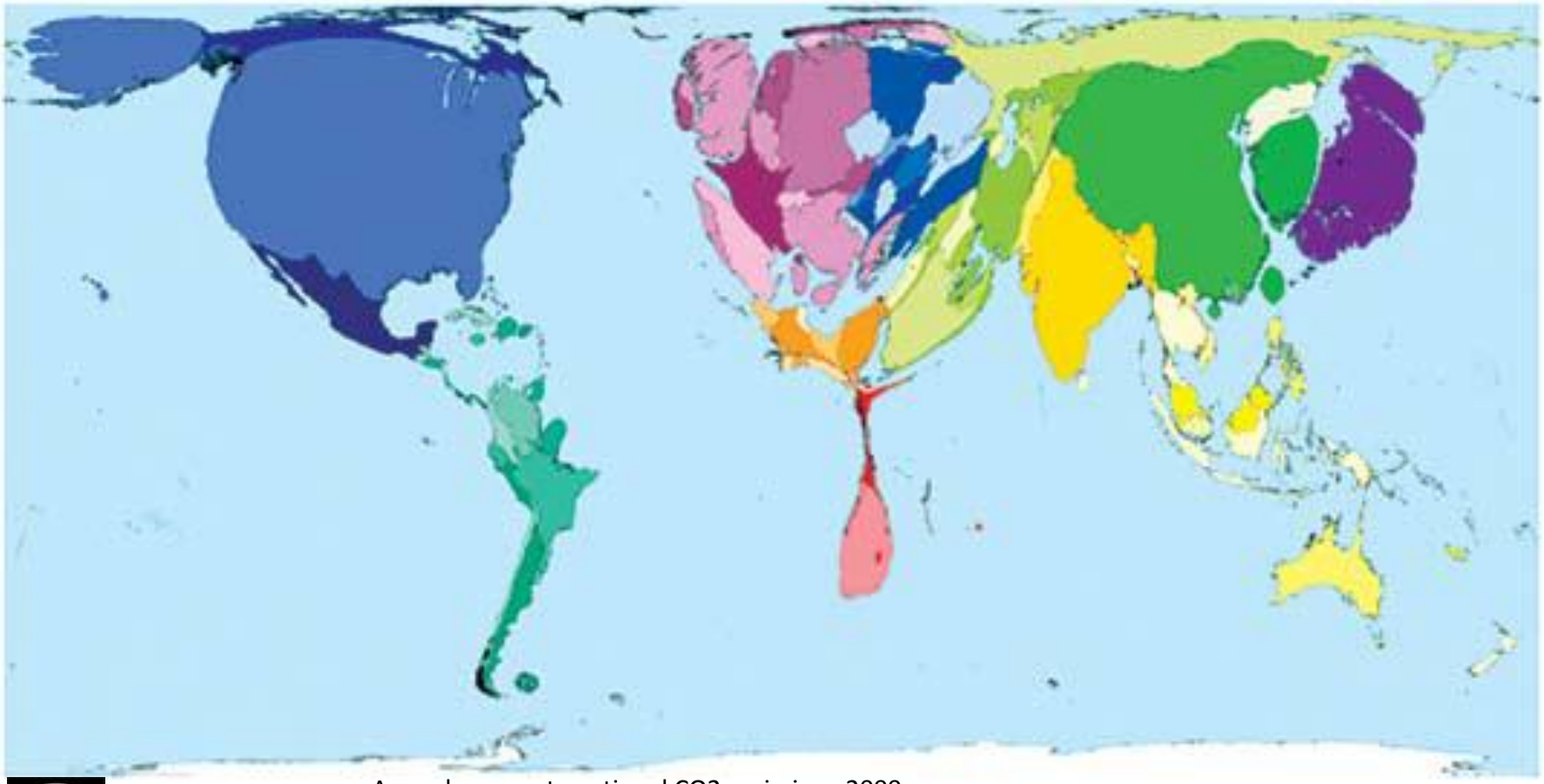
# WHAT IS SOCIAL RESILIENCE?

*"The ability of societies or groups within society to cope with, recover from and reorganize in the face of shocks and stresses resulting from social, political, economic and environmental causes"*

# RESILIENCE *TO* WHAT AND *FOR* WHOM?

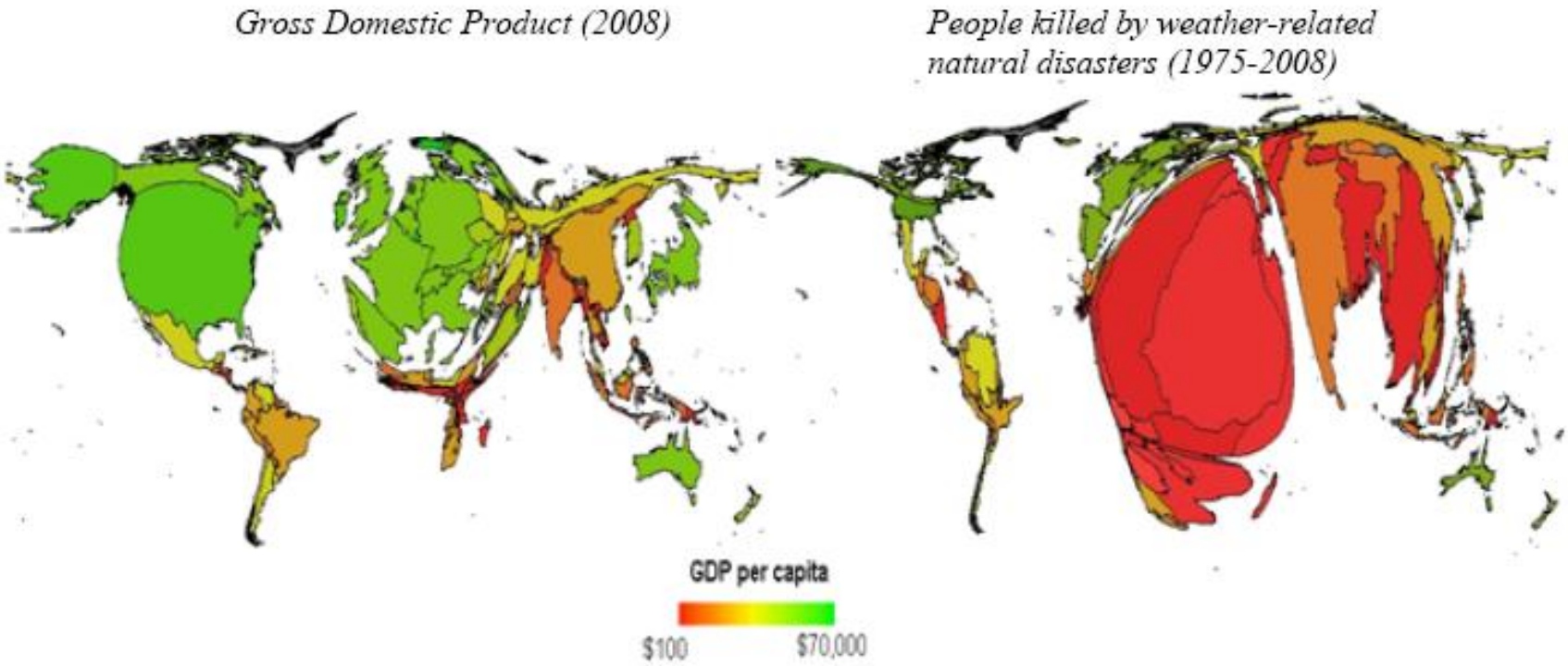
- The poor face interlocking vulnerabilities:
  - natural hazards
  - food, fuel and financial crises (‘3F’)
  - health-related shocks to family breadwinners
  - societal fragility and conflict
  - complex humanitarian emergencies
- Climate change acts as a ‘threat multiplier’
- Poor people in developing countries bear the brunt of its impacts while contributing very little to its causes

# THE WORLD ACCORDING TO CARBON EMISSIONS



Annual aggregate national CO2 emissions 2000
Source: SASI Group (University of Sheffield) and Mark Newman (University of Michigan), 2006, cited in Global Humanitarian Forum (2009), *The Anatomy of a Silent Crisis*

# THE LOWER THE GDP, THE MORE PEOPLE KILLED BY NATURAL DISASTERS

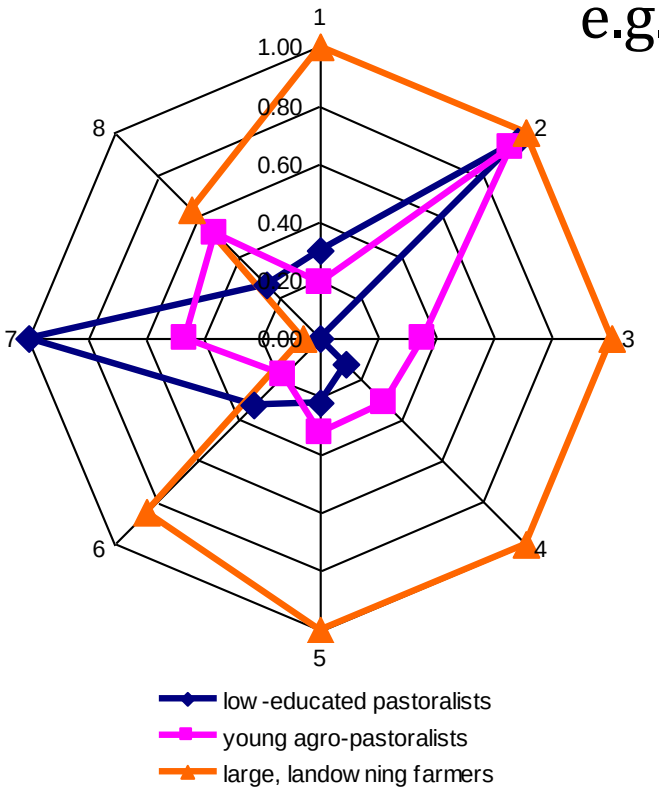


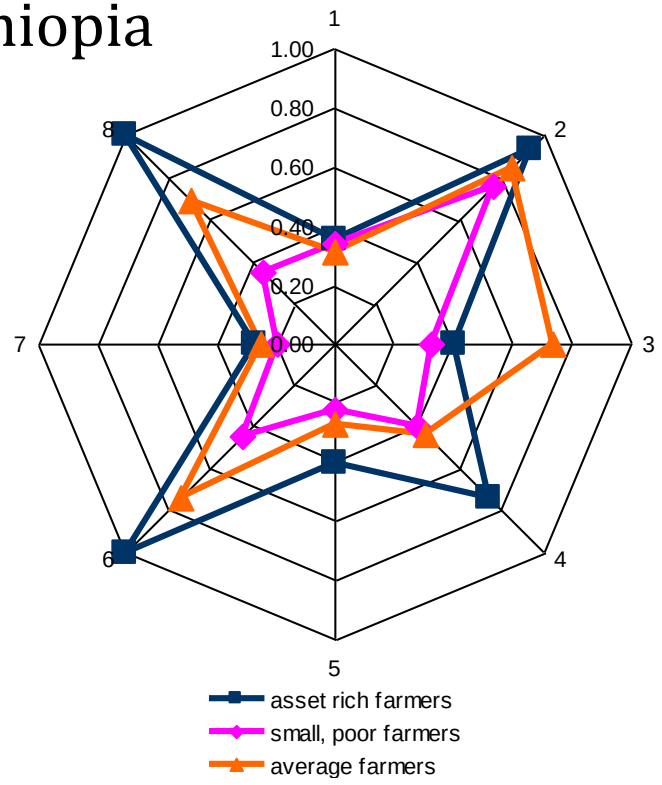

*Note*: Natural disasters cartogram is based on number deaths from hydrometeorological disasters (floods, droughts, cyclones and extreme temperatures) as recorded in EM-DAT. GDP data are from WDI.

*Source*: EM-DAT Disaster Database 2008; and World Development Indicators 2008.

# VULNERABILITY IS SOCIALLY DIFFERENTIATED

e.g. Ethiopia




1 inverse of dependency ratio
2 % of male headed hh
3 % of hh with migrated members
4 average years of education
5 average acreage per hh
6 Acreage cash + oil crops and trees
7 Livestock (in Tropical Livestock Units)
8 Mean asset score

# WHAT'S NEW? HOW TO BUILD RESILIENCE?

- Less about doing new things, but doing more things and doing things differently

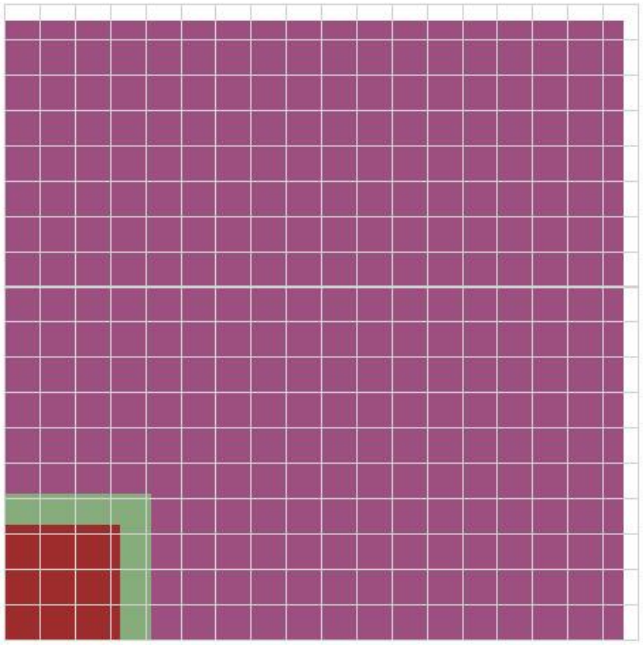
- Focus on properties of resilience
  - Diversity, less sensitive fall-back options
  - Social and institutional learning

# SOME ENTRY POINTS FOR ACTION

- Development policy lending, informed by poverty and social impact analysis (PSIA)
  - Mexico, Morocco, Mozambique, Vietnam
- Investment lending across multiple sectors
  - Social protection
  - Community driven development (CDD)
- Carbon finance
- Climate investment funds (esp. PPCR)

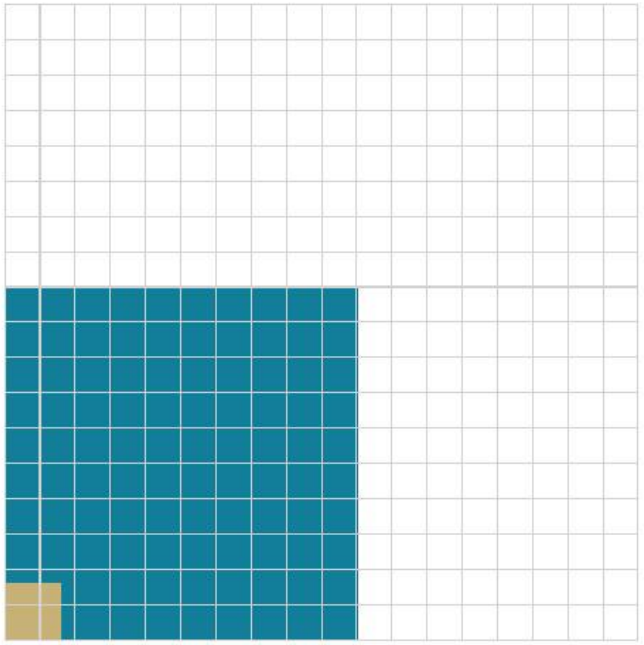
# INVESTING IN CLIMATE RESILIENCE THROUGH COMMUNITY DRIVEN DEVELOPMENT (CDD)

Total WB lending 2001-2011: $308 b



CDD investment in climate resilience: $17 b

Amount needed annually to adapt to climate change: $100 b



Total amount mobilized globally to date for CCA financing: $2.5 b

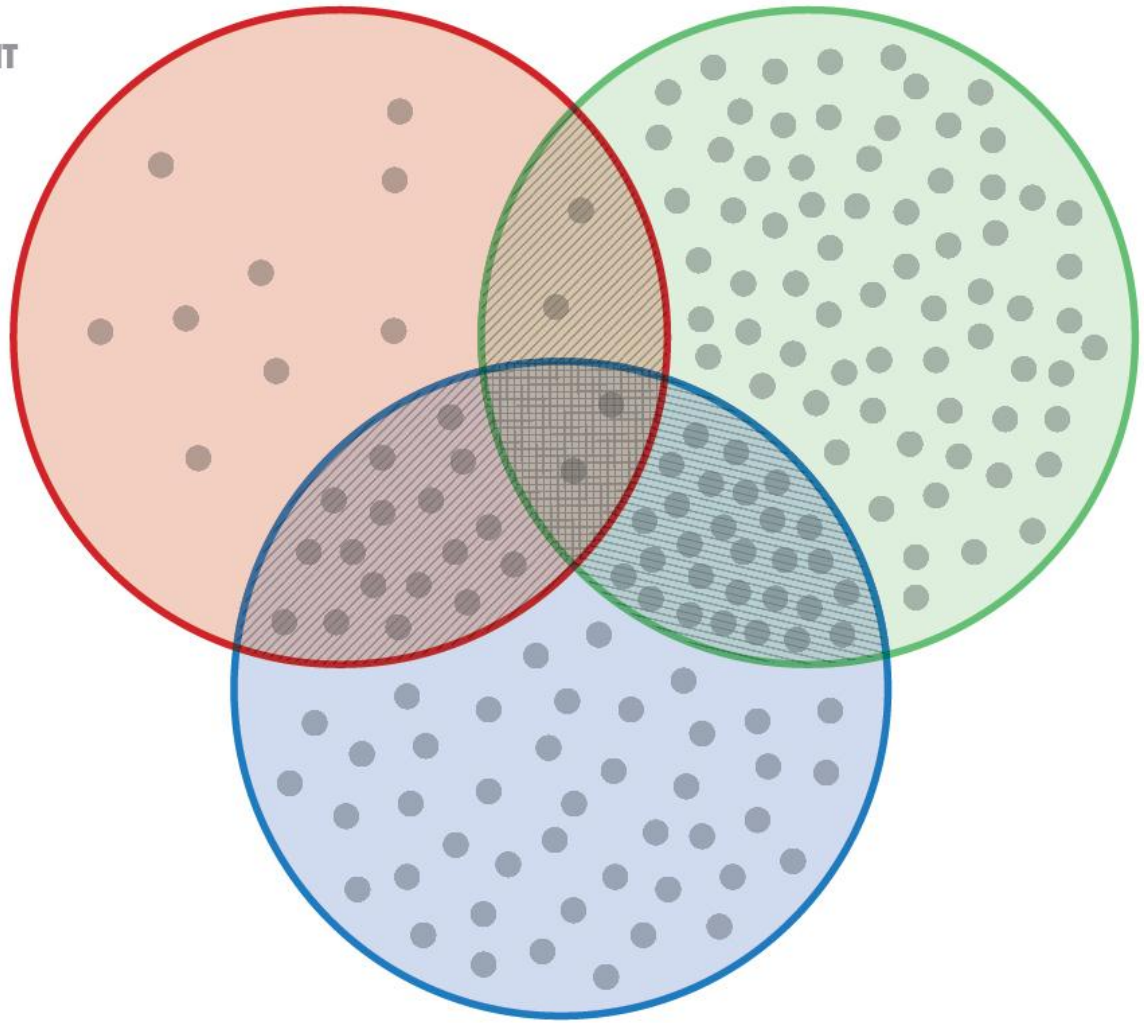
# ENTRY POINTS FOR CDD AND CLIMATE RESILIENCE

NATURAL RESOURCES MANAGEMENT

INFRASTRUCTURE

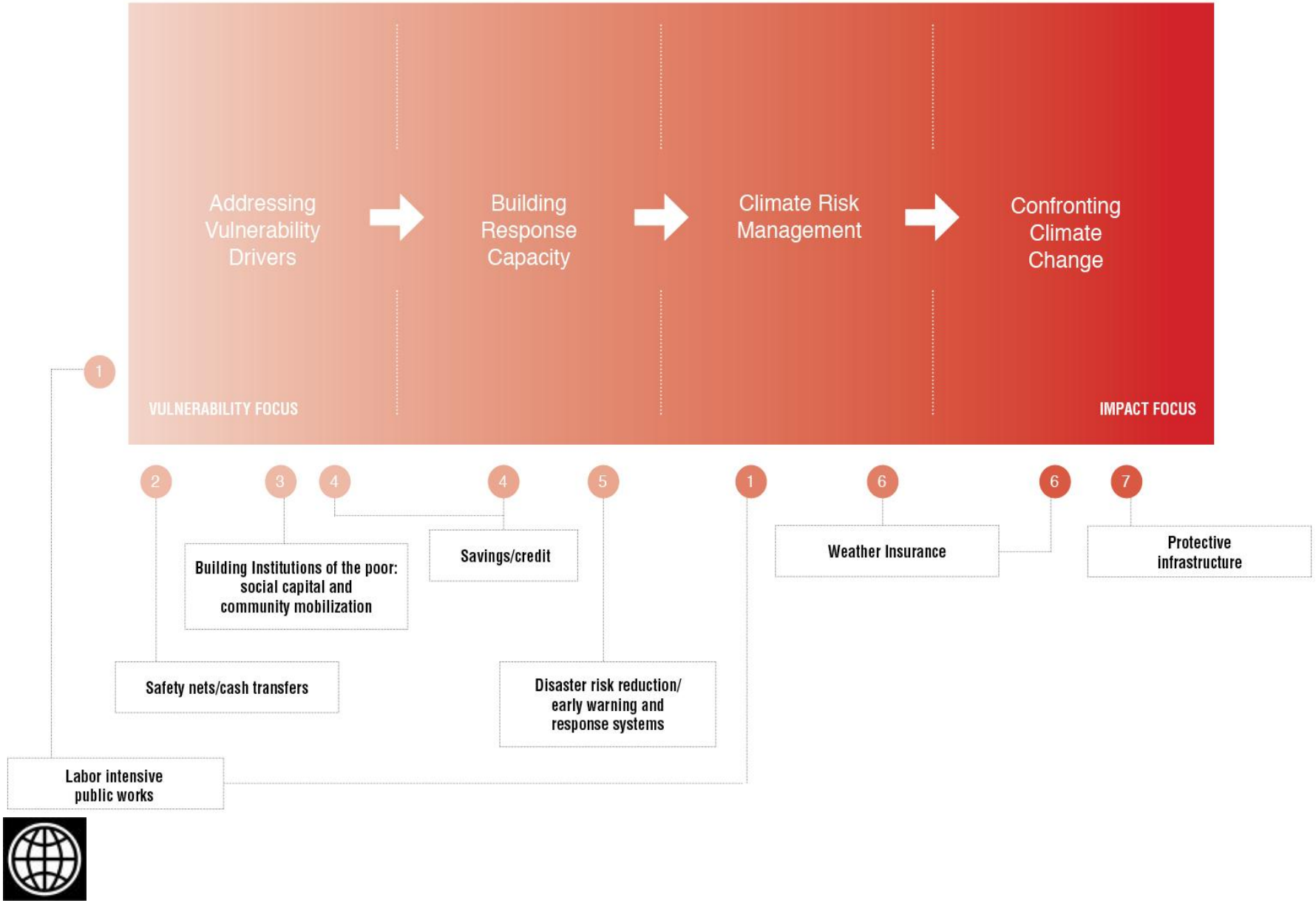
LIVELIHOODS

PROJECTS



# ACTIVITIES ALONG AN "ADAPTATION CONTINUUM"

(AFTER MCGRAY ET AL)



# CONCLUDING QUESTIONS

- Resilience as applied to development is an evolving concept
- Most clearly understood in a DRR context?
- Wider application flows from recognition of the *multiple, interlocking* risks faced by the most vulnerable
- May deflect from other aspects of ‘triple win’ in climate-smart agriculture (e.g. carbon)?
- Measurement remains a challenge