



United Nations Trust Fund for Human Security



Climate Change and Disasters: A Threat to Human Security

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http://www.afes-press.de/html/download_oswald.html

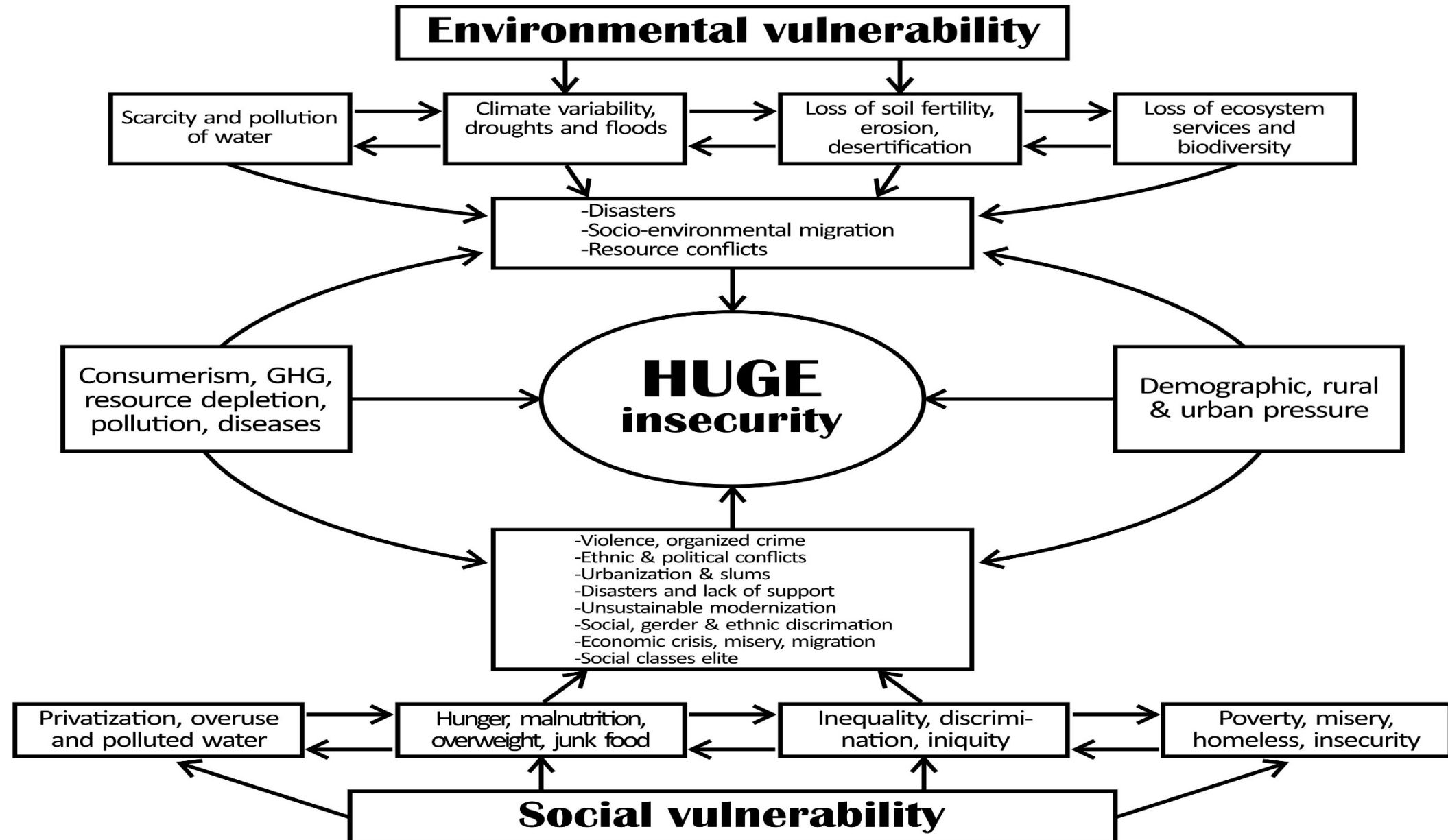
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1. Research Question

How could the four pillars of human security enhance the wellbeing of the people -especially the vulnerable ones- to avoid the negative outcomes of the physical and societal effects of climate change?

2. Dual vulnerability



3. Environmental and Human Security

Label	Reference object	Value at risk	Source(s) of threat
National security	The State	Territorial integrity	State, substate actors, org. crime
Societal security	Societal groups	Nation, identity	Nations, migrants
Human security	Individual, humankind	Survival	Nature, state, global
Environmental security	Ecosystem	Sustainability	Humankind, nature
Gender security	Gender relations, indigenous people, minorities	Equality, identity, solidarity	Patriarchy, totalitarian institutions (governments, churches, elites) intolerance

Human security: Referent: individuals and humankind. [Human Sec. Network]

❖ Values at risk: survival of human beings and their quality of life.

❖ Major source of threat: nature (global environmental change), globalisation, nation state with its ability to cope with this dual challenge.

Environmental Security: Referent: Ecosystem; Value at risk is sustainability.

❖ Major challenges: global environmental change & humankind,

❖ Focus: Interactions between ecosystem & humankind, impact of GEC on environ-mental degradation, of increasing demand on environmental scarcity & stress.

[No Environment Security Network of States, IGOs & NGOs]

Environmental Dimension of Human Security

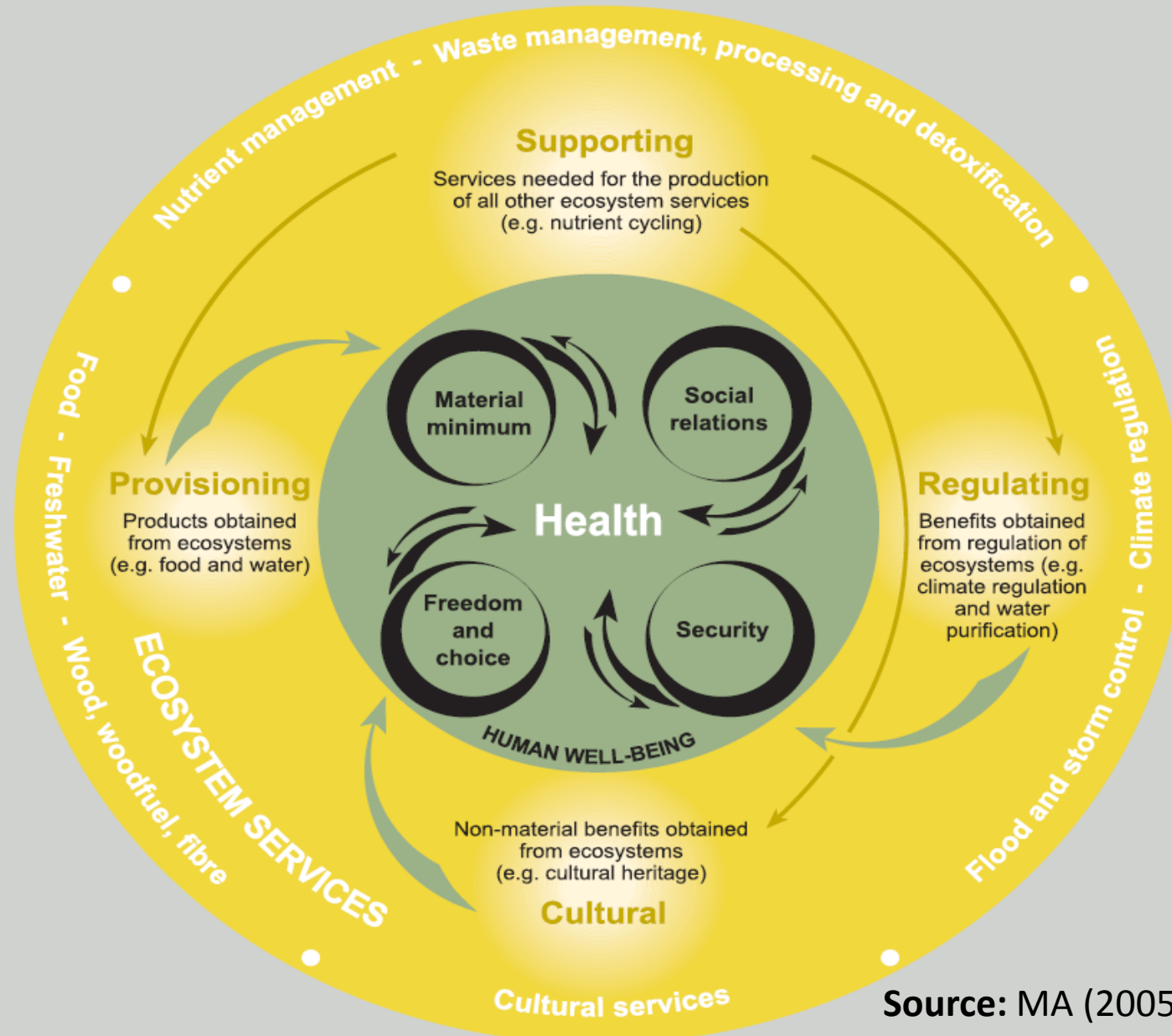
- **Research Project GECHS (Global Environmental Change & Guman Security) of IHDP (International Human Dimension Programme)**
- **GECHS considers human security to be a state that is achieved**
- **when and where individuals and communities have the options necessary to end, mitigate or adapt to threats to their human, environmental and social rights;**
- **have the capacity and freedom to exercise these options;**
- **and actively participate in pursuing these options.**
- **The focus is on security for individuals and communities, rather than on states.**



UNU-EHS in Bonn

- **Hans Günter Brauch: Environment and Human Security. Towards Freedom from Hazard Impacts. April 2005 (intersection 2/2005)**
- **Hans Günter Brauch: Security Threats, Challenges, Vulnerabilities and Risks of Environmental and Human Security, August 2005 (Source 1/2005)**
- **Úrsula Oswald Spring: Gender and Disasters (Source /2008)**

Ecosystem services in danger



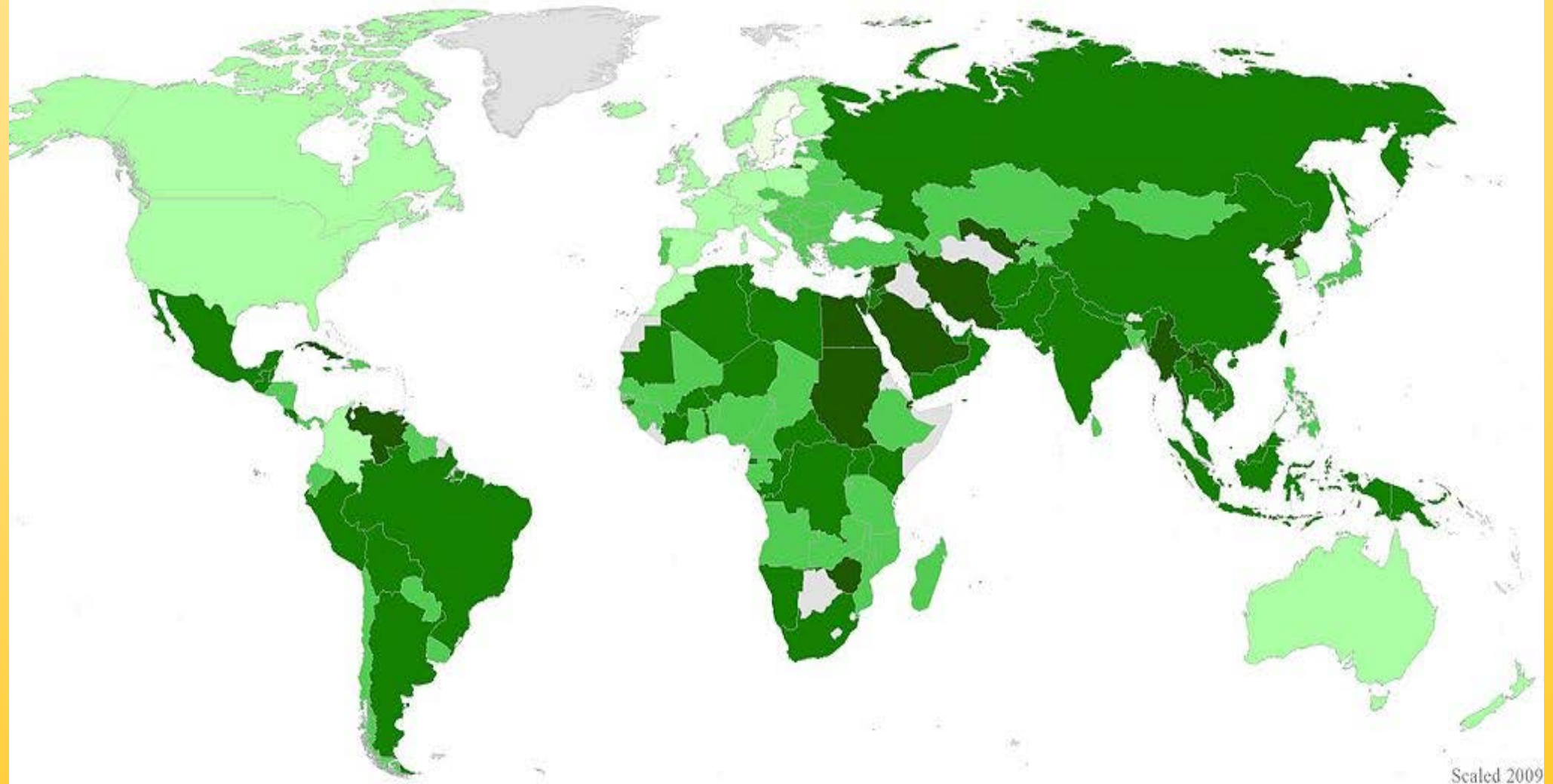
4. Human Security and its four pillars

1. **“Freedom from fear”**: humanitarian agenda: violence, conflicts, weapons (Canada, Norway, Human Security Network) (UNESCO, HSN), **Canadian approach**: Human Security Report
2. **“Freedom from want”** human development agenda: poverty (stimulated by Asian economic crisis of the 1990s) by reducing social vulnerability through poverty eradication programs (UNDP 1994; CHS: Ogata/Sen: Human Security Now, 2003, Human Security Trust Fund, HSU of OCHA), **Japanese approach**;
3. **“Freedom from hazard impact”**: environmental (GEC) and natural hazard agenda: Bogardi/Brauch vision, goal: securitize: “environment” (GEC as pressure) and “natural hazards” as impact by reducing dual: environmental and social vulnerability by enhancing coping capabilities of societies confronted with natural and human-induced hazards (Bogardi/Brauch 2005; Brauch 2005a, 2005b).
4. **“Freedom to live in dignity”**: agenda: rule of law, human rights, democratic governance (Kofi Annan: *In Larger Freedom* (March 2005))

4.1. Freedom from fear

- **Primary Focus of the Human Security Network: Campaign against personal landmines**
- **Requirements and objects:**
 - **Rule of Law:** ICC, International Court of Justice and national, regional and local judicial courts and mechanisms
 - **Universal Humanitarian Standards:** initiatives in international, humanitarian and human rights law, human development, human rights education,
 - **Good Governance:** capacity building of not only national, but regional and local governments or leadership authorities; fostering democracy; respect for minorities
 - **Conflict Prevention/ Post-Conflict Reconstruction:** land mines, child soldiers, protection of civilian population in armed conflict, small arms and light weapons, trans-national organized crime (Ottawa Convention on Anti-personnel Landmines)
 - **Strong International Institutions**

Trafficking of Females



- | | |
|---|--|
|  No Data |  Trafficking is illegal but is still practiced |
|  Trafficking is illegal and rare |  Trafficking is limitedly illegal and is practiced |
|  Trafficking is illegal but problems still exist |  Trafficking is not illegal and is commonly practiced |

Trafficking of drugs

Source: Bourbaki Report, 2011: 15





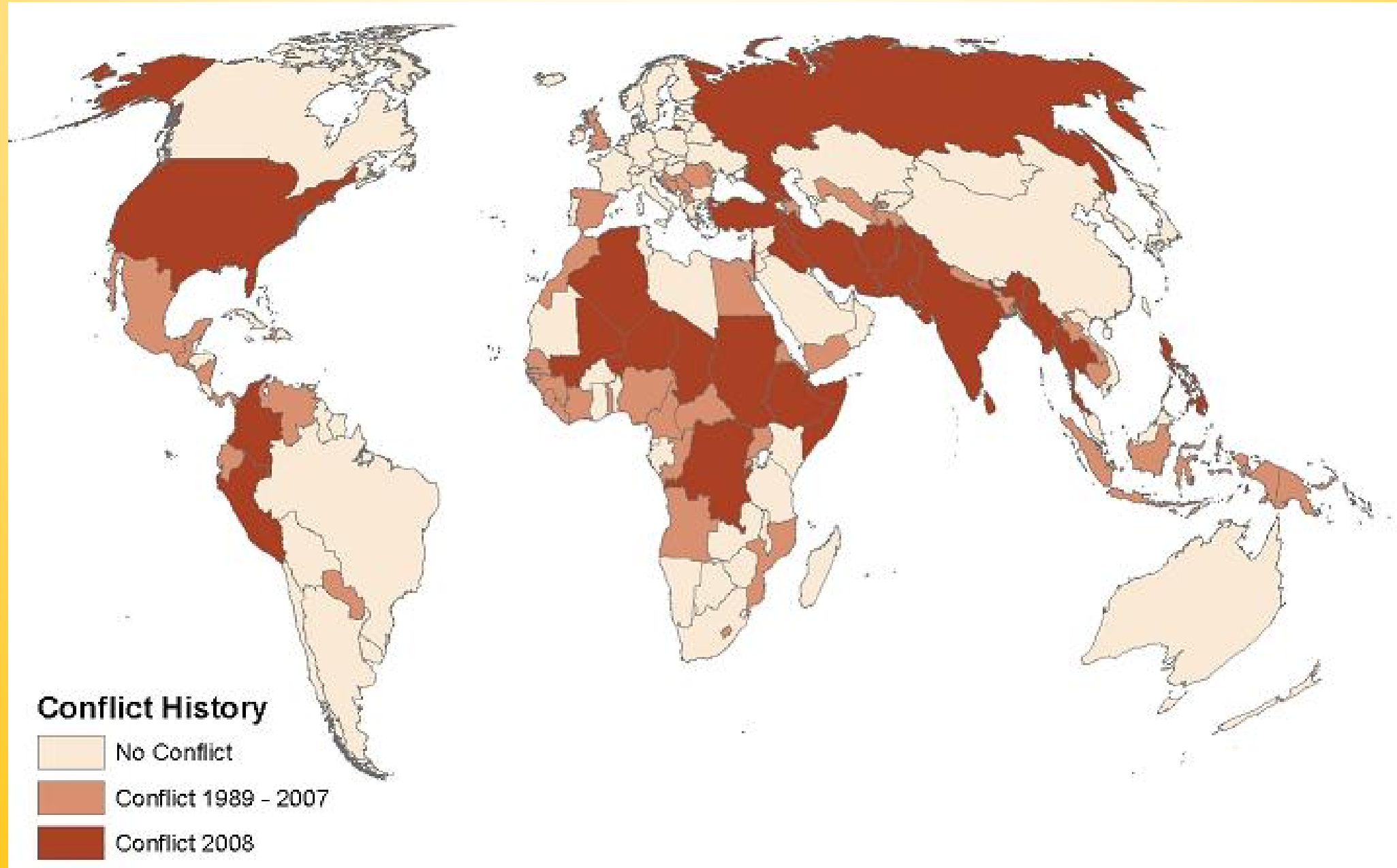
Trafficking of arms

- According to the World Health Organization, between 73,000 and 90,000 people in Latin America and the Caribbean are **shot to death each year**.
- the gun-related homicide rate in Latin America exceeded the **global average in 2010 by more than 30 percent**. The World Bank estimates that crime and violence cost **Central America**

nearly 8 percent of its GDP when accounting for the costs of law enforcement, security, and health care.

- Mexican authorities intercepted **12.7 % of the roughly 250,000 guns** smuggled into Mexico between 2010 and 2012, while the **ATF intercepted no more than 2%** (OAS 2014)
- USA voted in favor of the United Nations' Arms Trade Treaty in April 2013, but has not sign or ratify the treaty. **Strengthening U.S. gun laws** will not eliminate gun violence in Latin America, where **weak judiciaries and police forces**, the proliferation of **gangs and black markets**, and **deep inequality exacerbate violent conflict**. Nonetheless, lax U.S. gun regulations **do enable international trafficking**.

Armed conflicts (1989-2008). Source: UCDP/PRIO Armed Conflict Dataset v5-2009; at: < <http://www.prio.no/CSCW/Datasets/Armed-Conflict/UCDP-PRIO/>>.



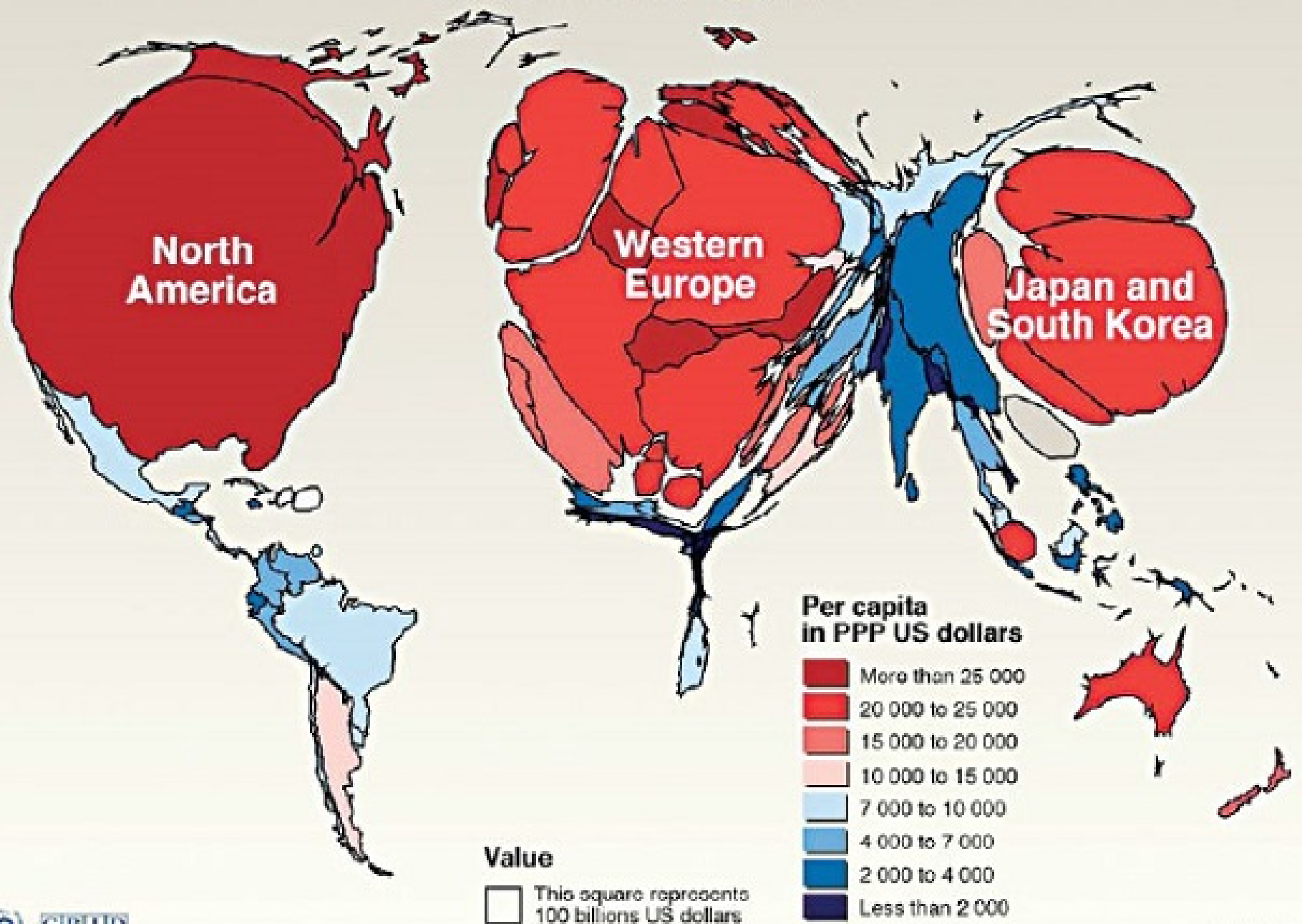


4.2 Freedom from want

Human Security Commission Report: Ogata/Sen: Human Security Now (2003)

- **Commission on Human Security (CHS)** established in January 2001 at initiative of Japan. The Commission consisted of twelve persons, chaired by Sadako Ogata (former UNHCR) Amartya Sen (1998 Nobel Economics).
- **CHS goals:** a) promote public understanding, engagement and support of human security; b) develop the concept of human security as an operational tool for policy formulation and implementation; c) propose a concrete program of action to address critical and pervasive threats to HS.
- **Human Security Now (2003)** proposes a **people-centered** security framework that focuses “on shielding people from critical and pervasive threats and **empowering them to take charge of their lives**. It demands creating genuine opportunities for **people to live in safety and dignity and earn their livelihood**. Its final report highlighted that:
- More than **800,000 people a year lose their lives to violence**. Ca. **2.8 billion** suffer from **poverty, ill health, illiteracy & other maladies**

The Real Picture

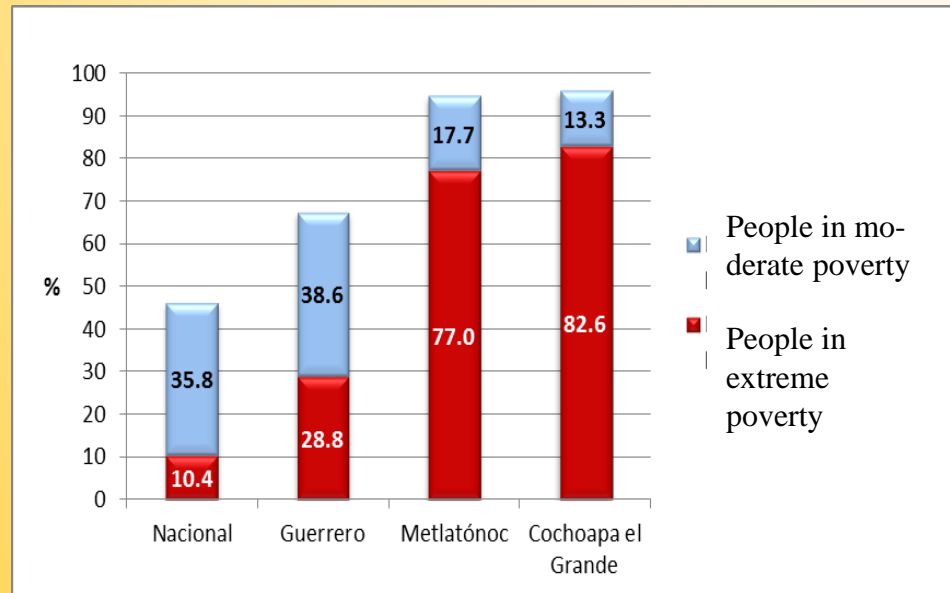


Wealth on Earth

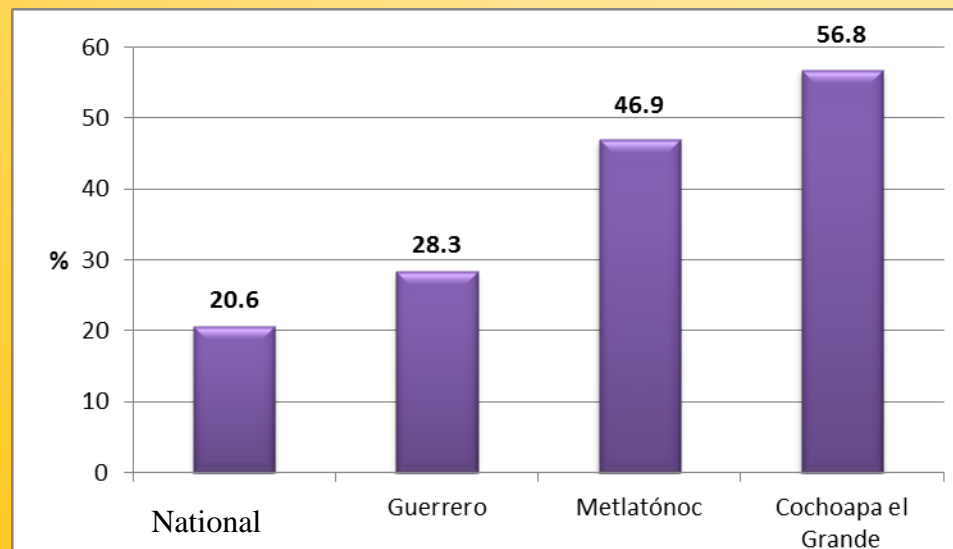
Source: GRID, 2013

- Inequality
- Injustice
- Discrimination
- Exploitation
- Underdevelopment
- Poverty
- Illness

Economic deadlocks in Cochoapa, Gro., Mexico



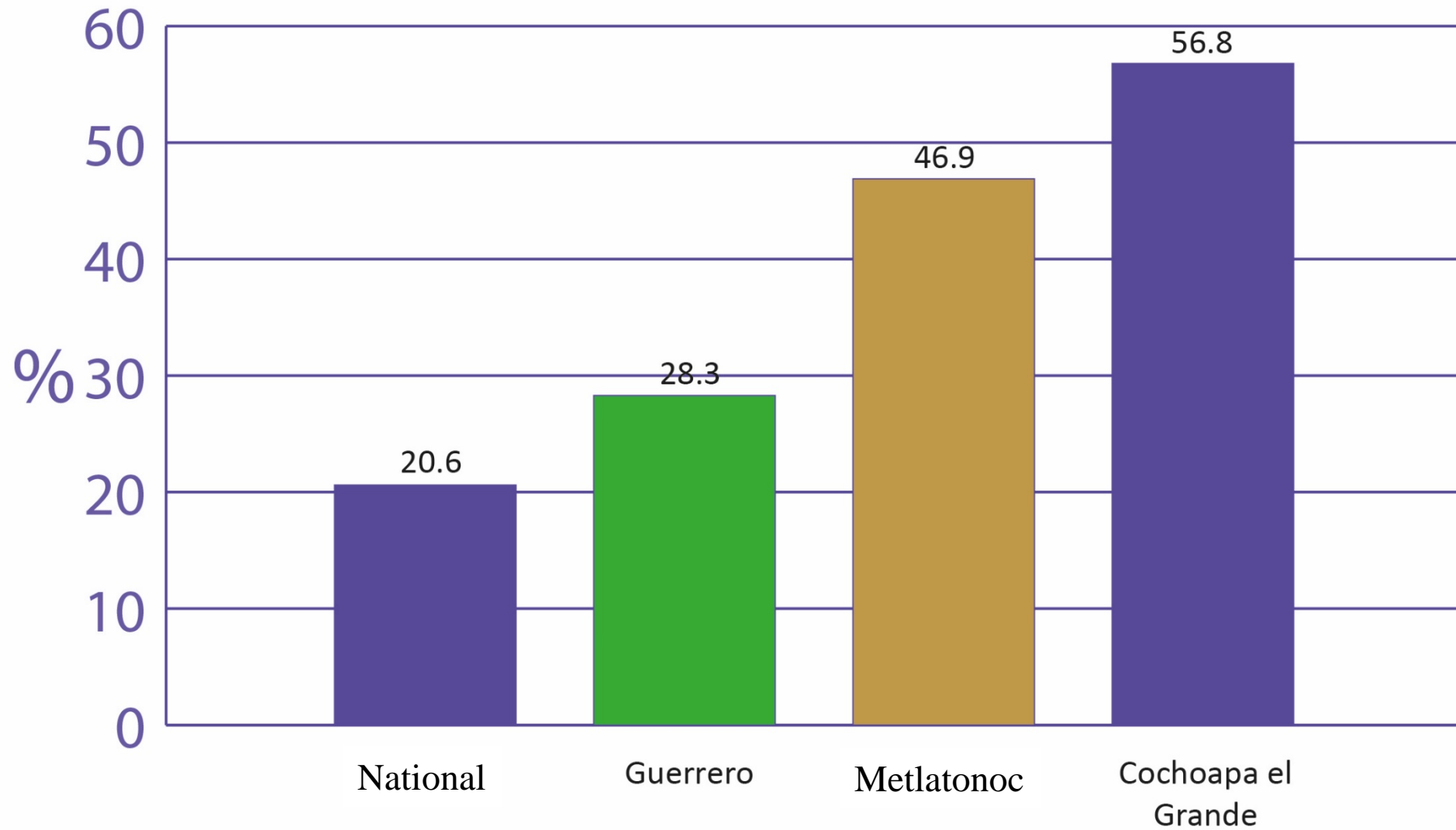
Without school training



1. Poorest municipality in Mexico
2. 82.6% extreme poor
3. 98% indigenous
4. 56.8% analphabets
5. 70% of women without school
6. Studying prevents marriage
7. Girls at 12 years are sold for marriage
8. Temporary and permanent migration: Day laborers & family in the fields with toxic pesticides (including children)

Discrimination: Poor, woman, indigenous and migrant

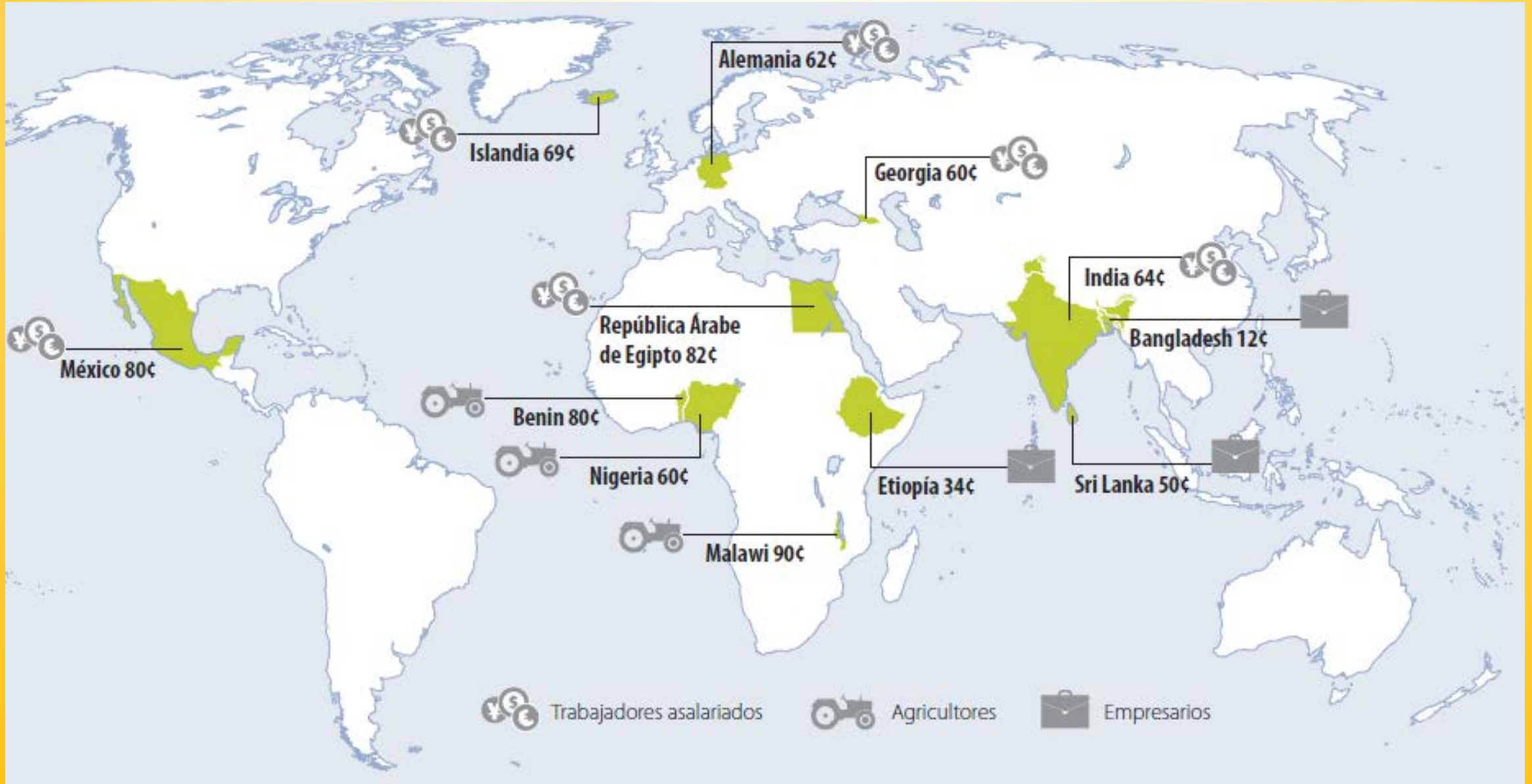
Educational backwardness



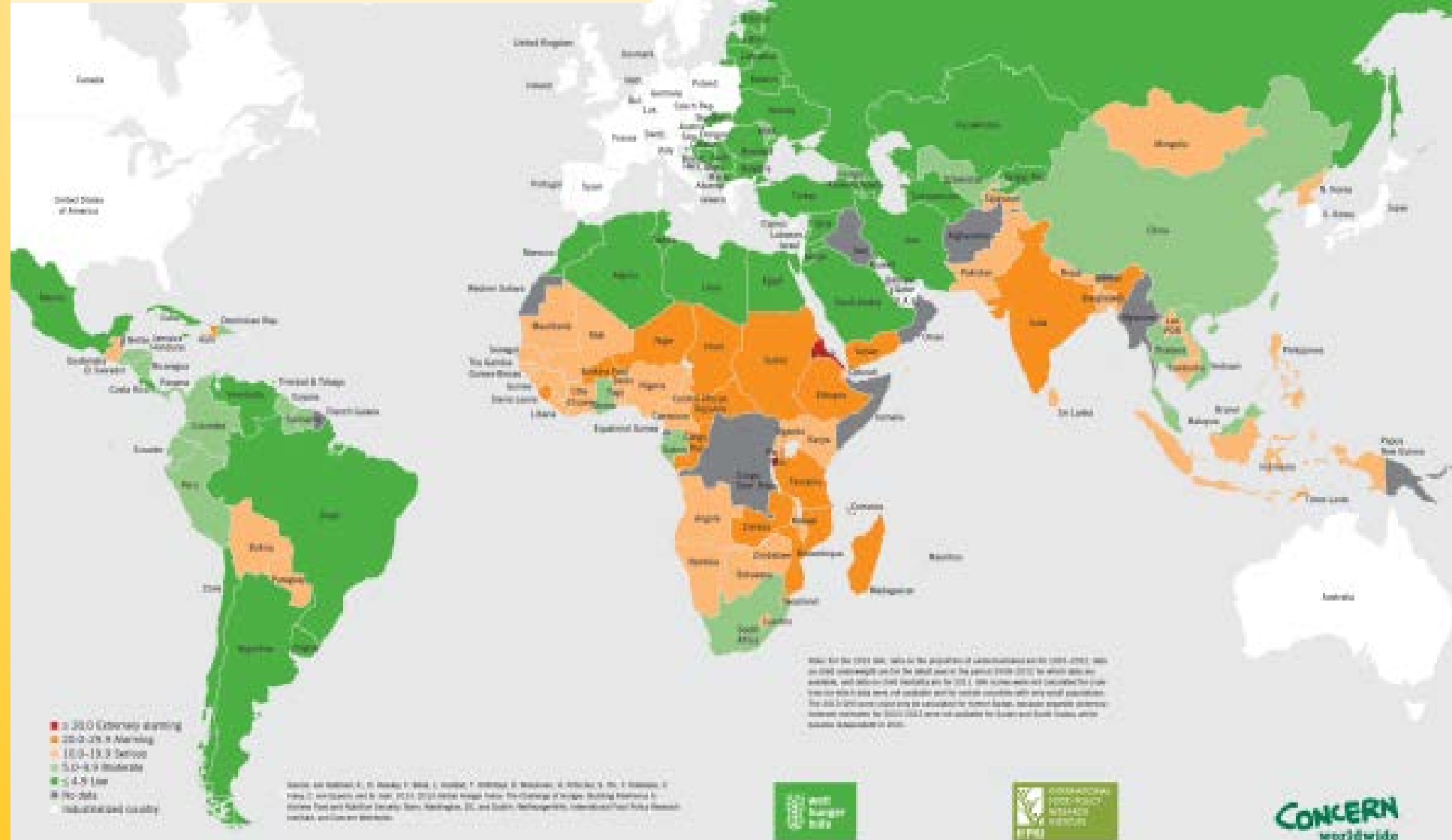
Income differences among men and women

Surce: BM

2012: 17



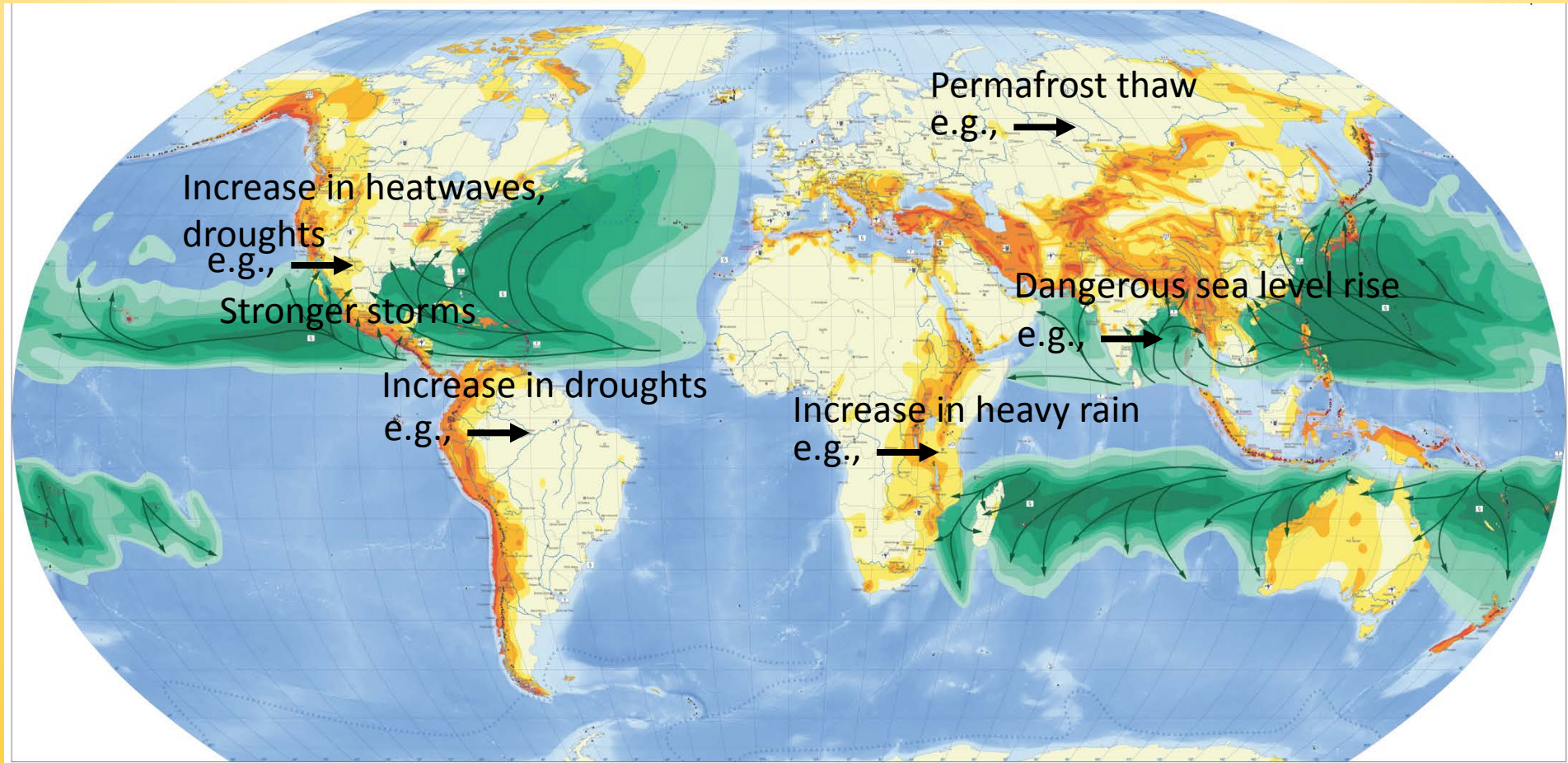
Global Hunger Index



4.3 Freedom from hazard impacts



Climate threats, disasters & impacts



Earthquakes

Zone 0: MM V
Zone 1: MM VI
Zone 2: MM VII
Zone 3: MM VIII
Zone 4: MM IX

MM: modified Mercalli scale

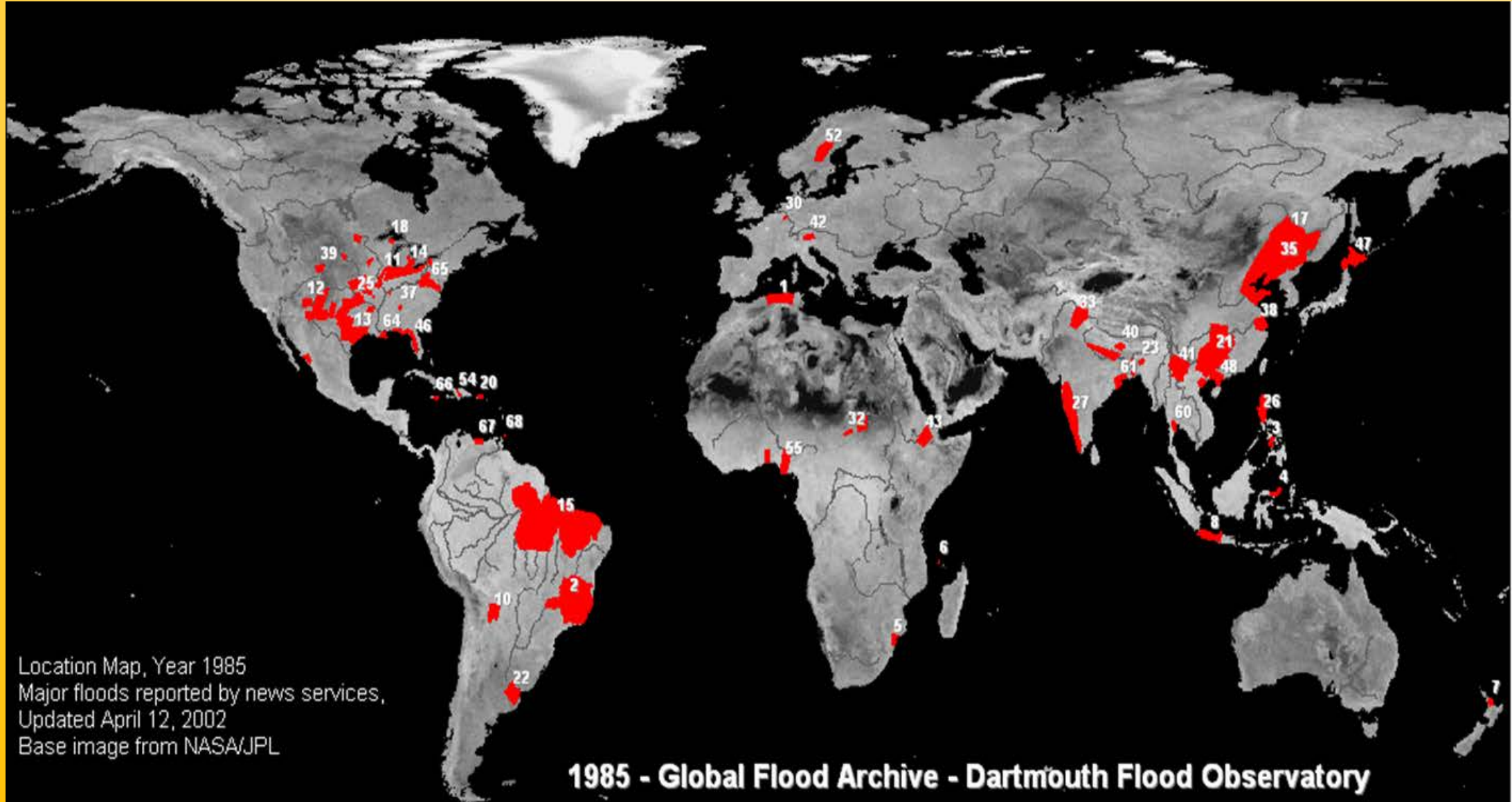
Tropical Hurricanes

Zone 0: 76–141 km/h
Zone 1: 142–184 km/h
Zone 2: 185–212 km/h
Zone 3: 213–251 km/h
Zone 4: 252–299 km/h
Zone 5: ≥ 300 km/h



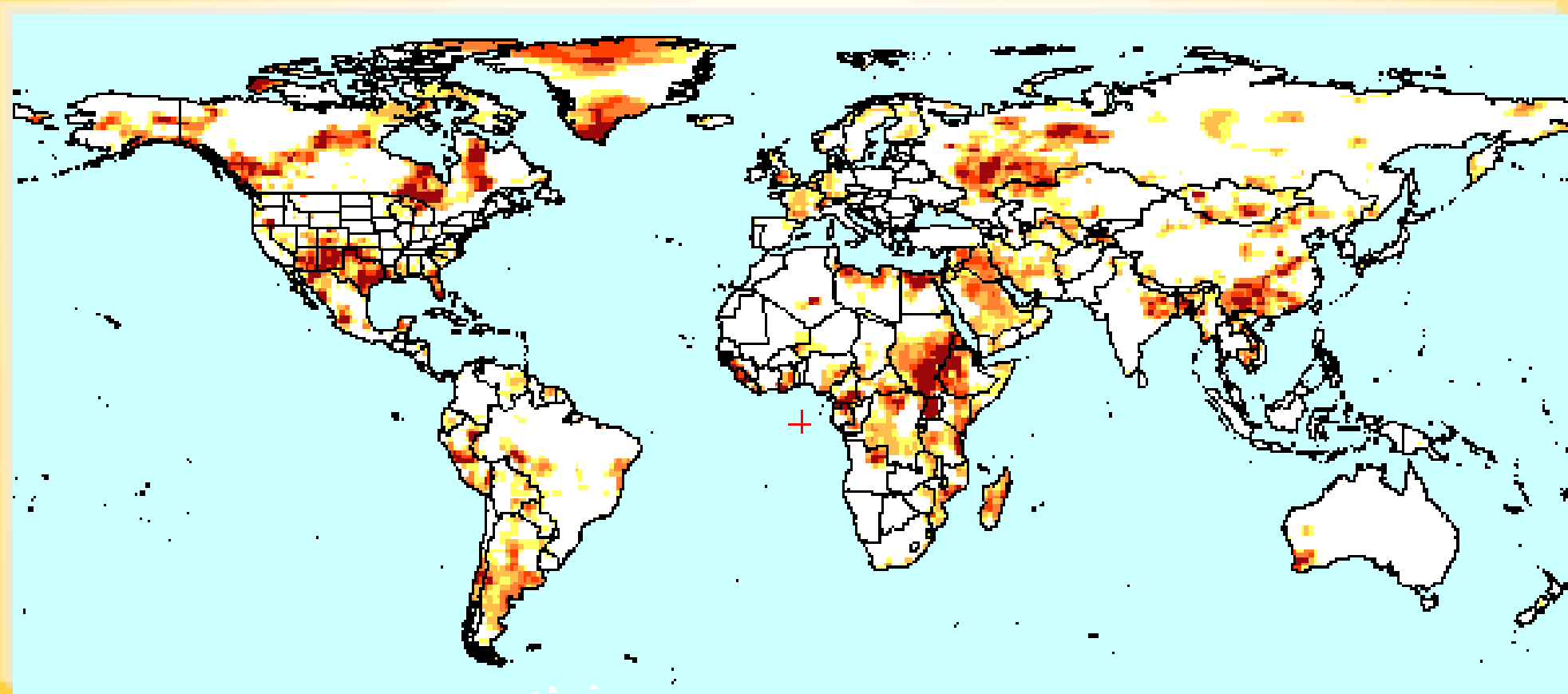
Münchener Rück
Munich Re Group

Climate change and hydro-meteorological extreme events: Major Floods 1985-2007



Droughts

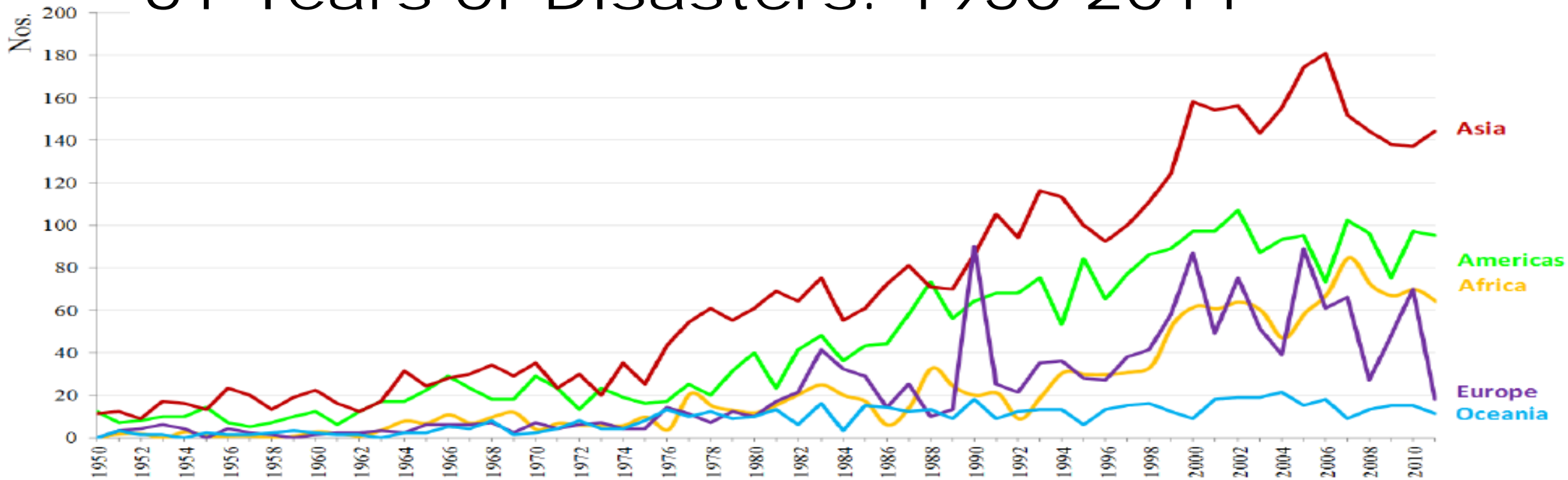
36 months of drought conditions starting Sept 2011



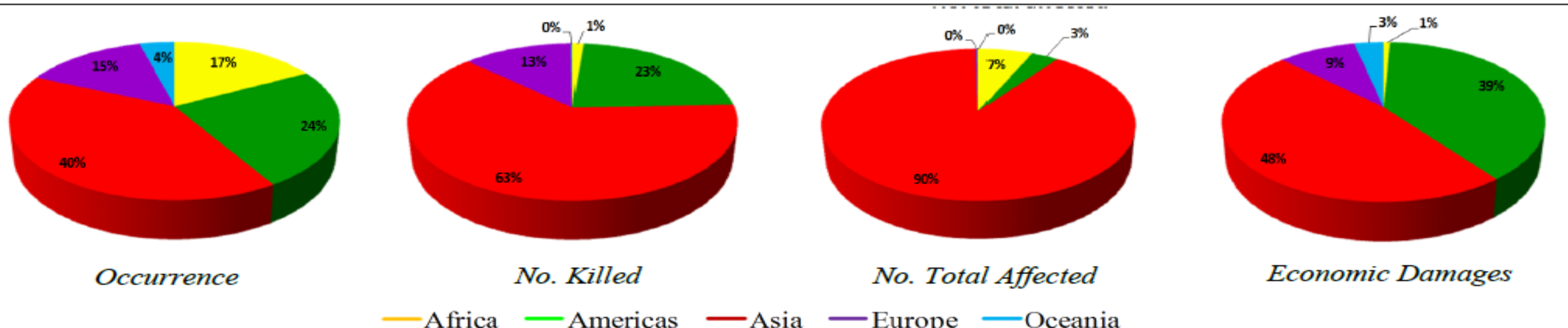
302.8 million people are under severe drought condition

Data from UCL global drought monitor. Based on 36 months standardized precipitation index

61 Years of Disasters: 1950-2011



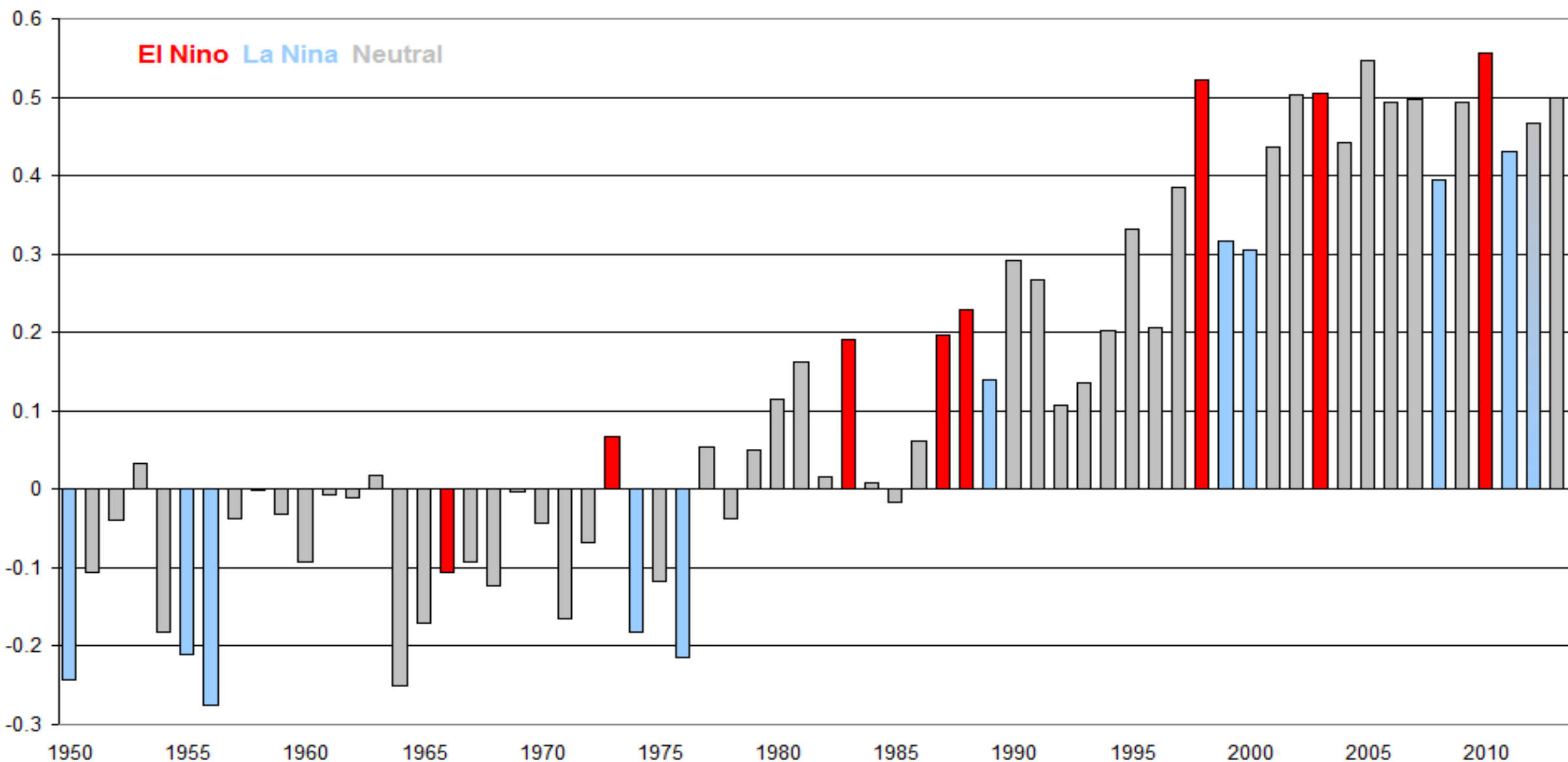
Asia's share: 2002-2011



Annual temperature anomaly (°C) with respect to 1961-1990

(data source: latest combined data set of NOAA-NCDC, NASA-GISS and HadCRU)

El Nino La Nina Neutral



Latin America threatened by climate change

Gender vulnerability and women's discrimination increase vulnerability of exposed communities: even non-extreme events can have extreme impacts in loss of lives and livelihood

Managing the risks: drought in the context of food security in the drylands

Risk factors

- more variable rain
- ecosystem degradation
- hotter days
- discrimination of women
- poor health and education conditions



Risk Management/Adaptation

- improved water management
- sustainable farming practice
- drought-resistant crops
- drought forecasting

- **UNU-EHS: Goal:** reduce vulnerabilities/enhance capacity building & coping capabilities of societies faced with hazards and reduce risks
- **Threats/Hazards:**
 - **Environmental:** floods, droughts, and other natural disasters, environmental degradation, lack of water or clean water, human-induced climate change, exhaustion of fish resources, depletion of finite resources
 - **Societal:** poverty, improper housing, insufficient food and water, malfunctioning of technical systems, traffic accidents, population explosions, terrorism and organized crime
- **Develop vulnerability indicators and vulnerability mapping** to apply to operational realm by working on solutions
 - **improved early warning systems & capacity-building** to reduce disasters
 - **disaster preparedness** (education and training, infrastructure)
 - coordinated rapid **disaster response** by local, regional and national level
 - developing clear guidelines for **post hazard reconstruction**
 - **long term strategies:** e.g. Kyoto, Montreal Protocol
 - **adaptation measures:** e.g. dams, switching to renewable energy
 - **mitigation measures:** restrict housing in hazard areas (coastal areas-flooding, mud slides), charging more for garbage disposal and energy usage, birth control measures
- **Assess risks and develop risk maps at local, regional and national level**

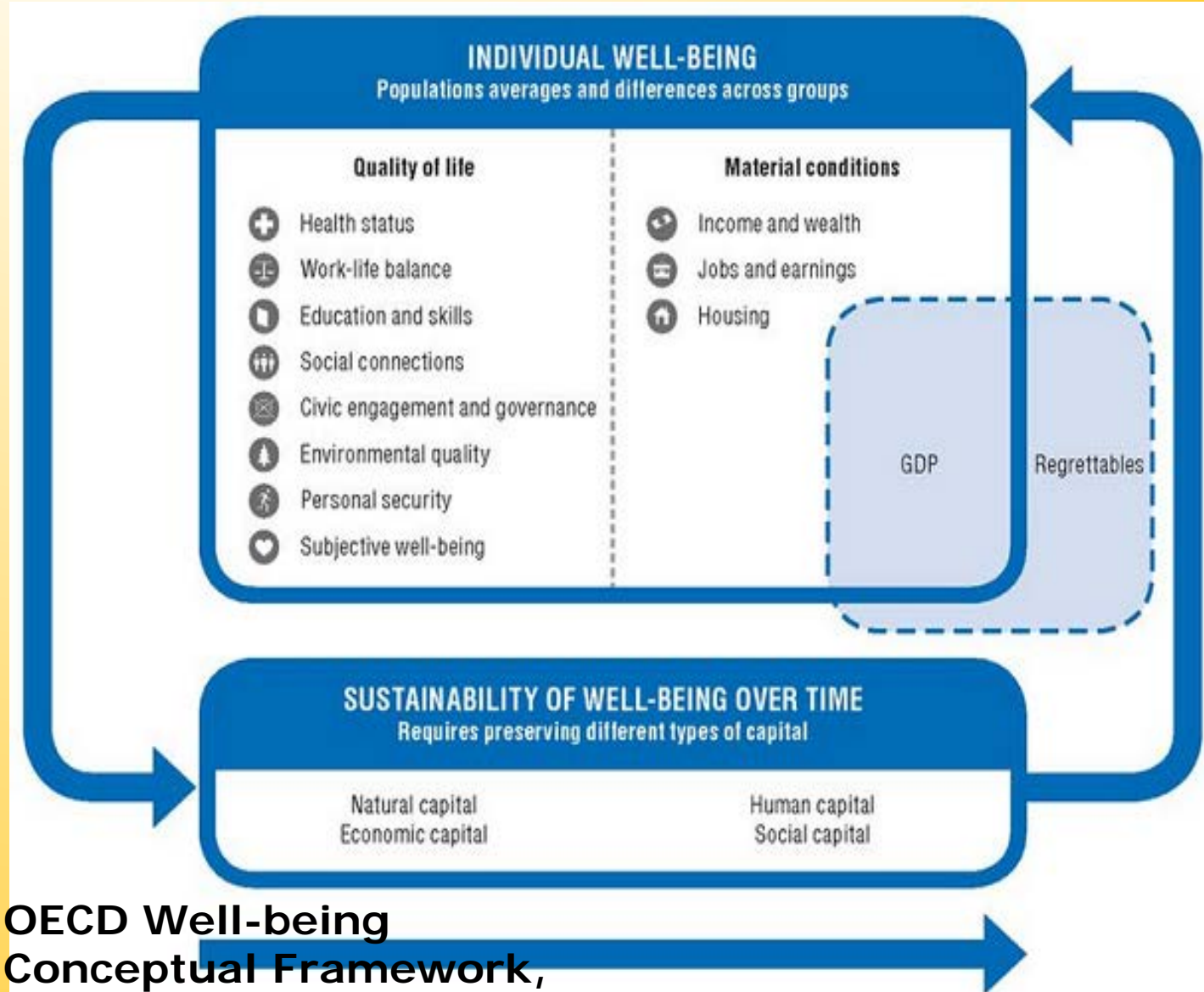


4.4. Freedom to live in dignity

- **Kofi Annan** – need for a human centered approach to security
“human security can no longer be understood in purely military terms.
- It must encompass economic development, social justice, environmental protection, democratisation, disarmament, and respect for human rights and the rule of law.”
- “Embraces far more than the absence of violent conflict”

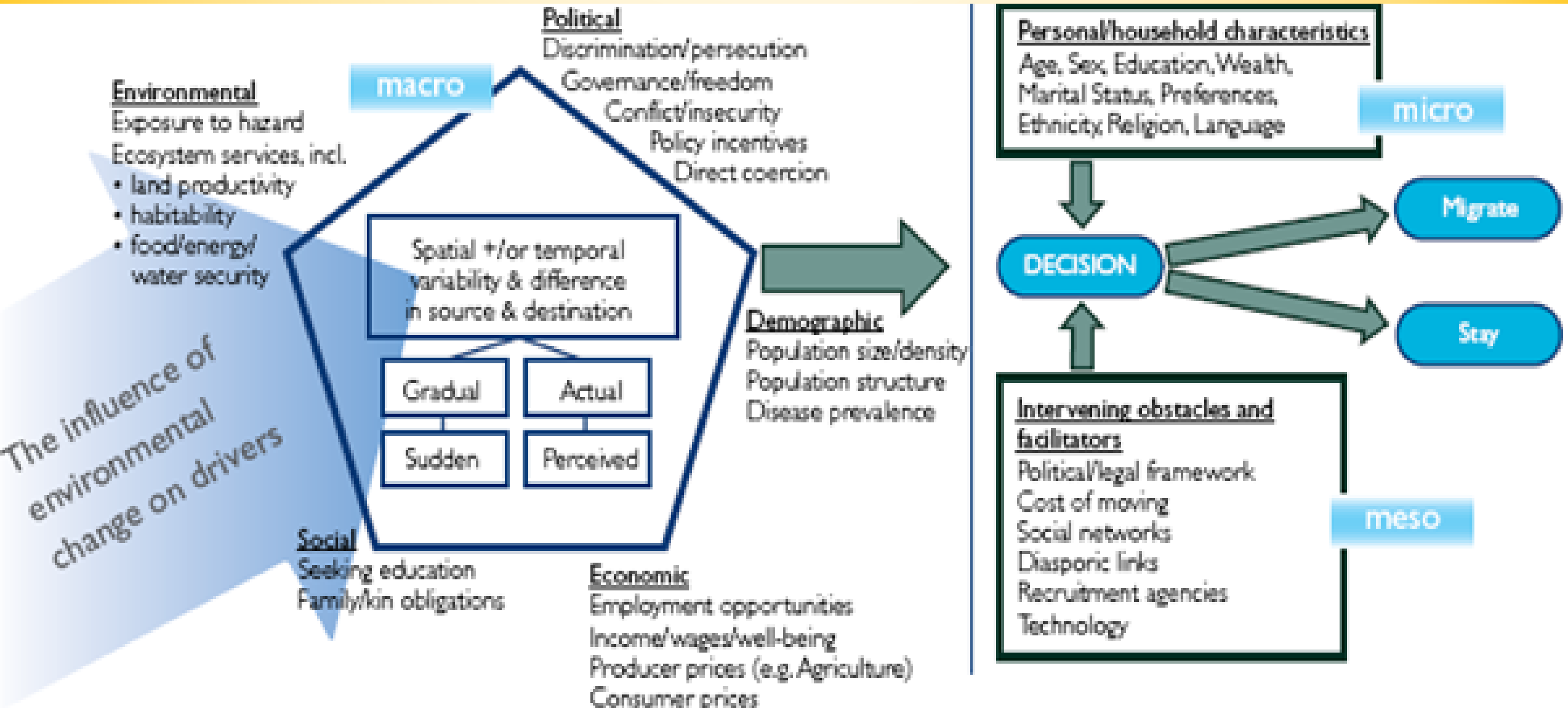


5. Adaptation and resilience-building

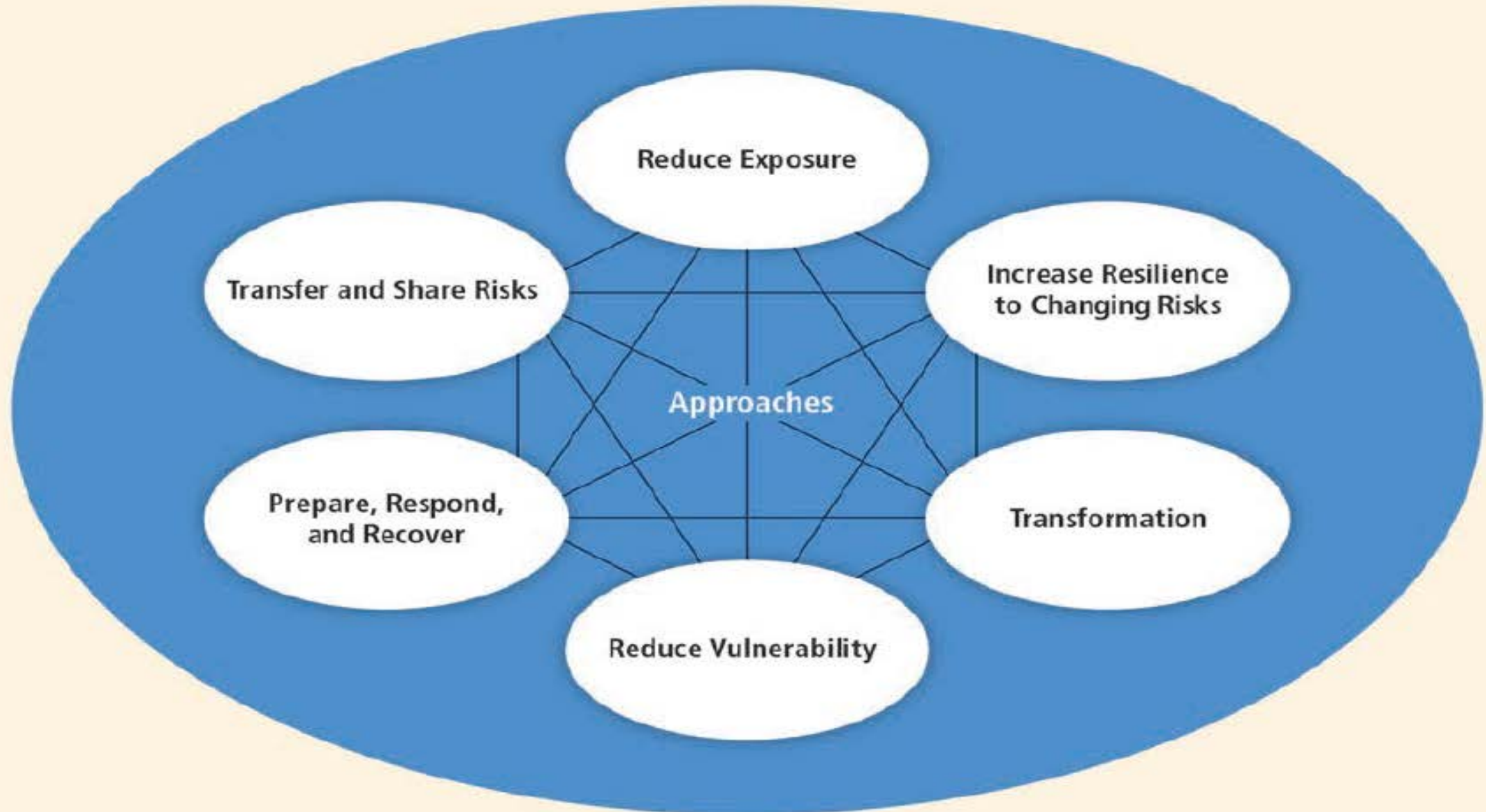


OECD Well-being
Conceptual Framework,
2013

Complex factors & levels of environmental induced migration



Adaptation and Disaster Risk Management Approaches for a Changing Climate



Multiple stressors

Climate change

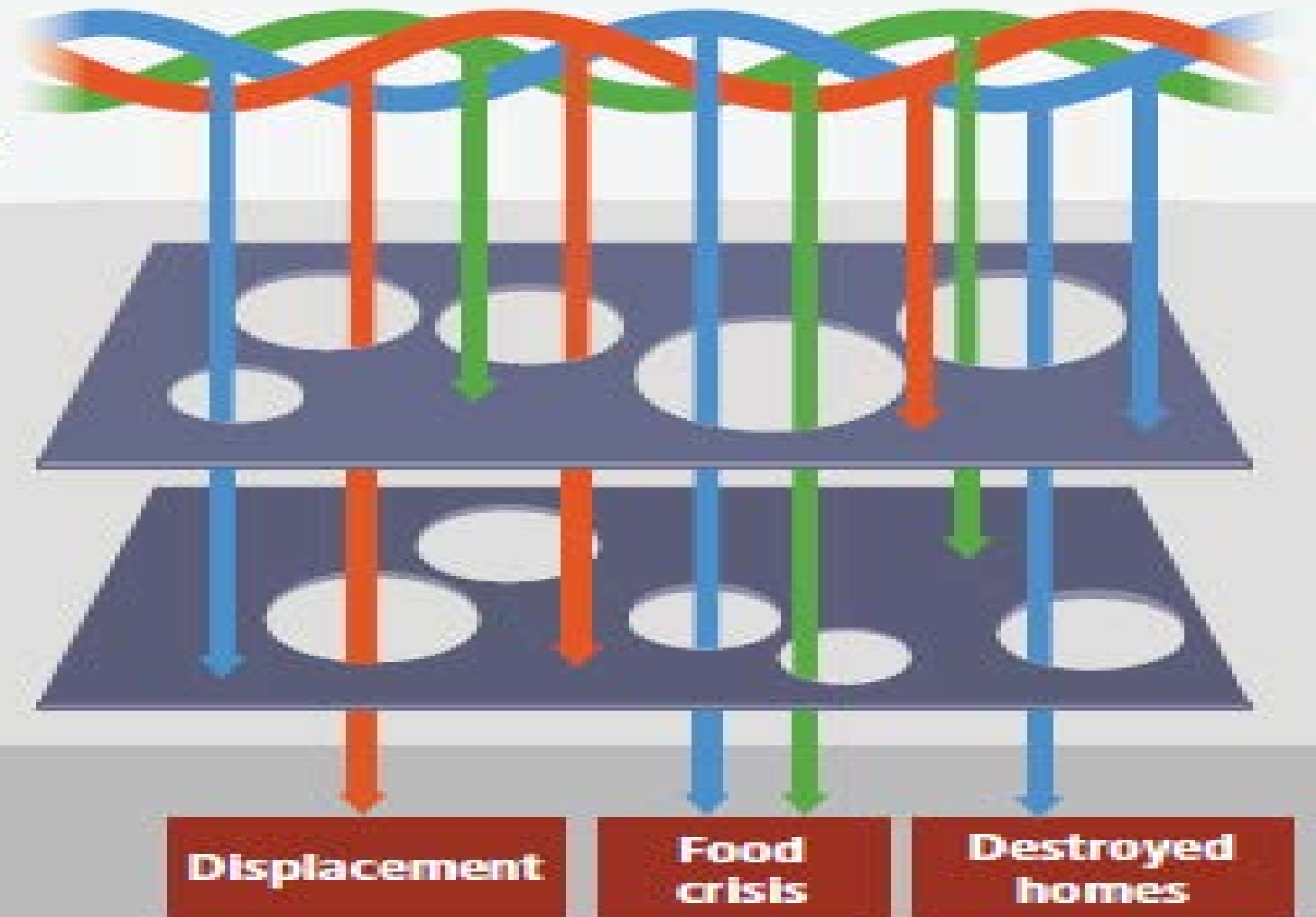
Globalizations

Technological change

Institutions such as:

- Social protection
- Relief organizations
- Disaster prevention

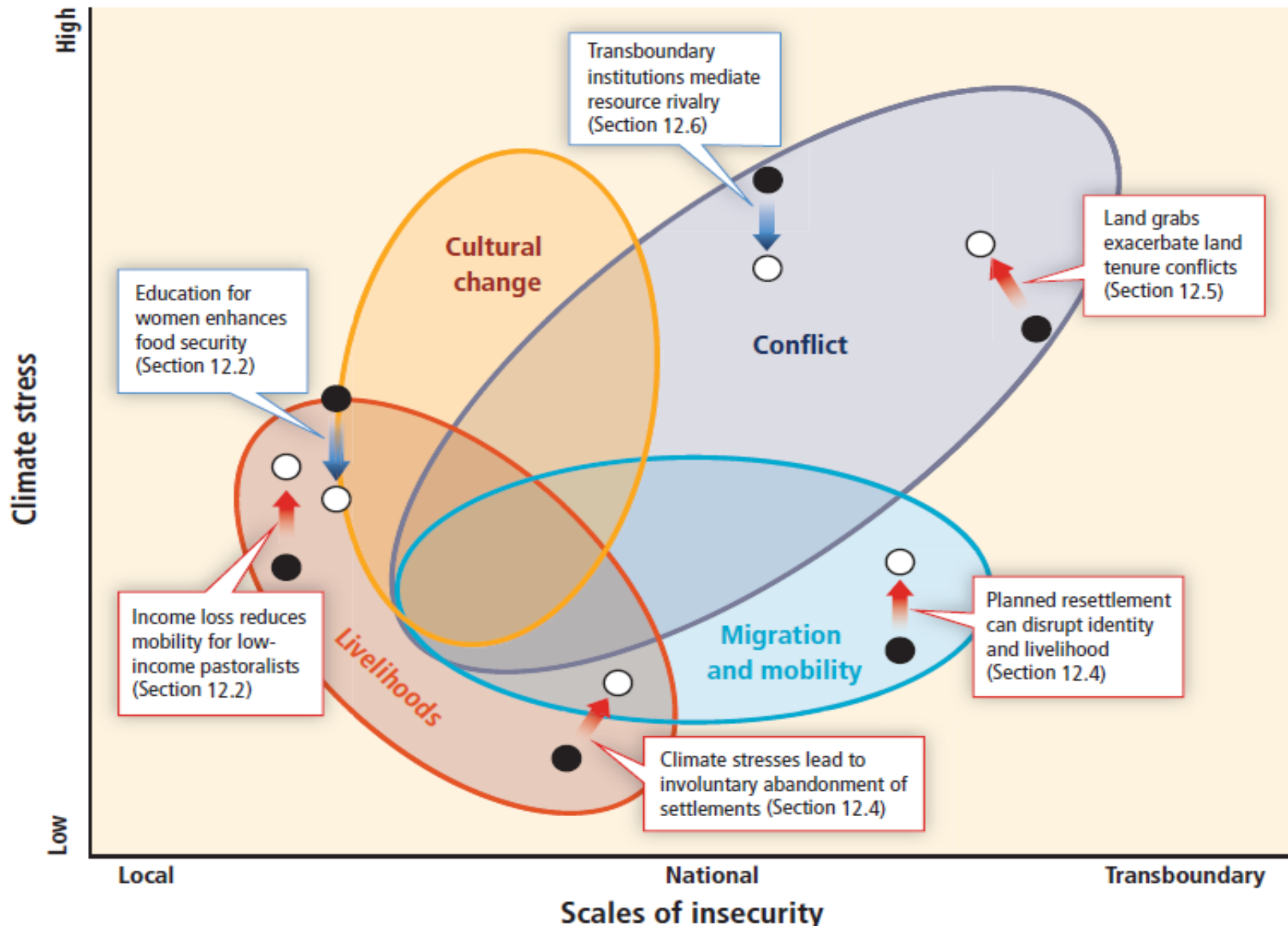
Livelihoods



Displacement

Food
crisis

Destroyed
homes



- Initial conditions
- Outcome of intervention
- ← Intervention with net increase in human security
- ← Intervention with net decrease in human security

Human security threatened

Glocal

Primary Actors

INTERNATIONAL

- Bilateral and multilateral partners
- Intergovernmental organizations

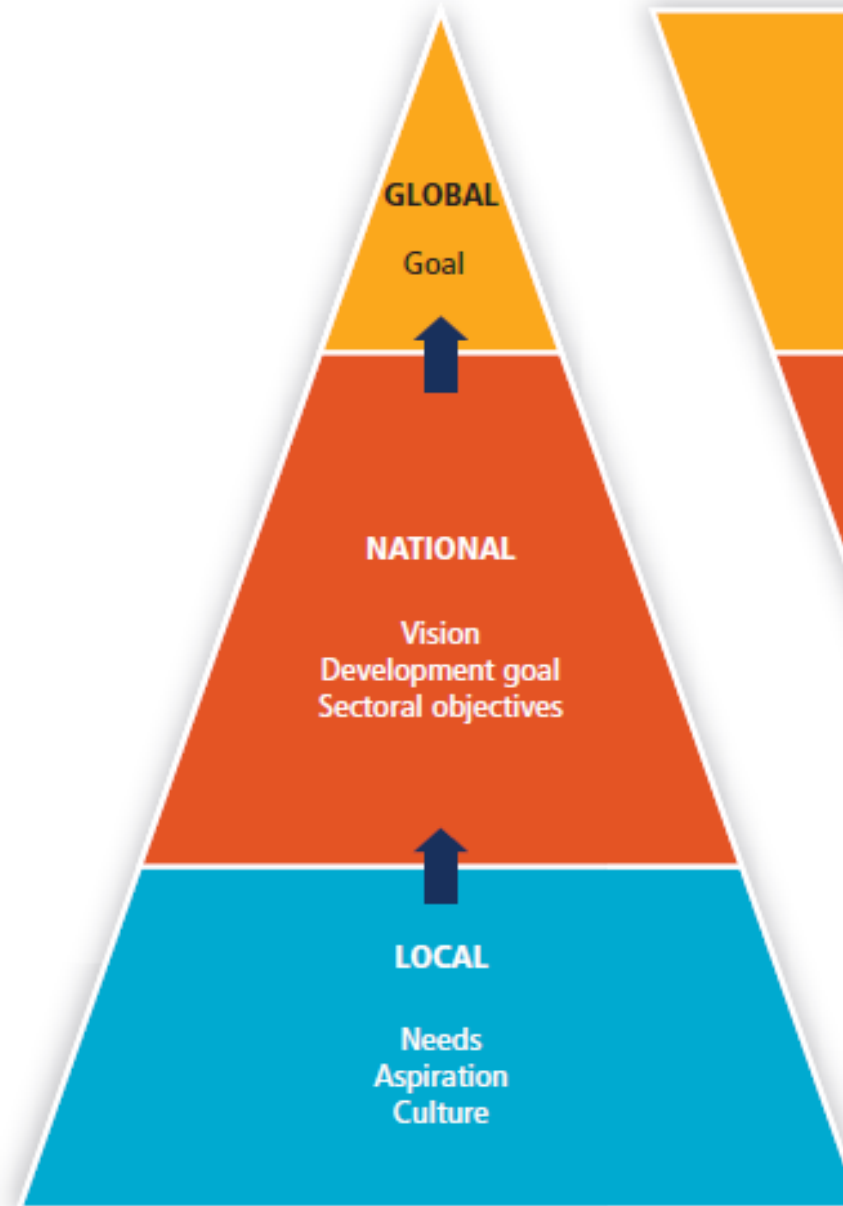
NATIONAL / SUB-NATIONAL

- National government and statutory agencies
- Civil society organizations
- Private sector
- Research and communication bodies
- Local government agencies

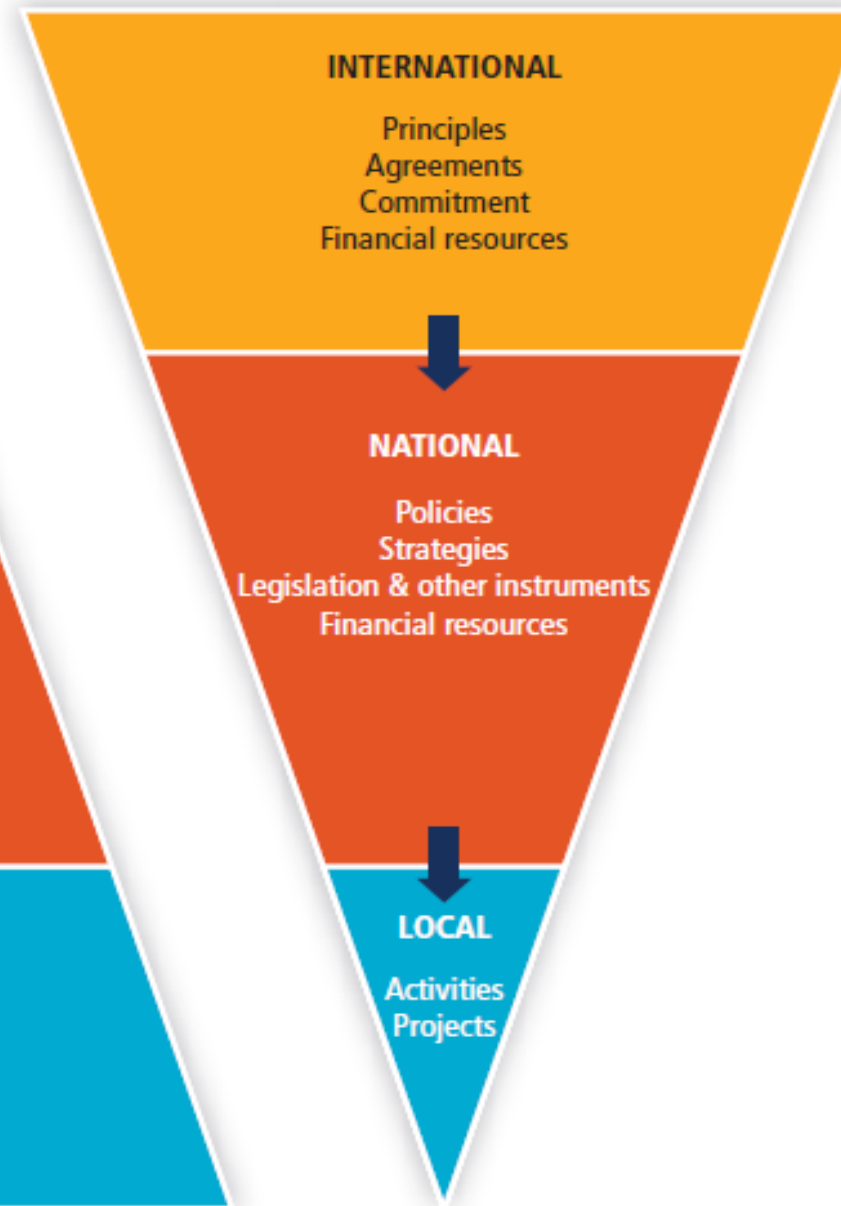
LOCAL

- Individuals, households, and communities
- Private sector
- Community-based organizations
- Faith-based organizations

"BOTTOM-UP" Functions



"TOP-DOWN" Functions



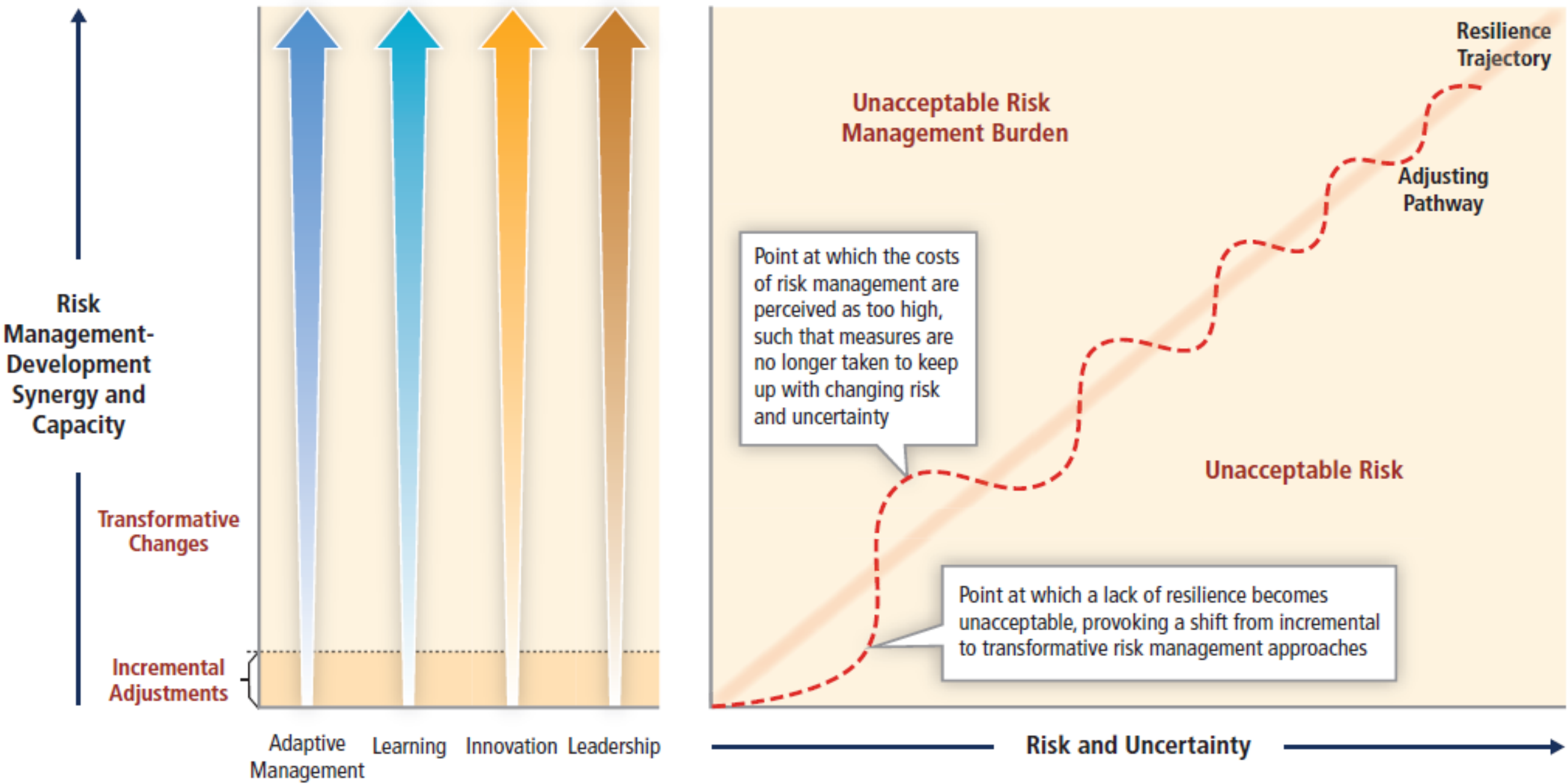
Global Climate Projections

Regional / National Climate Projections

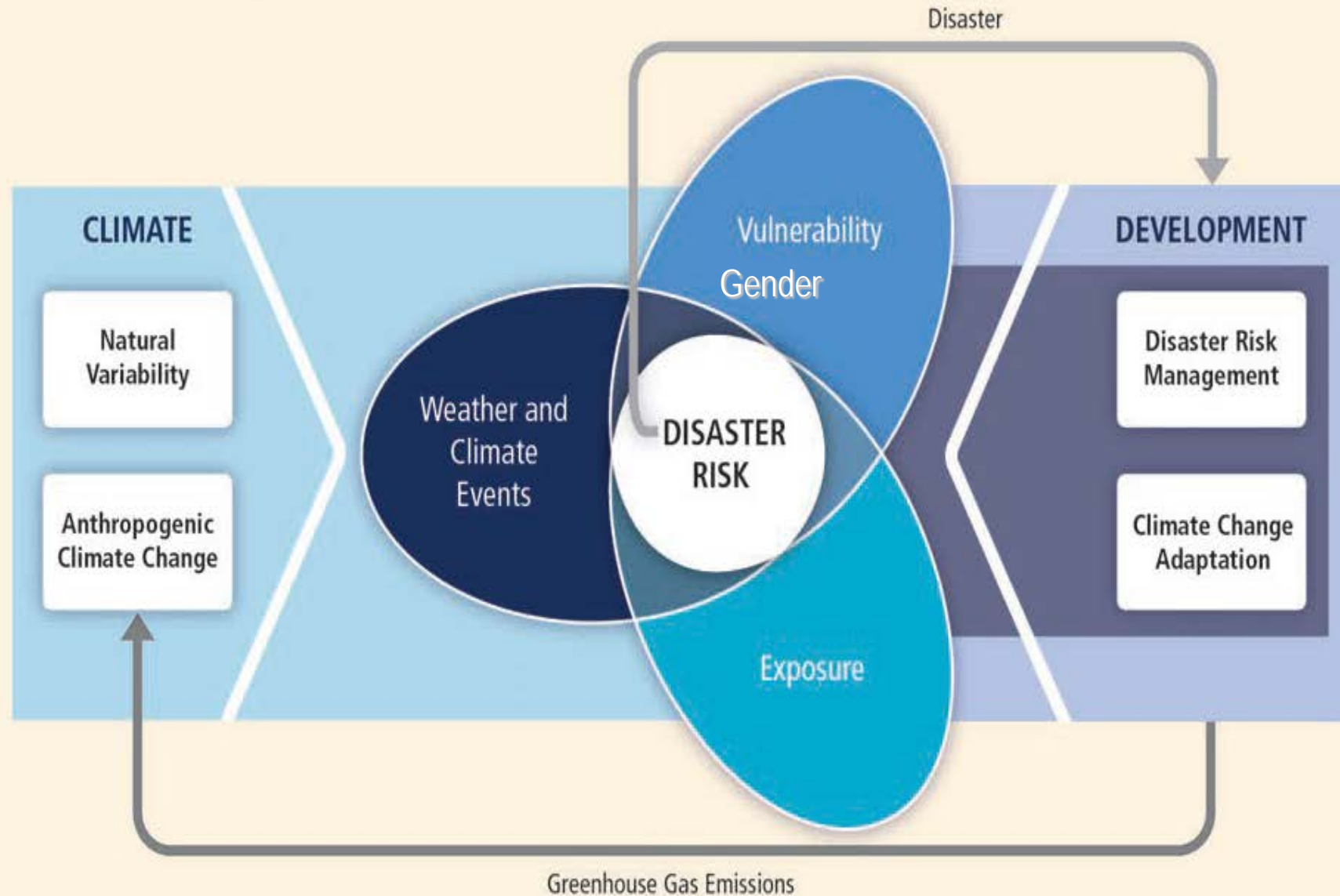
Scientific and Local Experiential Knowledge

Vulnerability, Risk, and Adaptation Assessments

Social sciences incremental & transformative pathways to resilience-building

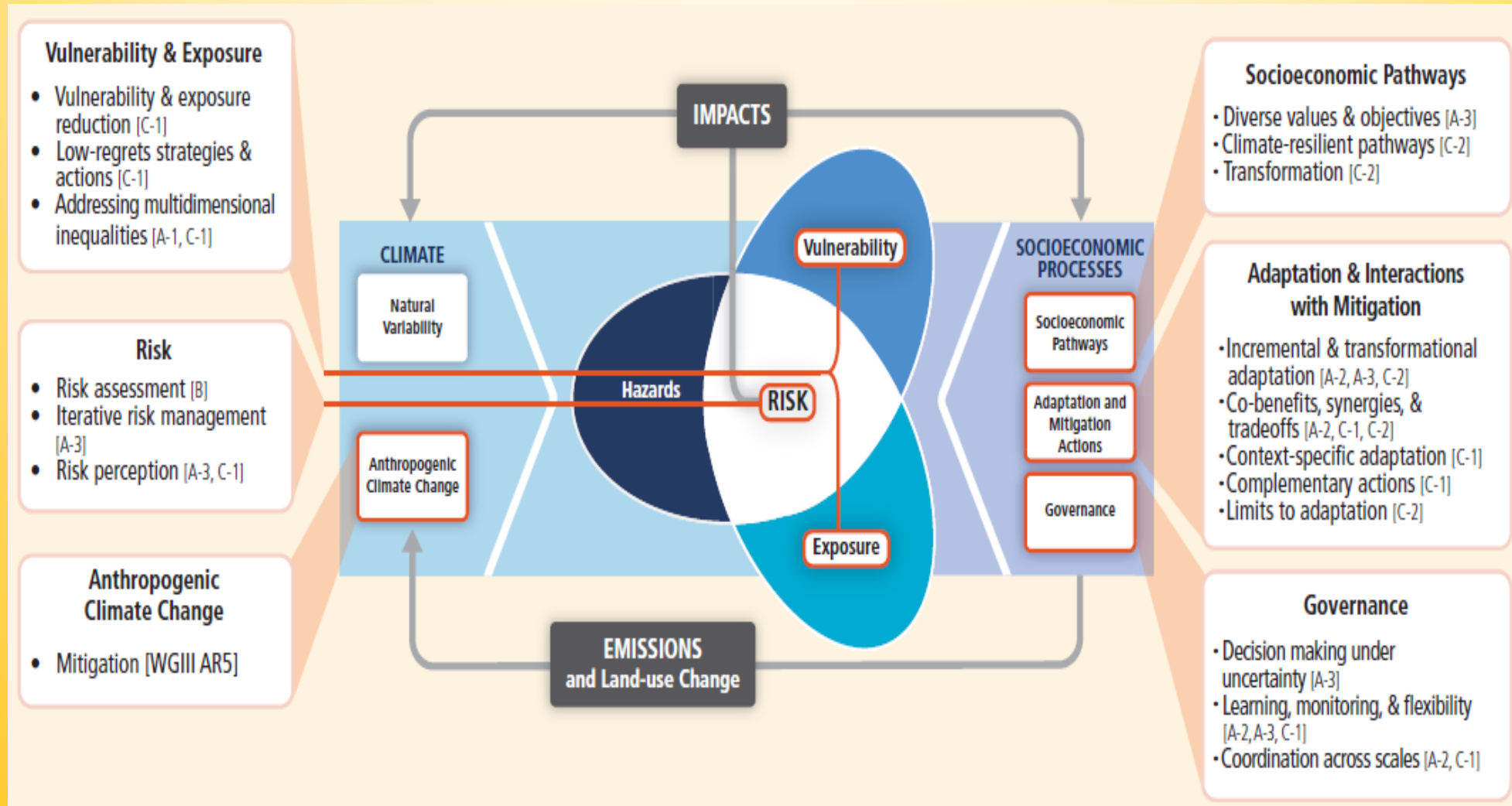


Overcome vulnerability, extreme events and promote development

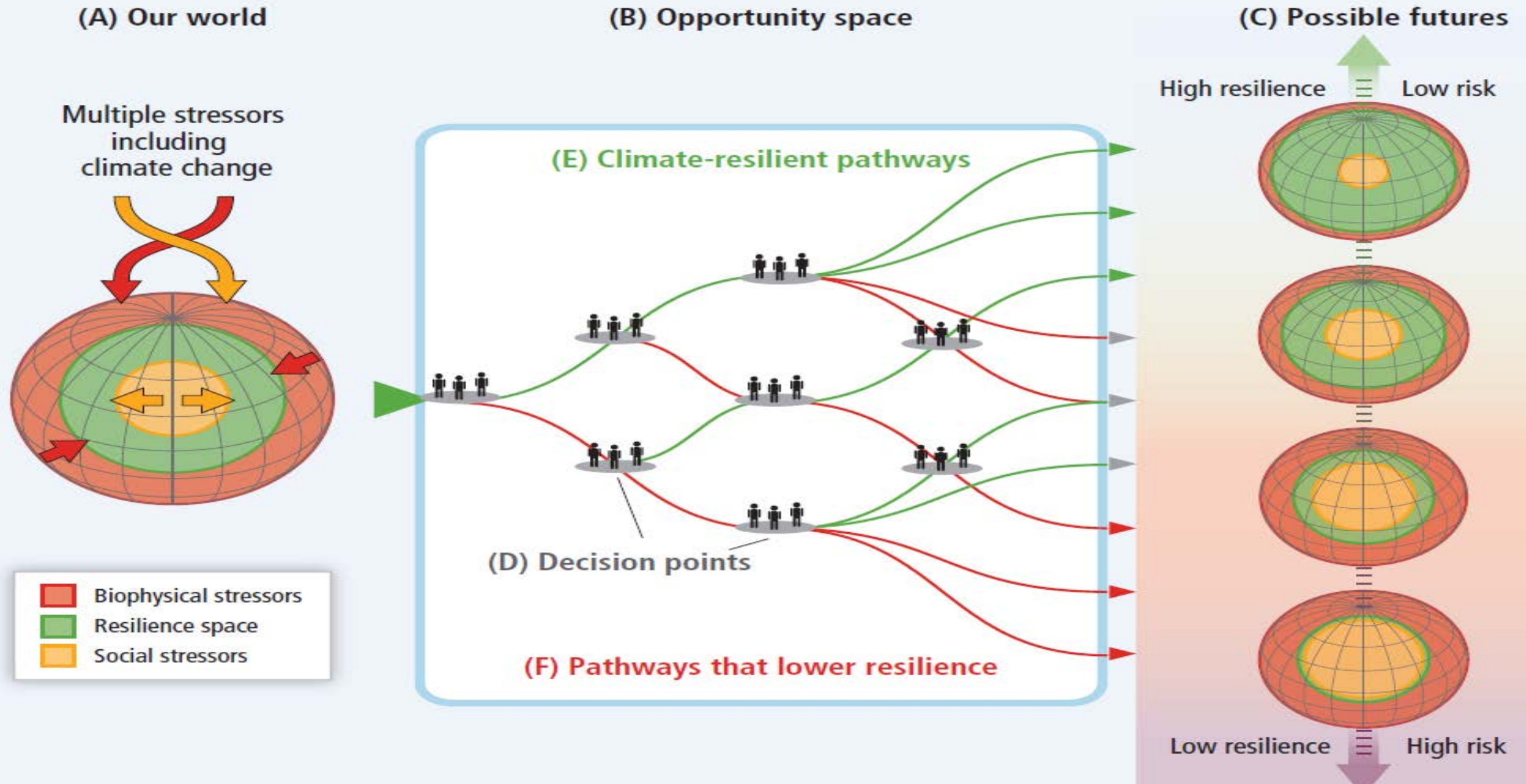


Integration of epistemic communities

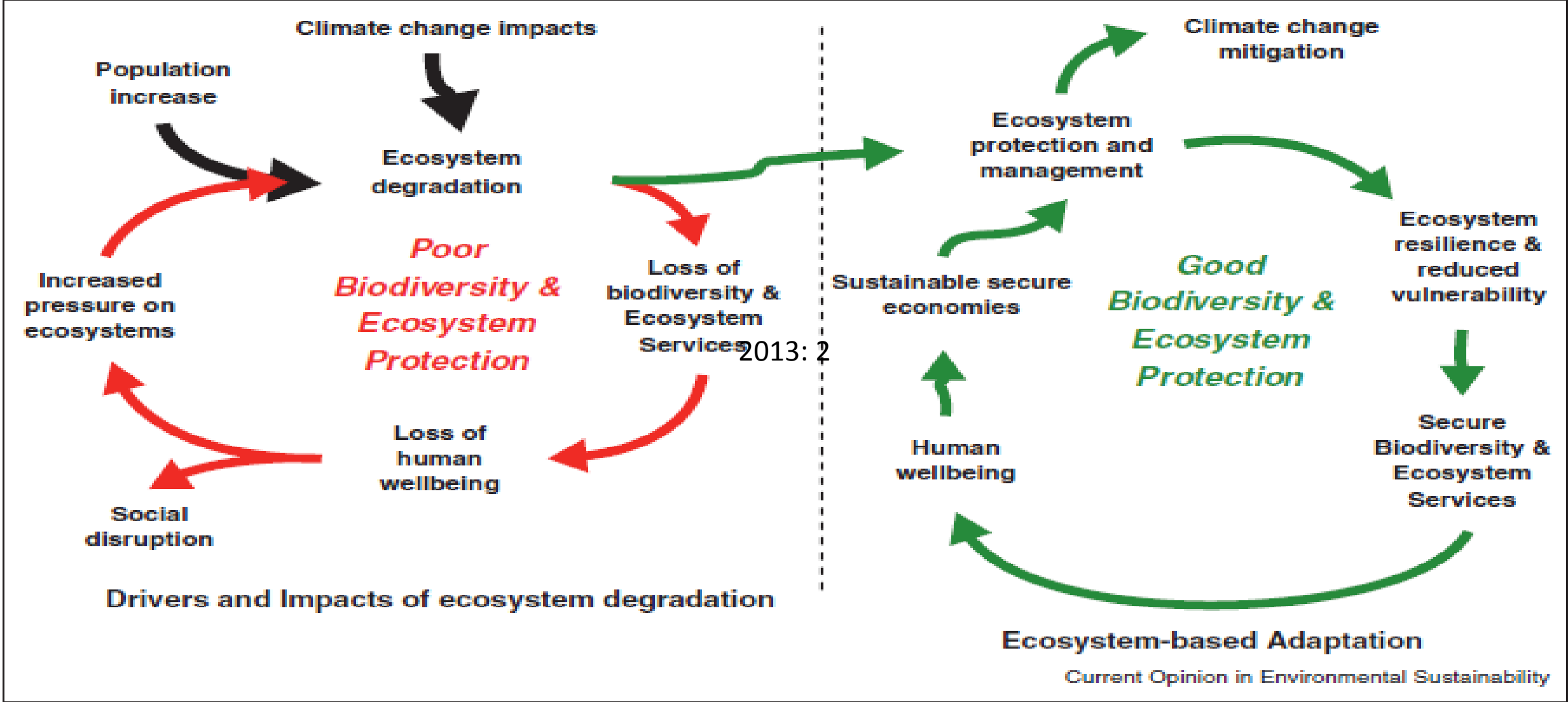
(IPCC: 26)



Opportunity spaces (IPCC, 2014: 29)



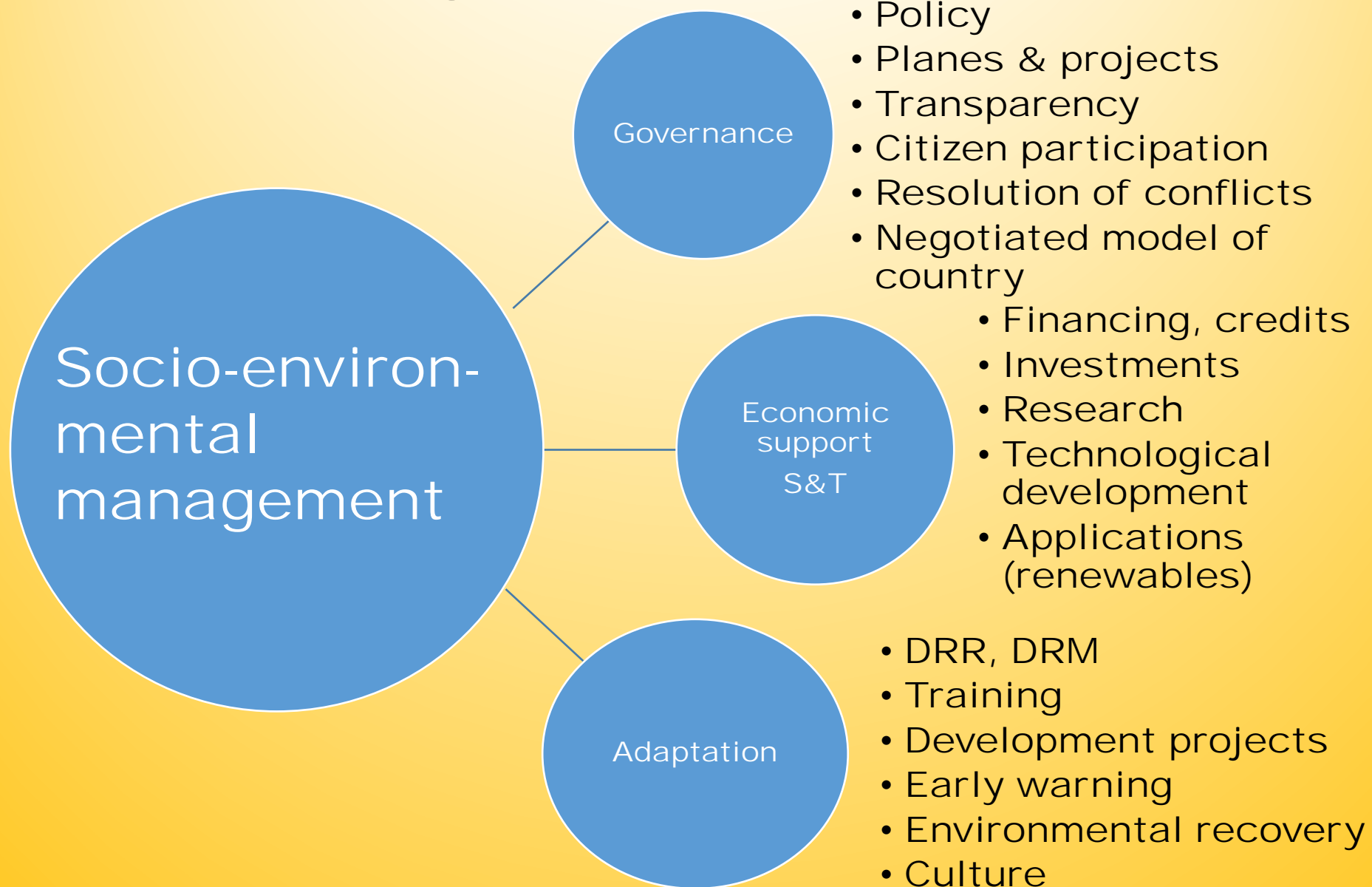
Ecosystem-based adaptation



Climate change and Ecosystem-based Adaptation: a new pragmatic approach to buffering climate change impacts
 Richard Munang¹, Ibrahim Thiaw¹, Keith Alverson¹, Musonda Mumba¹, Jian Liu² and Mike Rivington³
 2013: 2

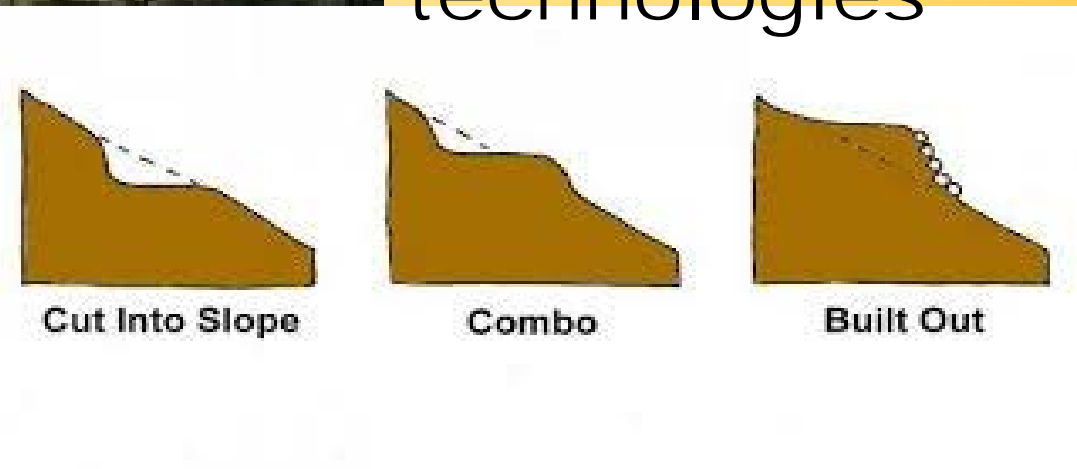


Obstacles to a dignified livelihood without migration





Local
knowledge:
experimental
accumulation of
traditional
technologies

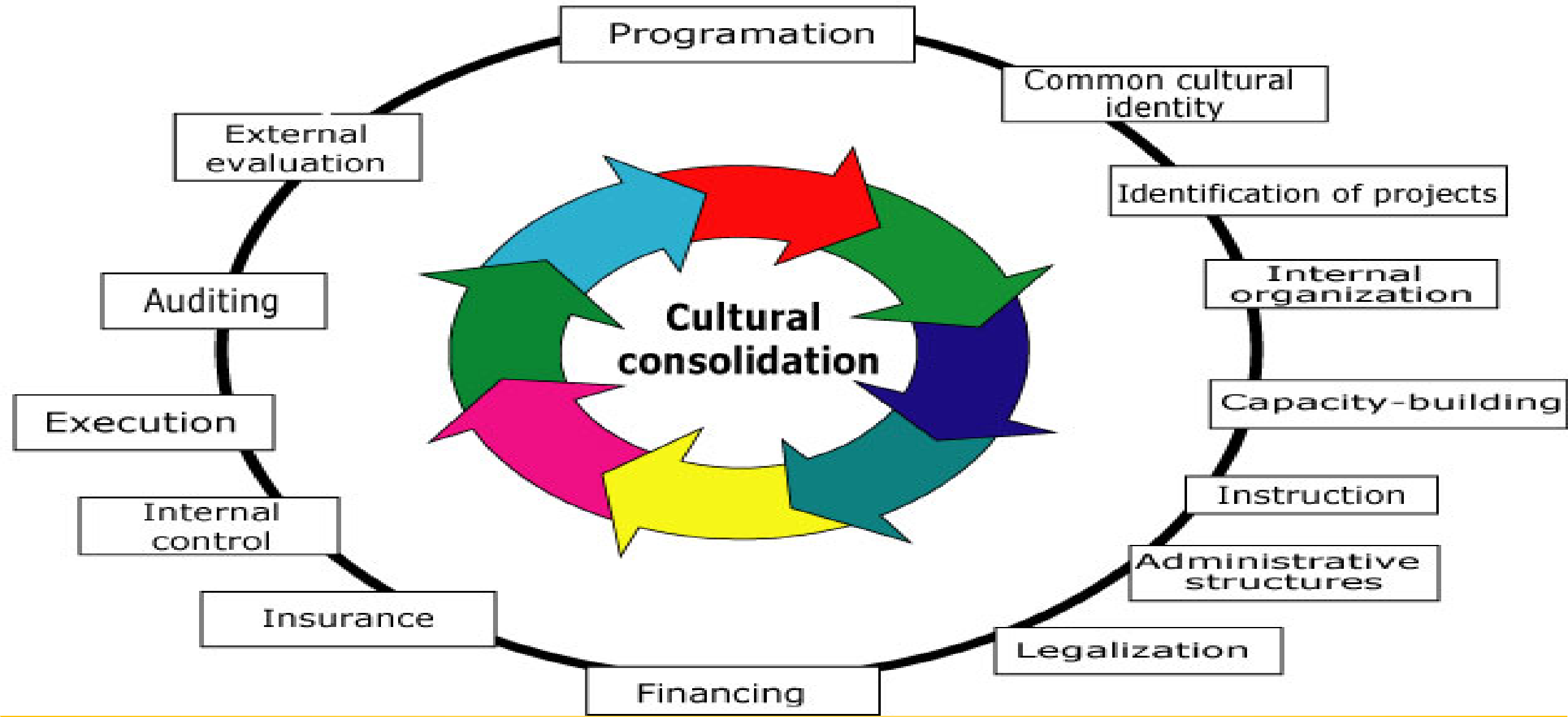


Cut Into Slope

Combo

Built Out

Model of self-reliant entrepreneurship



**Policy
Makers**

Male and elite-dominated parties/political agendas limit opportunities for women's voice

Voice

Male and elite-dominated policy making can exclude women's concerns

Instructions

**Gendered
Mediation**

Providers

Delivery

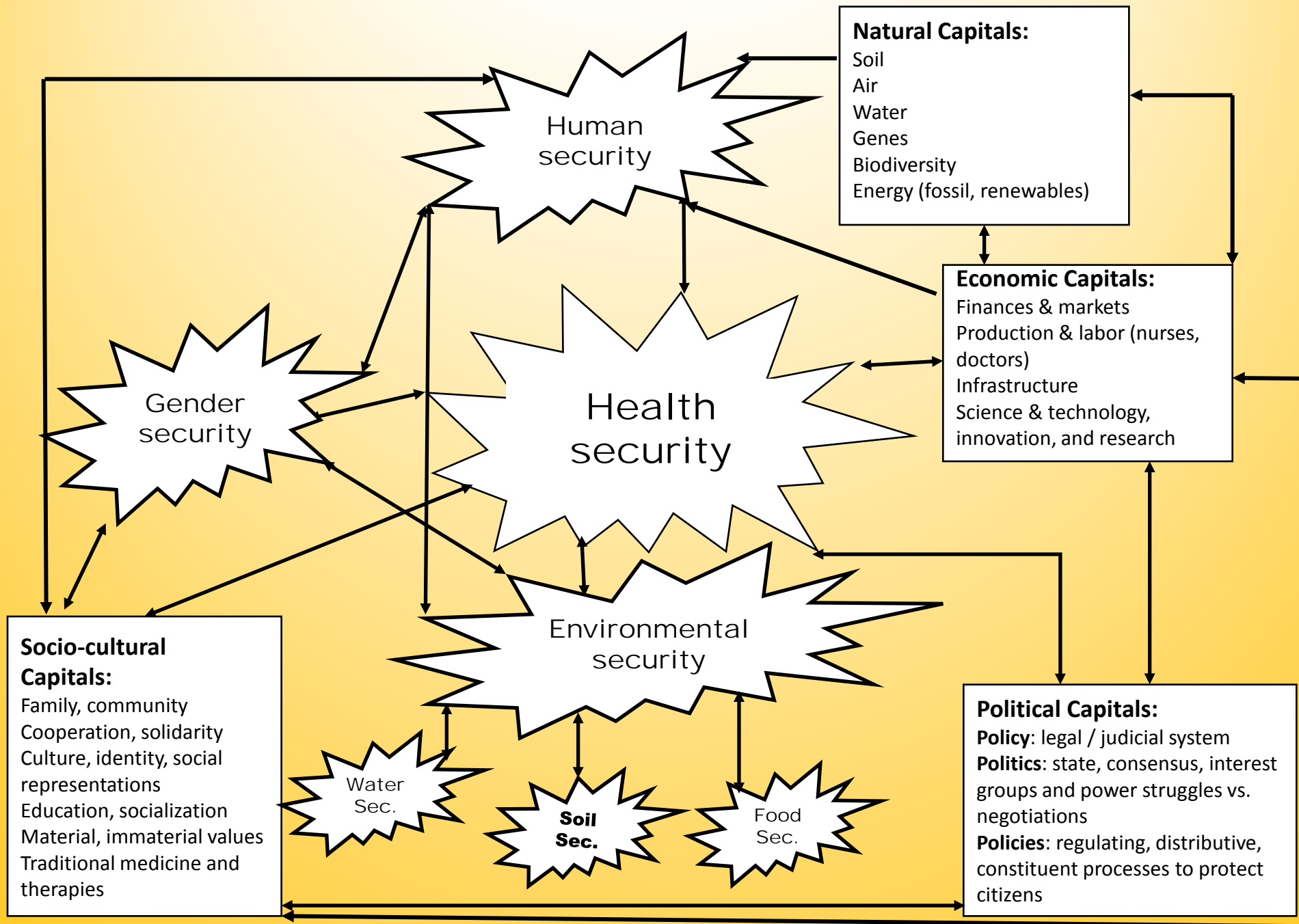
Gender-biased services misspecify women's needs for public provision

Choice

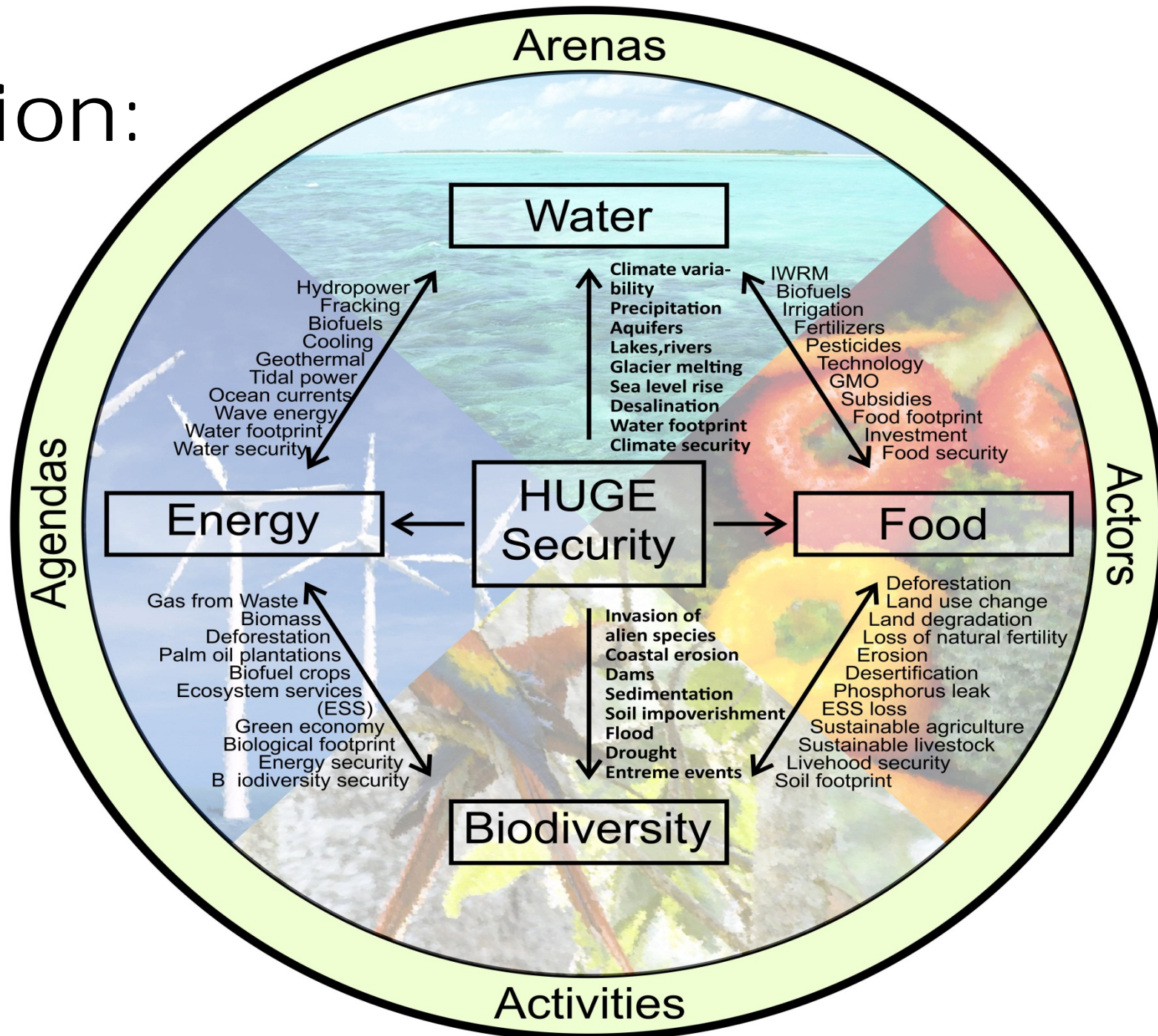
The dashed arrows symbolise weaker accountability due to gender bias

Women's capacity to use voice or exercise choice is mediated by men or local dominant interest groups, or is distorted by gender-biased access to politics or markets

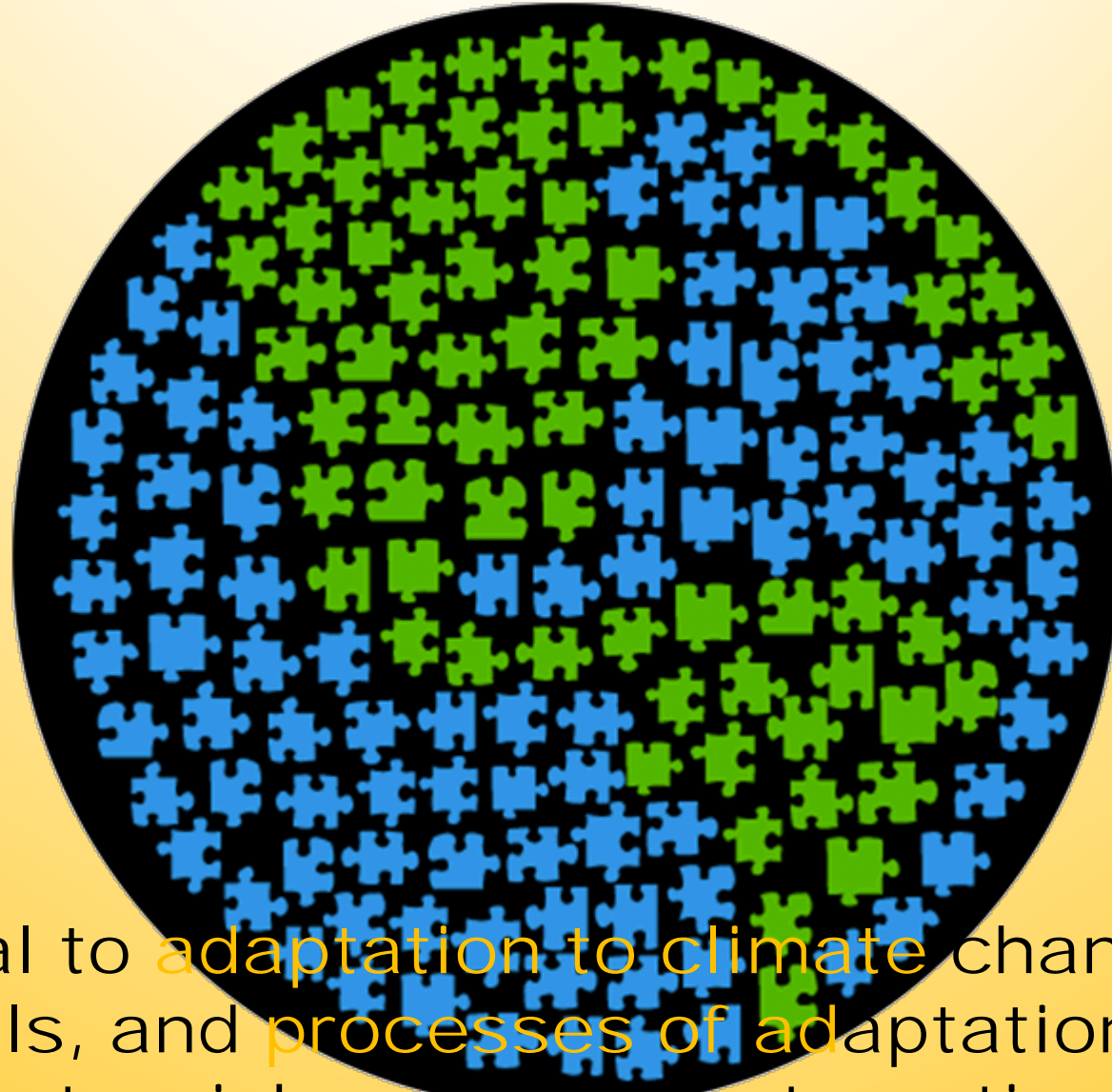
Source: Derived from World Bank (2003).



6. Conclusion:
 a human-
 gender &
 environ-
 mental
 security:
 a HUGE
 security



Key messages in LA for Human Security



Learning is central to adaptation to climate change. Furthermore, the concepts, goals, and processes of adaptation share much in common with disaster risk management, particularly its disaster risk reduction component, prevention and resilience-building