Reflections on climate change & migration

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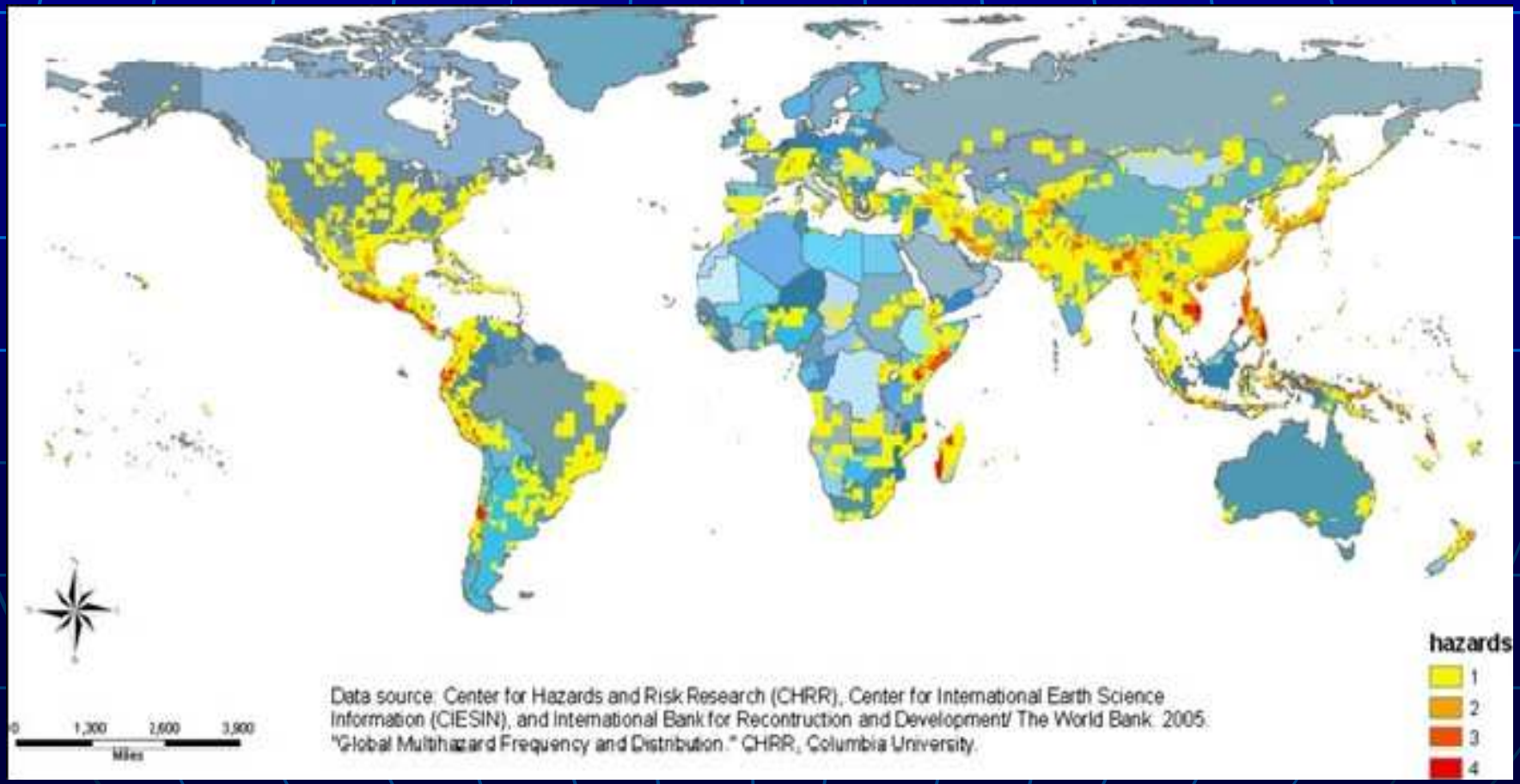
Lessons learned

Evidence

- **Indications that climate change is affecting many regions**
- **However, data are limited and evidence weak**



Lessons learned

Policy & debate

- **Issue is high on the agenda and politicized**
- **Emphasis on sudden onset disasters / emergencies**
- **Emphasis on negative aspects of CC and often alarmist**
- **Policies not always informed by clear evidence**

- **CC migration not linked up with other factors in policy**
- **Multi-sectoral approach needed but still lacking**
- **Failure to adequately address CC migration in Conventions/ Agreements**

→ Gives rise to questions on analysis, responsibility, governance

Lessons learned

ANALYSIS / DATA

- **No consensus on terminology**
- **Without clear terminology data collection & analysis not possible**
- **There are classification attempts but this remains problematic**

IOM definition: "Environmental migrants are persons or groups of persons, who, for compelling reasons of sudden or progressive changes in the environment that adversely affect their lives or living conditions, are obliged to leave their habitual homes, or chose to do so, either temporarily or permanently, and who move either within their country or abroad**".**

Can we isolate CC as prime cause without taking into account other socio-cultural, economic and political factors impinging on environment and livelihoods?

Lessons learned

- No direct causal link; many inter-dependent factors together reinforce migration

- Migration decisions based on many factors, including financial capital , social capital, conditions at home and conditions in the potential destination

- CC migration is highly context specific: depends on livelihood

- Migration = age-old strategy to cope with adverse environmental conditions and seasonal food shortage cycles

- counterintuitive evidence reported (Geest):
  - northern Ghana has increased vegetation [potentially attractive] but significant out-migration
  - N to S migration did not increase during environmentally stressed periods (1970-1980s): out-migration decreased, and there was return migration!

Drivers

EXAMPLE ETHIOPIA:

Experiencing droughts especially in low-lying areas

Lease of 3 million hectares over next 5 years (size of Belgium)

Foreign investors: Chinese, Indian and Saudi firms

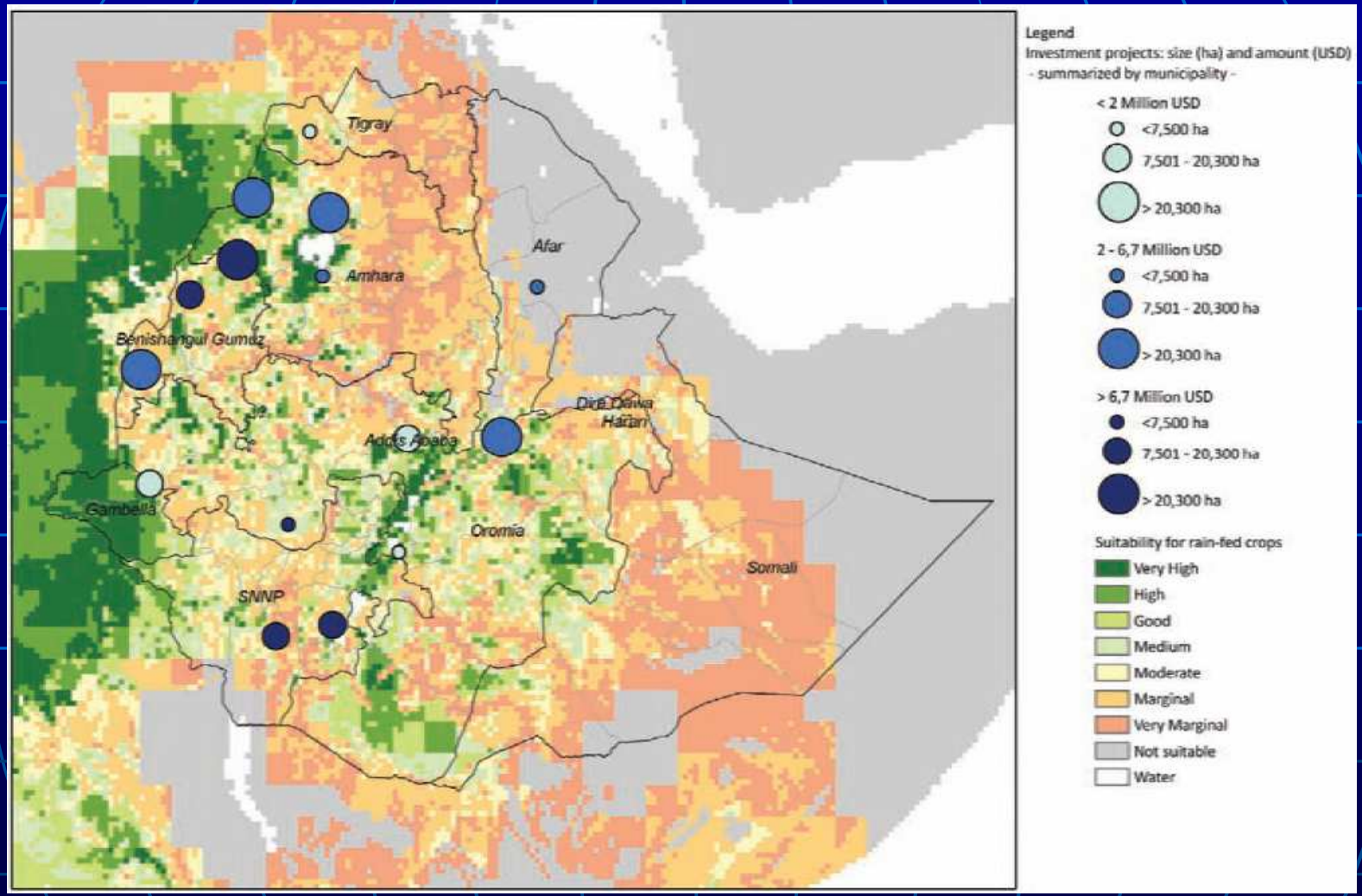
This threatens livelihoods of pastoralists, who use land for agriculture, for hunting/gathering and rearing cattle

African countries considering land lease: Ethiopia; Tanzania Mozambique; Sudan; Madagascar; Malawi

Migration = one survival strategy used by Ethiopian HH; other survival strategies include using food reserves, seeking local nonfarm employment, selling livestock or household and farm equipment.

However, most farmers in low-lying drylands remain instead of moving to the wet highlands with better resources → ancestral lands / identity

Drivers



"Landgrab" is important factor in out-migration flows

Source: Cotula, L. et al, 2009, LAND GRAB OR DEVELOPMENT OPPORTUNITY? AGRICULTURAL INVESTMENT AND INTERNATIONAL LAND DEALS IN AFRICA, IIED/FAO/IFAD, London/Rome

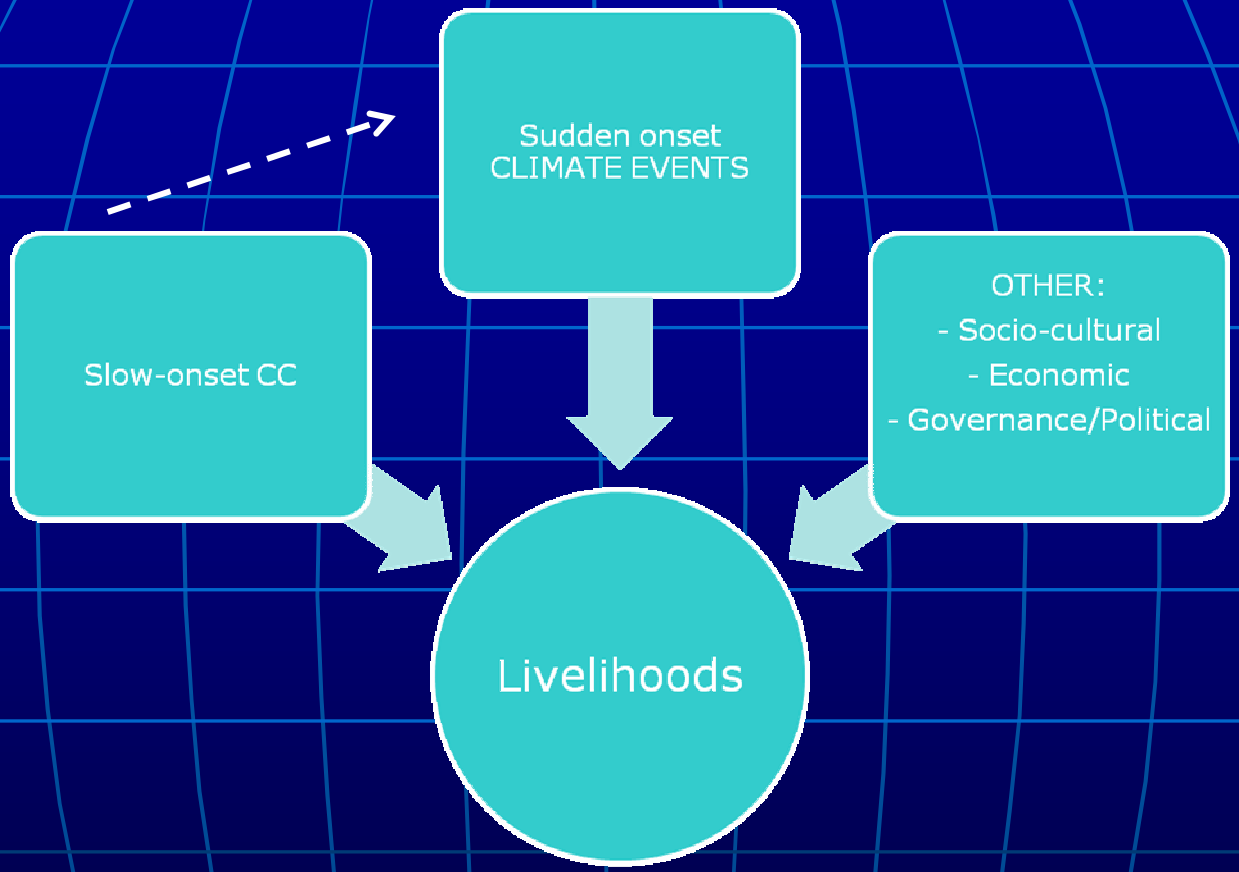
Lessons: drivers

1. **Migration *can be* an adaptive response to stressful conditions**

2. **But: Migration can also cause/excacerbate environmental problems:**

Yemeni migration and deteriorating agriculture/ irrigation:
When structures to protect agricultural land from floods were not maintained because of the migration of landowners large areas of agricultural land were washed away.

Approach



Recognize multi-causality; focus on livelihood improvement

CC migration needs to be analyzed in the context of three interrelated characteristics: vulnerability, resilience, and adaptability.

Impact

Impact of climate change as a driver of future forced migration depends on several factors:

1.Quantity of future greenhouse gas emissions

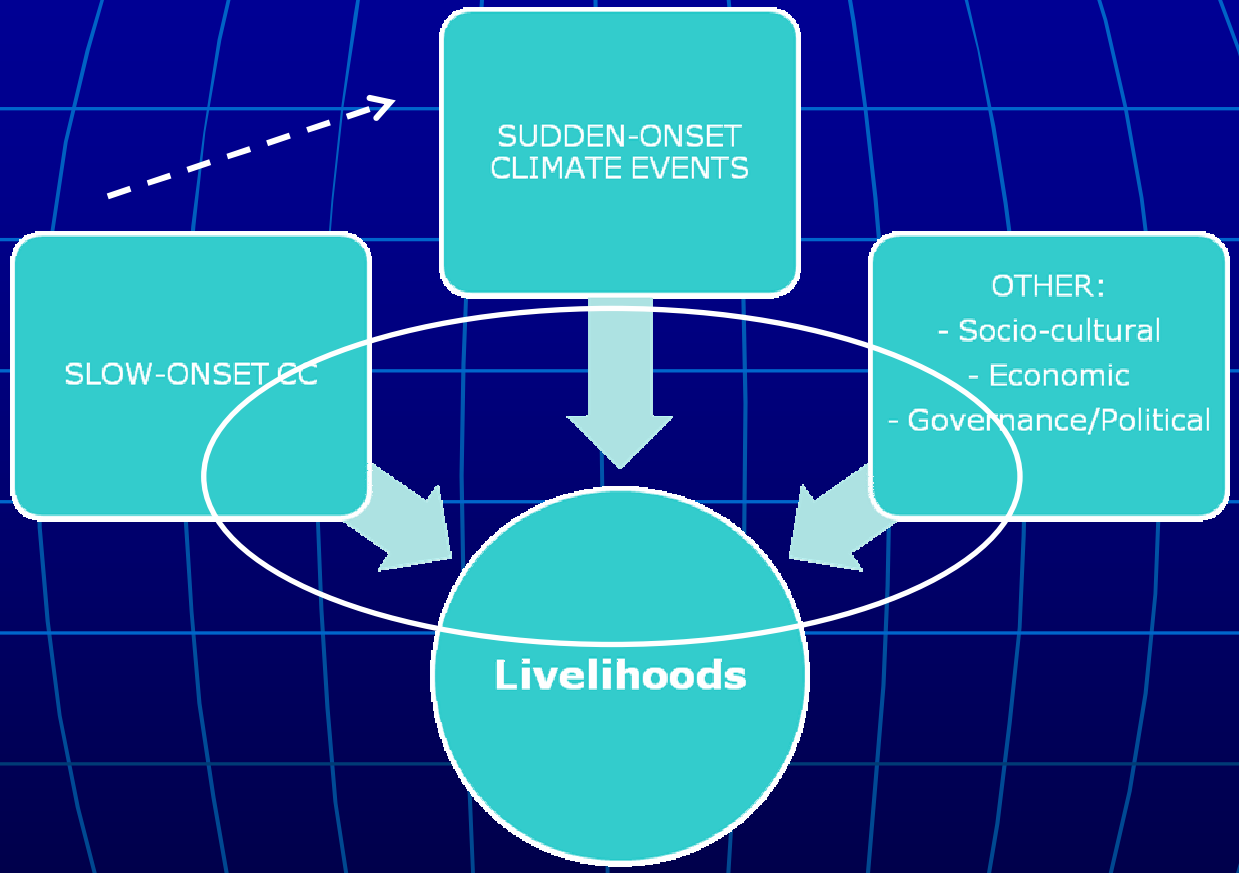
2.Meteorological evolution of climate change

3.Rate of future population growth and distribution

4.Adaptive capacity of communities, depending on exposure / vulnerability /resilience
→social & institutional organization

5. Effectiveness of local/national adaptation strategies

Approach



Potential arena for [policy] interventions

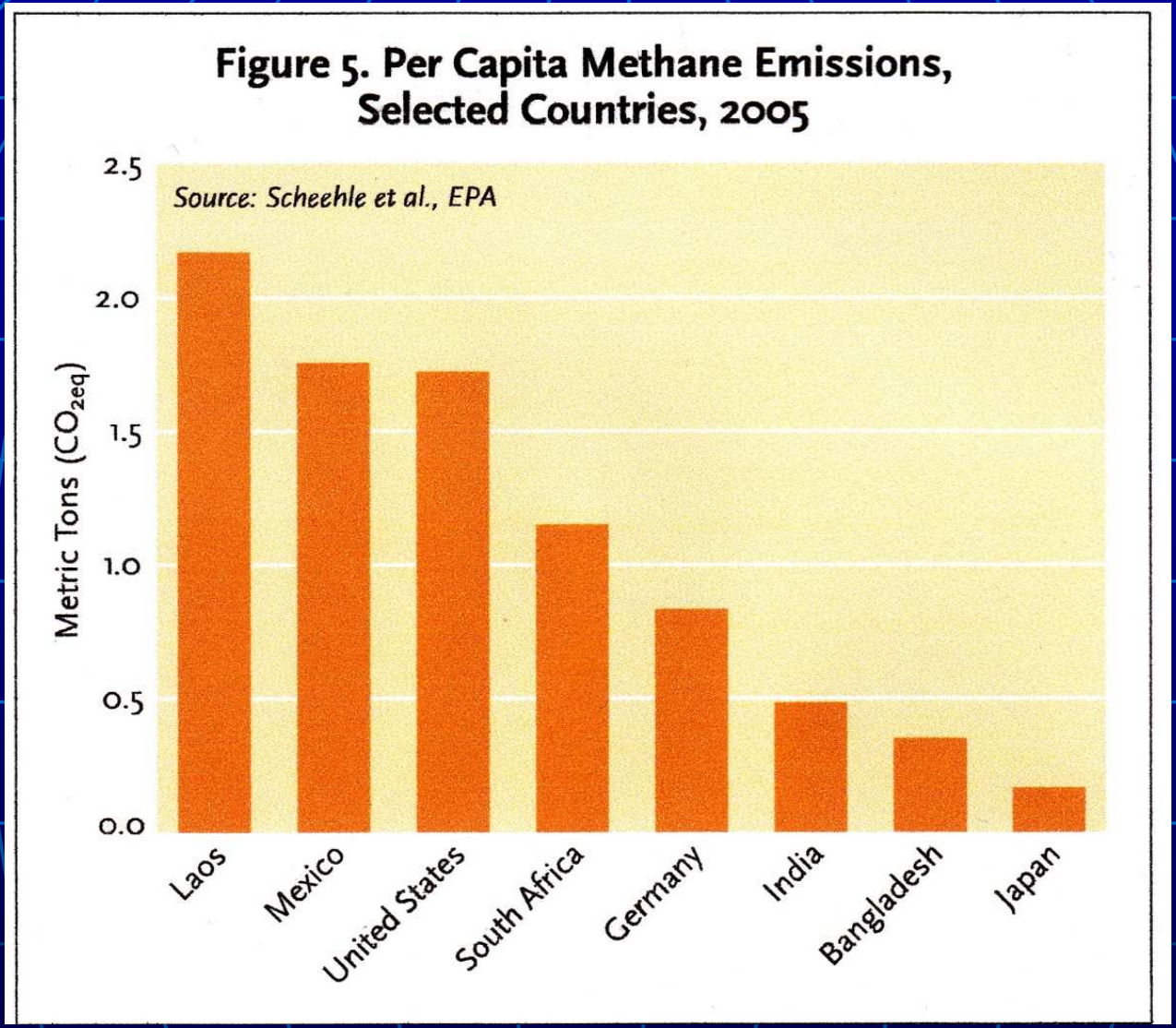
Policy issues: way forward

Basic preconditions

- **Policies need to be evidence based: informed by reliable data**
- **Avoid alarmist approach → realistic scenarios**
- **See migration as adaptation not a problem**
- **Recognize multi-causality & indirect link CC and migration**
- **Focus on other adaptations improving *resilience***
- **Multisectoral approach: focus on issues as population, trade, social security, rural development *etcetera***
- **Most climate-migrants are IDPs in the South: focus on assisting DCs rather than tightening immigration regimes**
- **CC is intricately linked to development → focus on preventive measures in North but also in South (BRIC)**

Policy issues: way forward

- **Poor(est) most affected → LICs also responsible for poverty alleviation (income generation; land rights; insurance)**
- **Focus on rural development/agriculture**
- **Implies intensified cooperation transfer of funding,technology**
- **Avoid simple division of responsibility in simple terms of perpetrators (North) and victims (South)**



Next to industrial related CO2 emissions, methane comes from deforestation, changes in land use, wetland rice cultivation, livestock, natural gas production, landfills, etc. Methane emissions are not closely correlated to a country's level of development.

Source: Population, Climate Change, and Women's Lives (2010), worldwatch report 183, Worldwatch Institute

Policy issues

Policy: what is needed?

1)Ensure CC does not lead to disasters/ mitigate impact
2)Policy aimed at reducing exposure, vulnerability
3)Policy aimed at improving resilience and coping capacity

How?

1) Involving diaspora's: co-development
- strengthening migration-adaptation linkages presupposes policies favorable to diaspora
→ however, EU policy restrictive / circulation is not real option

2) use and align existing policy frameworks/mechanisms, rather than creating separate bodies in recognition that it needs multisectoral approach

Challenges

Scientific:

- **Unravel complexity & develop clear terminology & indicators**
- **Collect reliable, longitudinal data + develop integrated models**
- **Focus on positive effects as well**
- **Foster multi-disciplinary scientific cooperation**

Policy:

- **develop multi-sectoral involving local / regional and global stakeholders dialogue**
- **harmonize policies and legal frameworks**
- **Compensation question: via funding, liberal migration policies but also transfer of (CO2 reduction) technology e.g. to new polluters (BRIC countries)**

Challenges

- avoid urban bias in urbanizing world → prioritize rural development and support agricultural innovation (new crops; agrosylvipastoral systems)
- counter adverse production systems (landgrab; trawler fishing; shrimp farming in vulnerable areas; destruction of reefs)
- develop sustainable funding mechanisms including insurance
- Develop fair/ethical compensation systems? monetary or in kind (technology; migrants)?
- population / demographic change into the equation
- Education & awareness building (lifestyles changes)

To conclude

Avoid too much focus on symptoms (out-migration), but use comprehensive approach (incl. consumption/production systems, population growth/distribution etc)

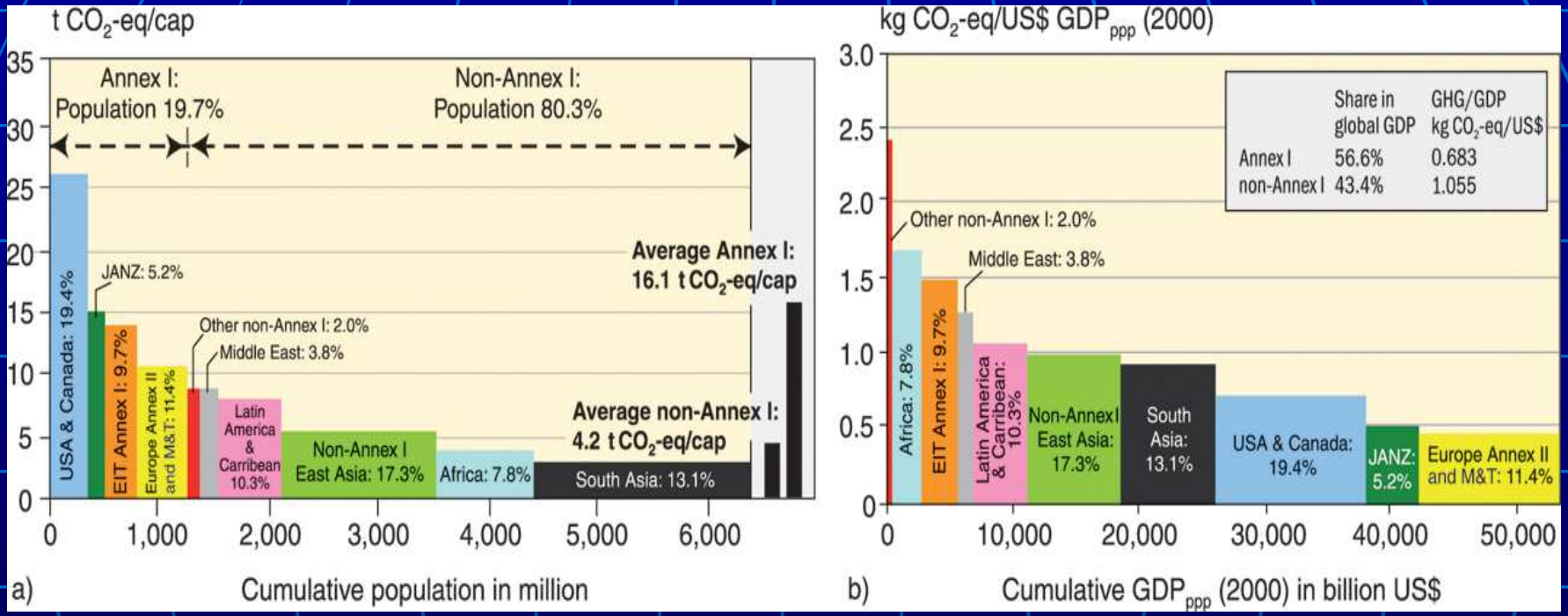
Do not amplify the problem: in ageing societies migrants needed

Creating large architecture around the issue problematic: draws away attention and resources from other development issues

"Reducing vulnerability to CC can only be achieved through sustainable development" (Cecilia Tacoli Oct. 2011)

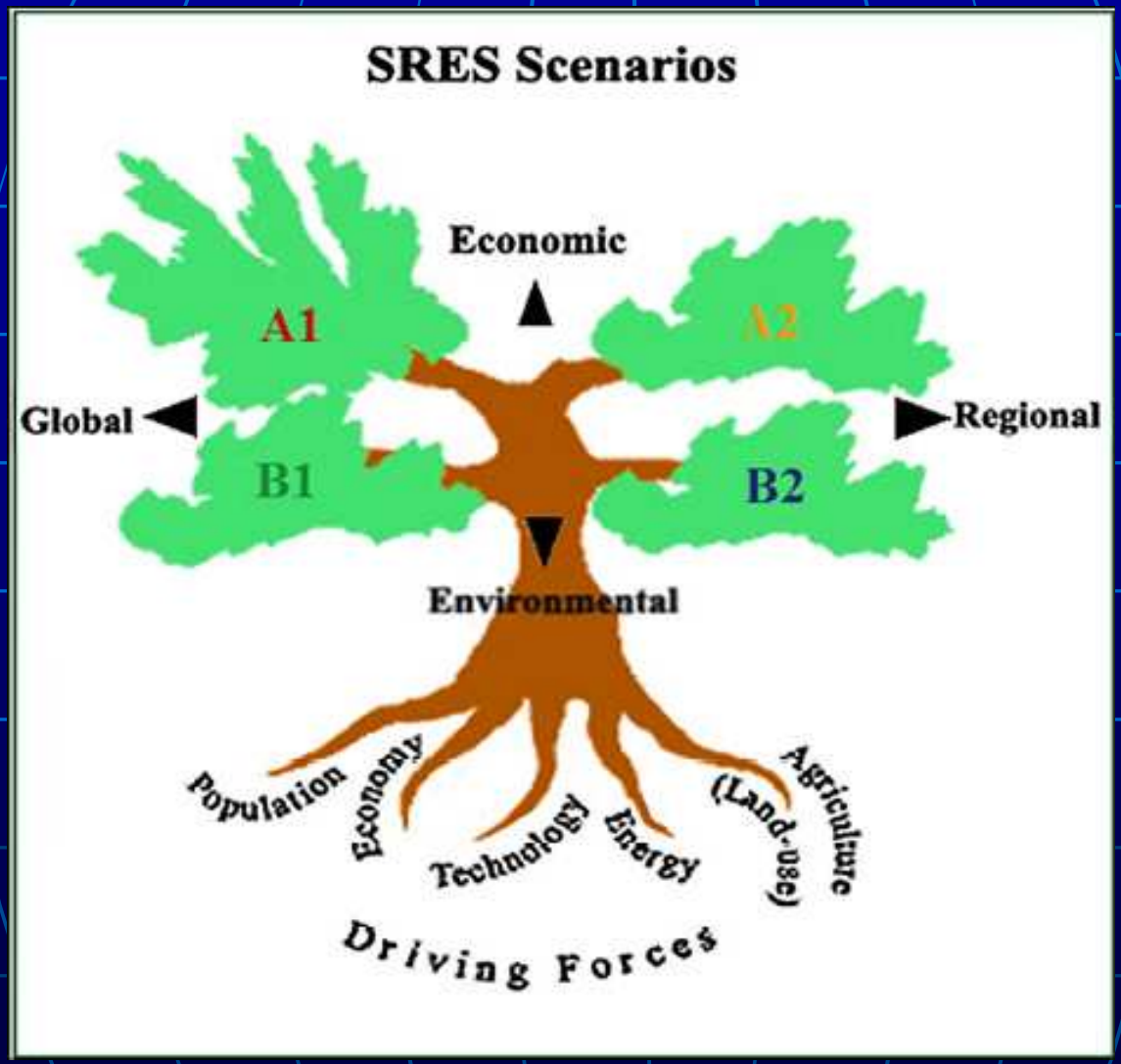
THANK YOU !!

Drivers



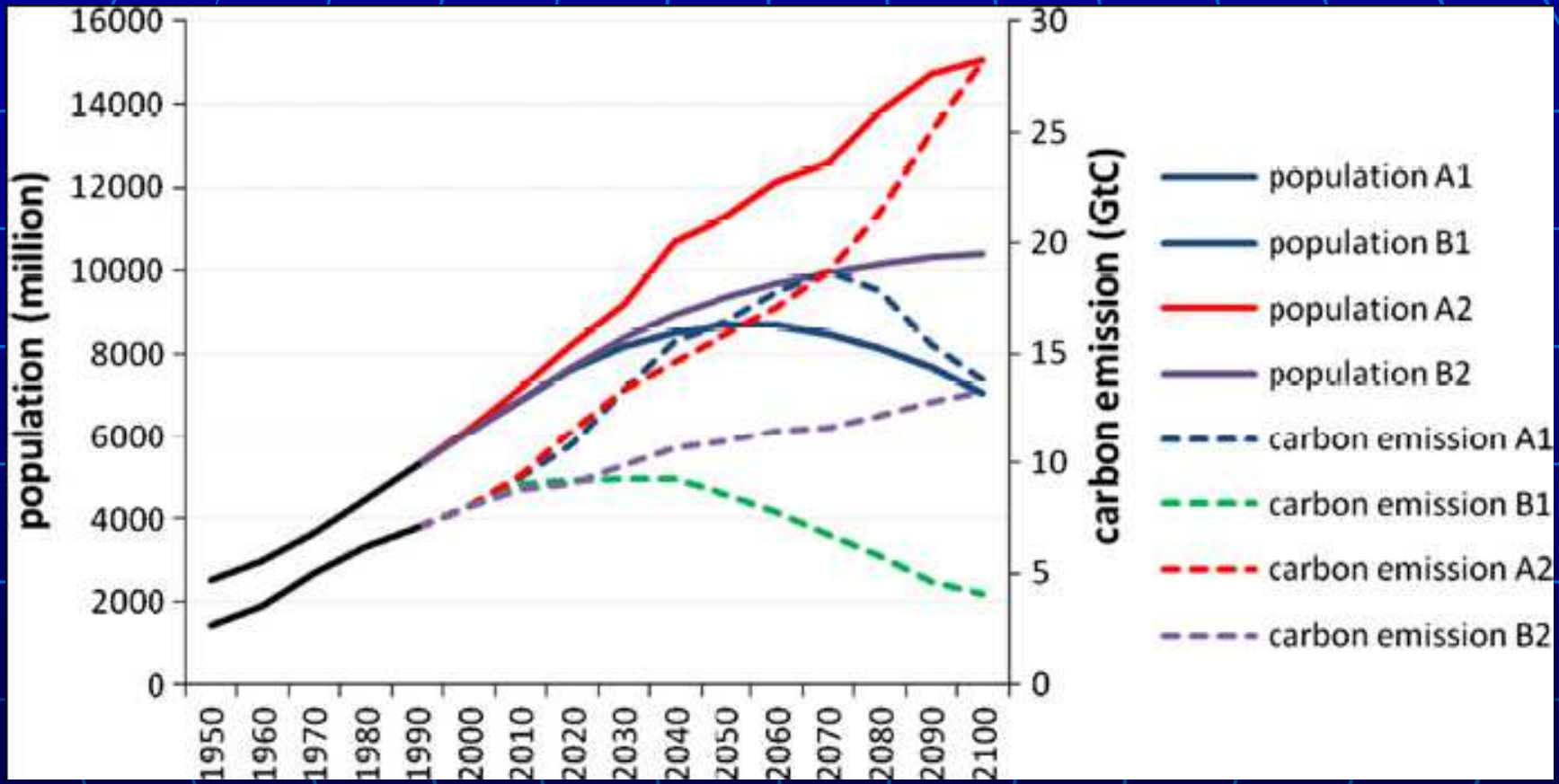
Source: Climate Change Synthesis Report 2007, IPCC

Discussion



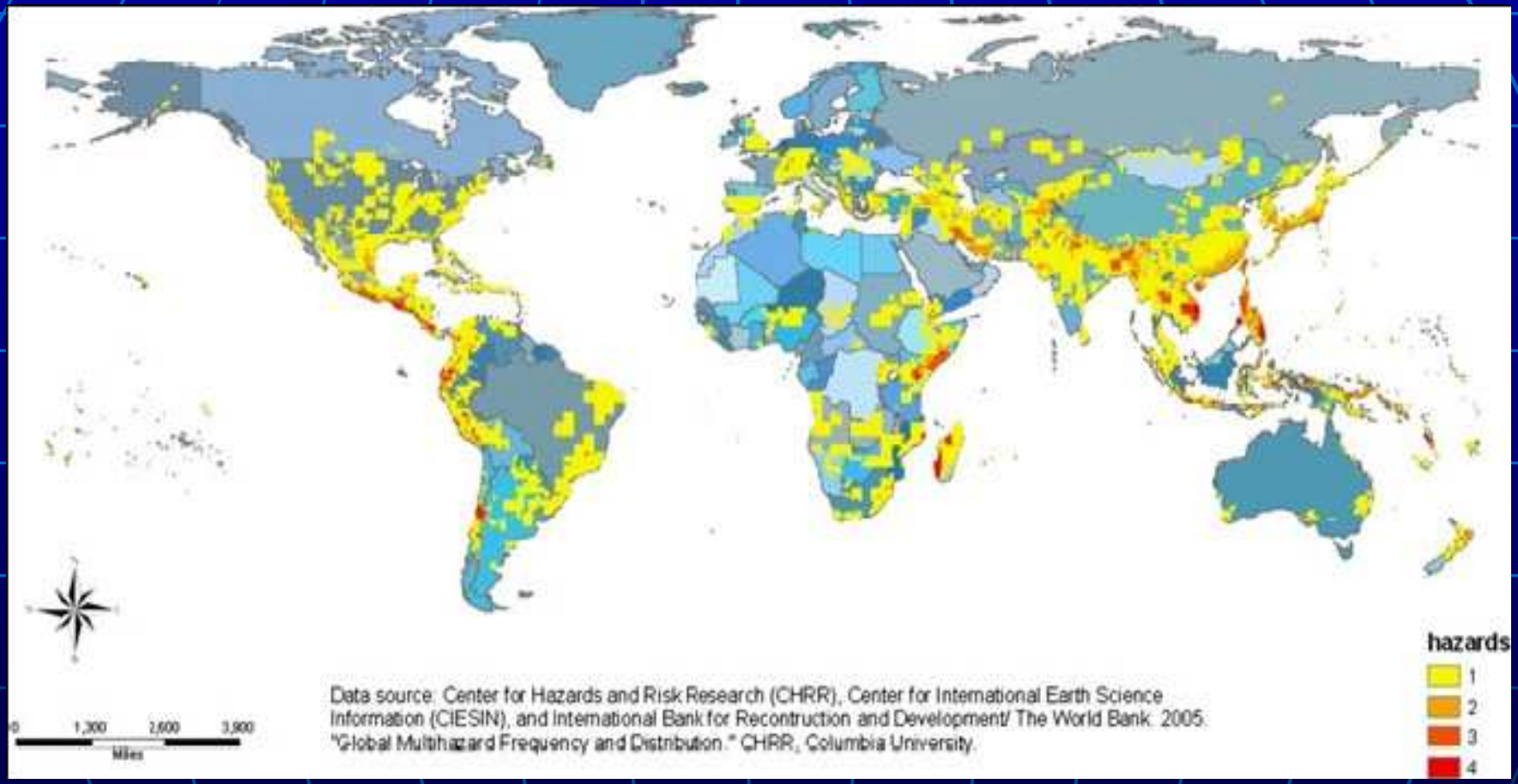
Source: IPCC Special Report for Emission Scenarios, in Jiang (2011)

Discussion



Source: climate model MESSAGE by the International Institute for Applied System Analysis (IIASA), in Jiang (2011)

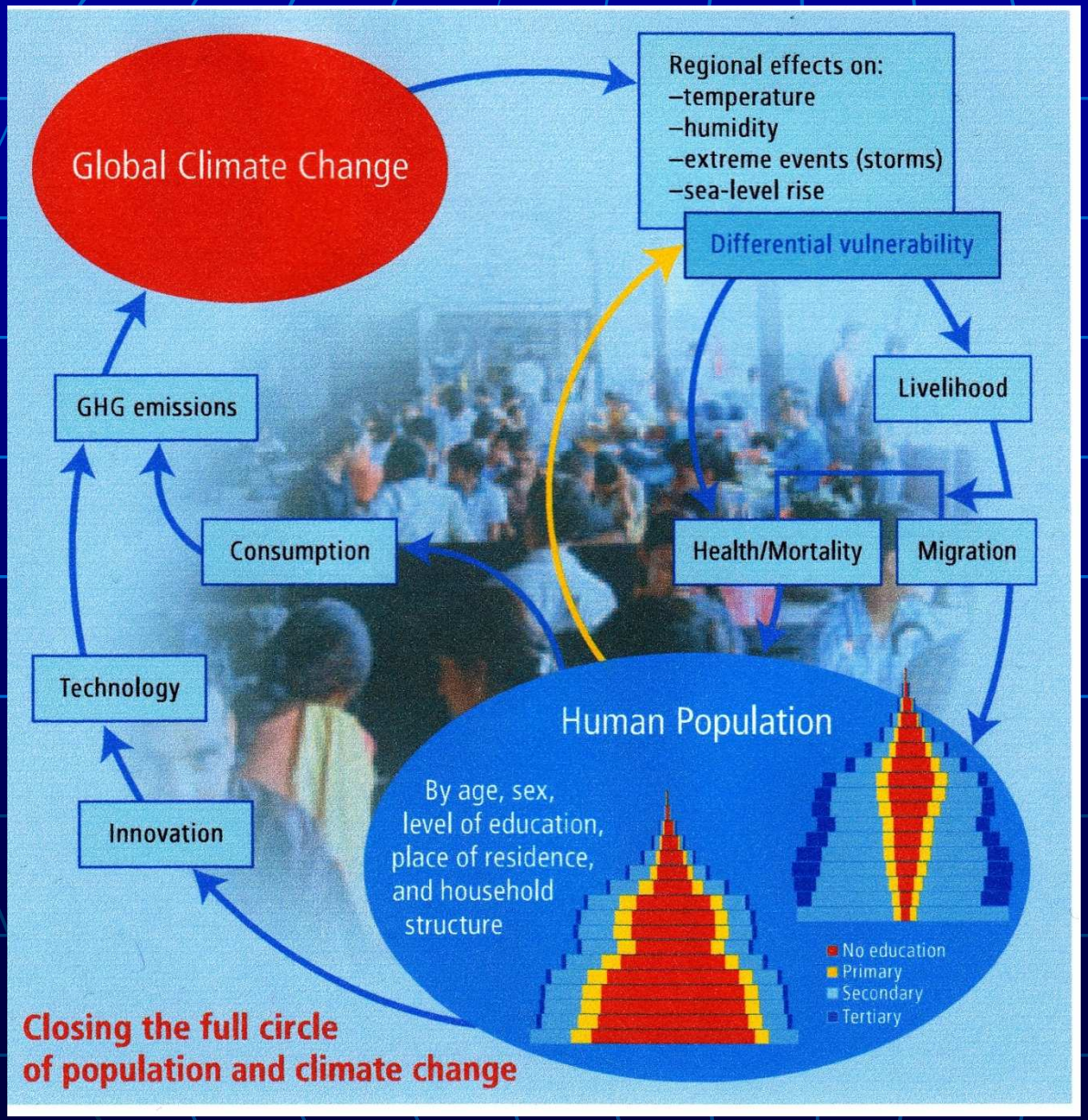
Discussion



Global distribution of climate-related hazard hotspots

Source: CIESN, in Jiang (2011)

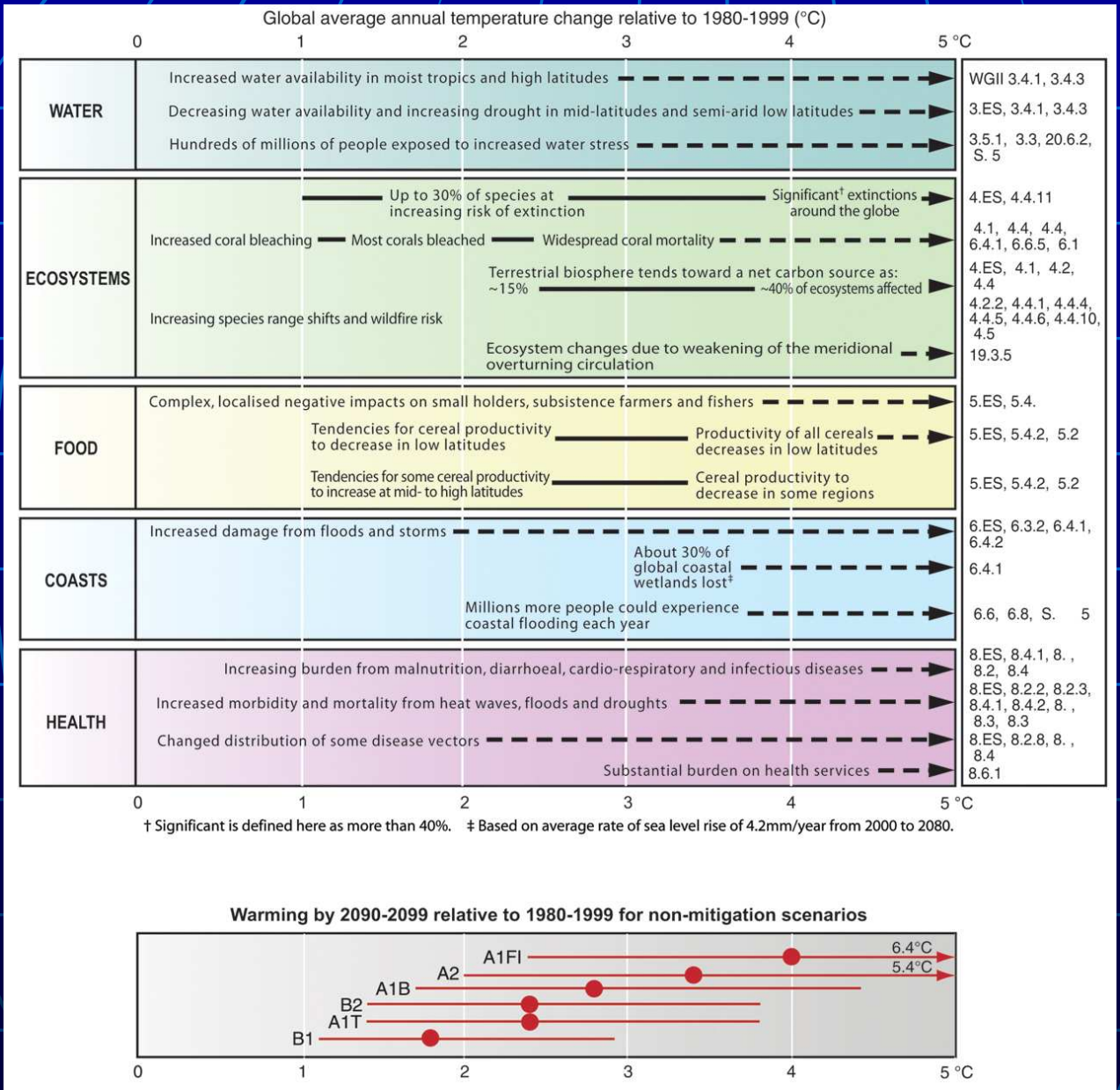
Discussion



Impact of CC depends on population structure and capability to adapt, e.g. via livelihood changes

Source: Population & Climate Change, PopNet, 41 (2009/10), IIASA

Drivers



Source: Climate Change Synthesis Report 2007, IPCC

Lessons learned

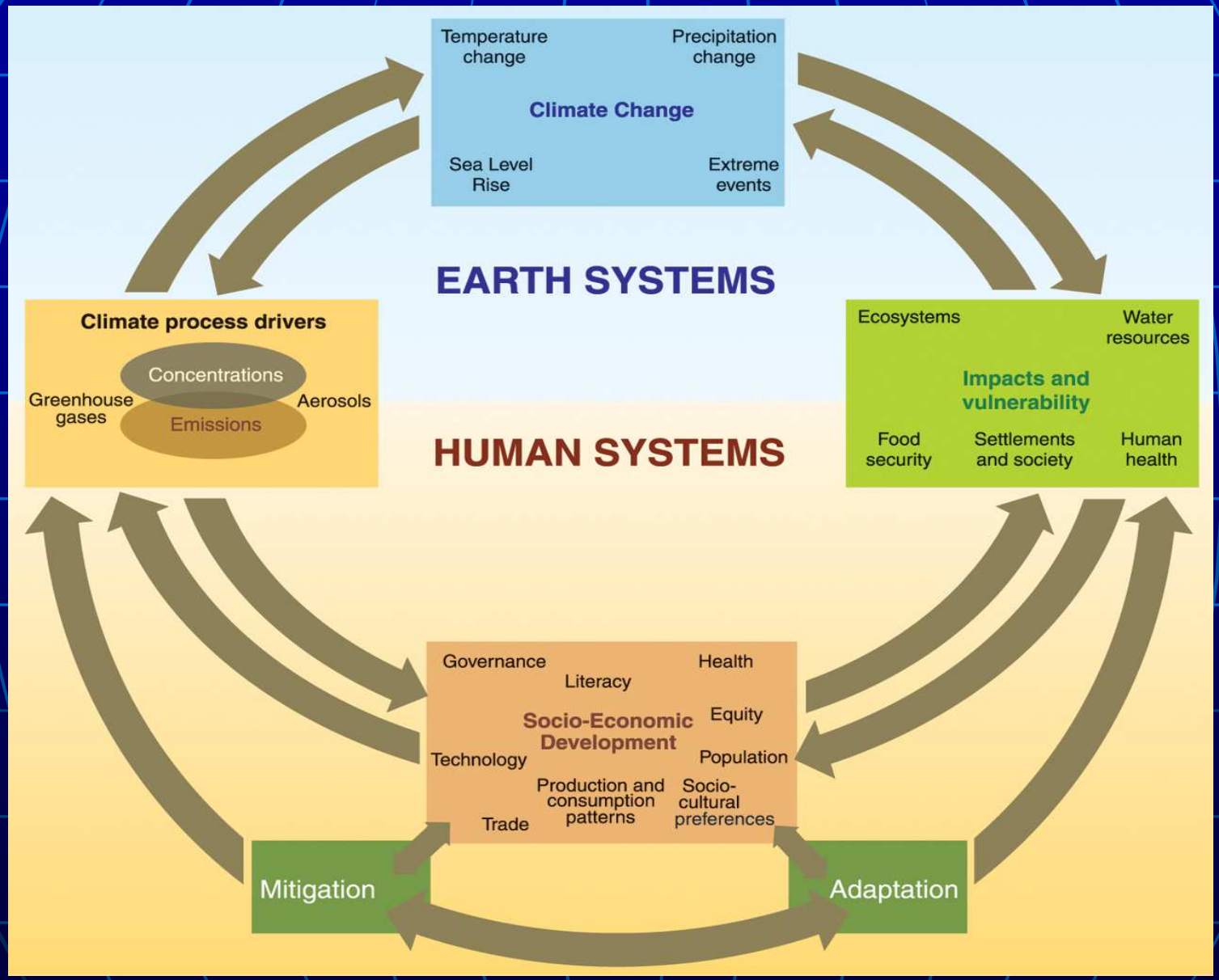
Is it new? Old wine in new bottles?

Migration = age-old strategy to cope with adverse environmental conditions and seasonal food shortage cycles

Historical examples:
-4th century: growing aridity caused Germanic migration to Gaul
- 8th century muslim migration to S-Europe partly due to droughts
-1930's: Dustbowl migration (drought, but also due to less attachment to land → only tenants → and economic crisis Depression years)
- many nomadic/pastoral societies migrate in response to environmental change processes

Source: Climate Change Synthesis Report 2007, IPCC

Drivers



Source: Climate Change Synthesis Report 2007, IPCC

Policy / intervention

Policy dimension

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Drivers

EXAMPLE ETHIOPIA:

Experiencing droughts especially in low-lying areas

Coverage of natural forest decreased from 40% of land area (50 million ha) just before the turn of this century to 3.6% by the early 1980s. By 1988 it had declined to 2.7% (3.2 mill ha)

Causes: coffee production activities and encroachment into forestland to expand farmland and pasture;

Population growth, and the government's land-reform and re-settlement programs have caused local residents to lose harmony with the land.

Forest management in this area hasn't yet been fully developed.

Migration = one survival strategy used by Ethiopian HH; other survival strategies include using food reserves, seeking local nonfarm employment, selling livestock or household and farm equipment.

However, most farmers in low-lying drylands remain instead of moving to the wet highlands with better resources → ancestral lands

Cheng S et al, (1998)

Drivers

Ethiopia:
The government of Meles Zenawi is pioneering the lease of some three million hectares of land over the next five years, an area the size of Belgium in lowland areas mostly in the west and south-west of the country
Foreign investors in Gambella include Chinese, Indian and Saudi firms
Most of this land is ancestral land in use by pastoralists; an estimated four million such farmers in Ethiopia, who often cross hundreds of miles a year to find fresh pasture for their cattle.

"They use the land for different purposes - for agriculture, for hunting, sometimes just to gather fruits during famine," one protester says.

African countries considering land lease: Ethiopia; Tanzania Mozambique; Sudan; Madagascar; Malawi

Source: Share Land grab fears for Ethiopian rural communities. By Ed Butler, Business Daily, BBC World Service, Ethiopia 16 December 2010