Sustainable Peace for Coping with Global Environmental Change (Plenary)

Úrsula Oswald Spring
CRIM-National University of Mexico
United Nation's University: EHS
National Coordinator on Water Networks

Index

1. What is Global Environmental Change?

- GEC is more than climate change
- Includes natural **plus** human components
- It is a constelation of **changes in different spheres**, such as:
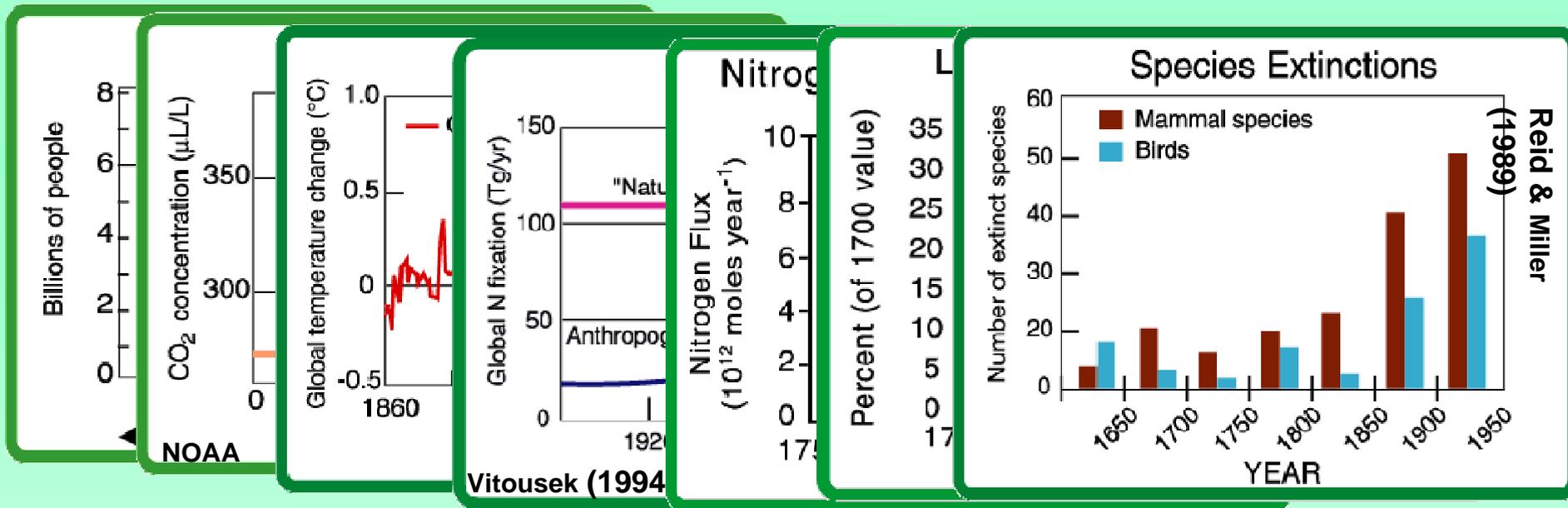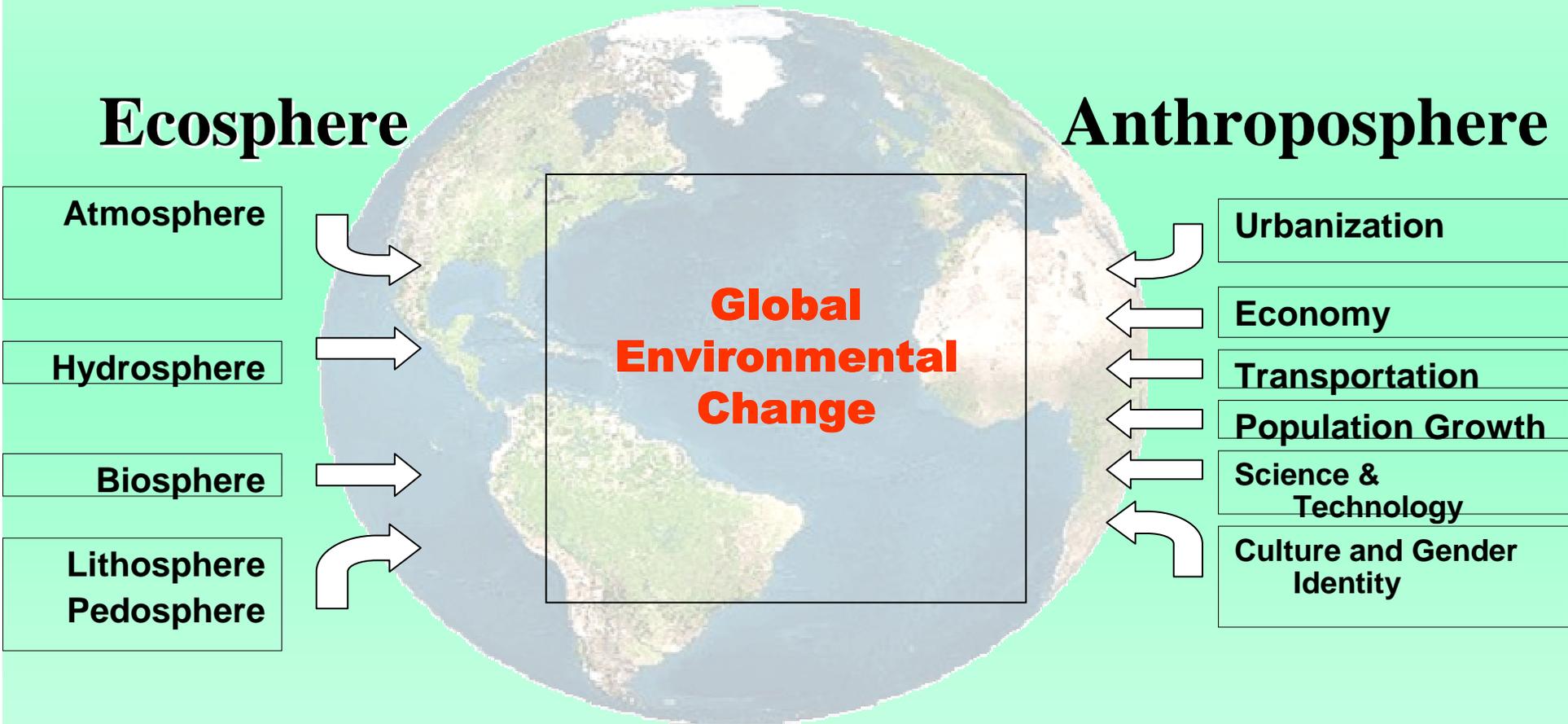
GEC: Earth and Human Systems
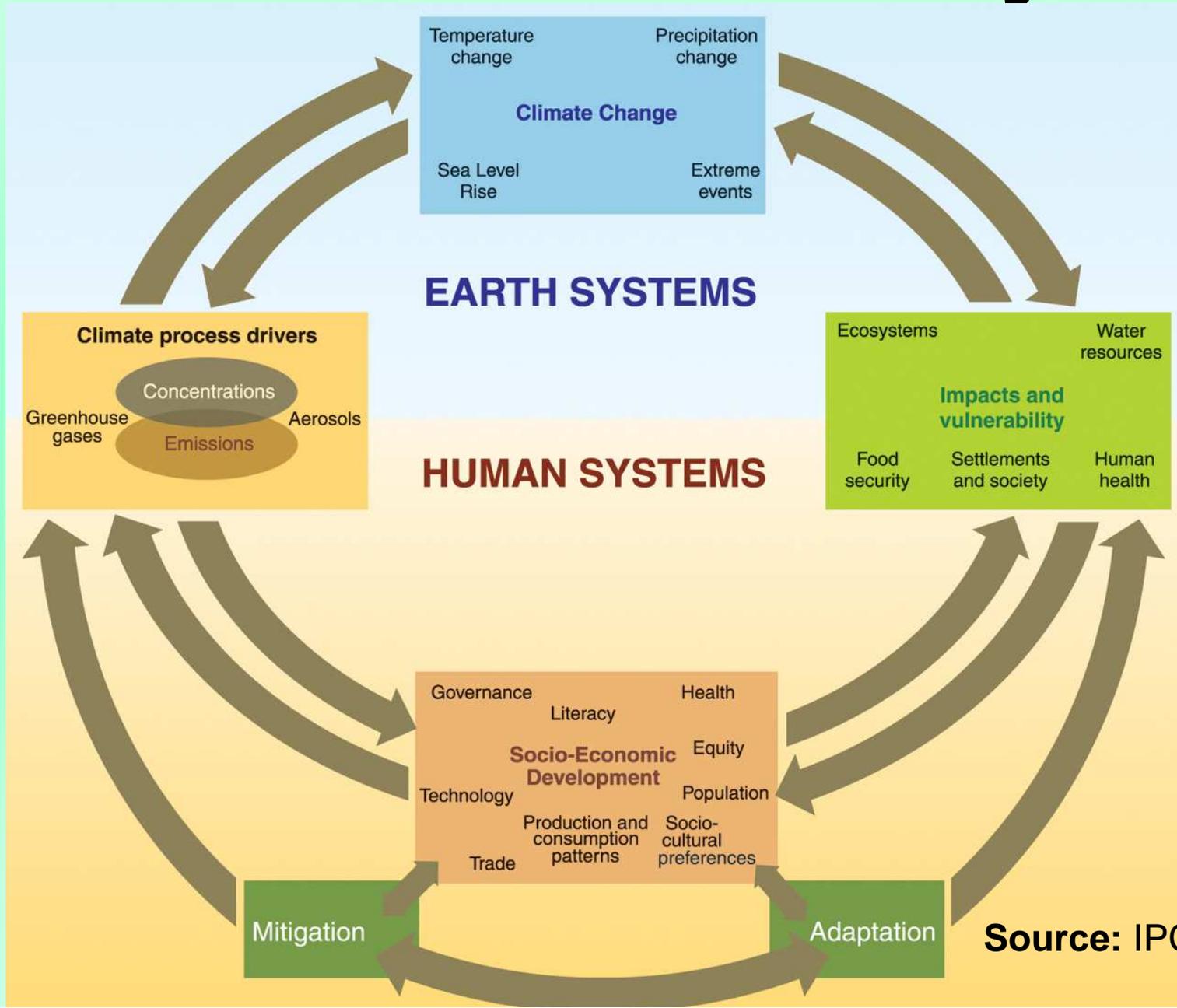
Source: IPCC, 2007

Globalization

1. Global financial networks
2. Instant communication (internet)
3. Global trade system
4. Global multilateral system of negotiation within the UN and the UN Security Council
5. Global agreements on human rights and its reinforcement
6. International Council of Justice
7. Consolidation of democratic political systems
8. Increase of social gaps within countries and between North and South

Globalization created unequal access to goods and crises

National investments   85,0   Richests
National savings   85,5
 International trade   84,2
GDP   84,7

Each bloc represents 1/5
Of world population

National investments   0,9
National savings   0,7   Poorest
International trade   0,9
GDP   1,4
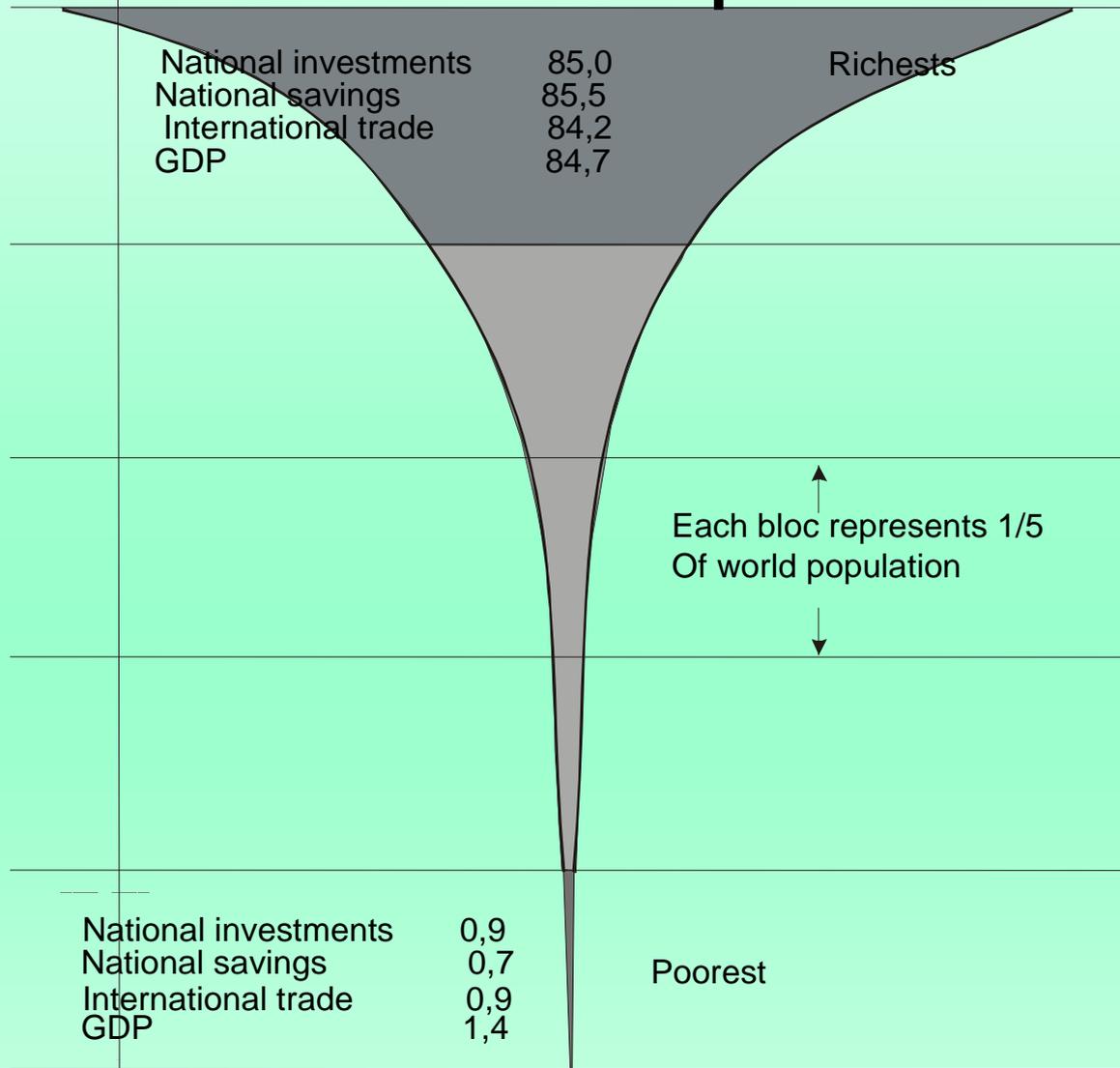
Outcomes of globalization and GEC

1. *Economic crisis:* **most severe financial crisis** since 1929 (collapse of private banks, insurance companies and enterprises), reduction of economic growth, increased unemployment and decline of remittances from migrants.

2. *Population Growth:* The world population has tripled during the 20th century from 2 to 6 billion and it is projected to **grow to 9 billion** until 2050.

3. *Climate Change:* global temperature is projected to rise between **1.1 and 6.4°C by 2100**; sea-level between **18 cm and 2.4 metres**; precipitation patterns change significantly, climate related **hazards** will increase in number and intensity affecting more people and economies.

4. *Water Security:* during the 20th century population **tripled** and water consumption increased **six fold**. By 2025, more than 2.8 billion people in 48 countries are projected to face water stress, most of them in Asia and Africa.

5. *Food Crises in 2009:* **more than one billion people are hungry**; 68 million more due to food price increase; more than 24,000 people die daily due to hunger-related causes

Produce regressive globalization

- Strategy of groups and governments that favor a globalization only to **benefit themselves**
- **Administrative unilateralism** makes use of global strategies of pre-emption and counter-proliferation in a clearly expression of national interest. This could create **isolationism** and an **anarchic global system of governance**.
- The rise of **nationalistic and religious fundamentalist** groups, which spawned a new geopolitical terrorism. This new groups are depend on **global infrastructure** such as internet, global funding and financial system, communication, propaganda and technology.

2. What is Sustainable Peace?

- It is a **generally accepted value,** a type of desideratum linked to **harmony, tranquility, cooperation, alliance, well-being, and agreement**.

- It started with **'preventive diplomacy'** from Dag Hammarskjold, later adopted by Boutros Boutros-Ghali, and today used in different governmental discourses and practices: tries in a **preventive way** to avoid escalation and spreading of conflicts through political solutions.

- The Orient contributed **nonviolent practices** with other humans and nature: **ahimsa** signifies not to do harm to any living organism.

- China's Taoism proposed a **harmony among sky, earth, and humans** generating cosmic energy which is the way to intelligence and fruitful life (Kongfuzi).

- In Mesoamerica indigenous societies, living in difficult environmental conditions, have developed **equilibrium, deep respect and unity with nature** and a profound knowledge on environment management

- Dark history of gender discrimination, intra-familial violence, feminicides, rape, trafficking and aggression have created **higher vulnerability of women**. UN Security Council Resolution 1325 that reinforced the ongoing gender mainstreaming in the UN bodies, highlighted the crucial role of women in development.

Critics to sustainable peace

- underlies a **hierarchical** present world order, where international institutions and **patriarchal** organizations are maintaining the status quo of the present exclusive globalization process.
- no **structural changes** are proposed
- **conflicts** are required to offer the superpower and its allies' **cheap raw materials** for consumerism and wasteful fossil energy use.
- ideologically false realities: **cheating system** of free-market and global trade: world elite get richer using legal and transnational organized crime to amplify their accumulation of capital and power
- South: sustainable peace implies **critics of the existing model** of exclusivity and violence.
- new elements to create a sustainable model of society with **less environmental destruction**, **resource efficiency** and **shared** use of science and technology (against TRIPS and GATS)
- promotes **reduction of global environmental change, poverty alleviation and self-reliance**: a new paradigm of security: Human, Gender and Environmental Security: **HUGE**

3. What is security?

➢ Security (Lat.: **'securus', 'securitas', 'se cura'**

➢ philosophical and psychological **state of mind**

➢ subjective feeling of **freedom from sorrow.**

➢ Political concept of 'Pax Romana': **stability** in era of Augustus.

➢ Western thinking 'security' synonymous: 'certitudo'; **certainty**

➢ Since Augustus, and Middle Ages, 'securitas' was linked with **'pax' & 'libertas'** that was associated with 'quietness'.

➢ 19th century, **state** is key security institution governed by law.

➢ 20th century, security associated with **preventing internal & external dangers**; police & courts (*internal: justice & home affairs*) & political, economic, military measures (*external: security/defense*).

➢ a general 'societal idea of value', a universally **normative concept**, different meanings in affirmative manner.

➢ **political value**, related to individual or societal value systems

Objective, Subjective, Intersubjective Security

- **Wolfers (1962)** pointed to two sides of the security concept: "Security, in an *objective* sense, measures the absence of threats to acquired values, in a *subjective* sense, the absence of fear that such values will be attacked".

- From a constructivist approach in international relations 'security' is the outcome of a process of social & political interaction where social values & norms, collective identities & cultural traditions are essential. Security: *intersubjective* or "what actors make of it".

- Copenhagen school: security as a "speech act", "where a securitizing actor designates a threat to a specified reference object and declares an existential threat implying a right to use extraordinary means to fend it off".

- Such a process of "securitization" is successful when the construction of an "existential threat" by a policy maker is socially accepted and where "survival'" against existential threats is crucial

4. Is GEC a security risk? PEISOR Model

- **PEISOR: Result of pressure and response models and of debates on environmental security and on natural hazards.**

The PEISOR model combines five stages:

- *P* (*pressure*) refers to 6-8 drivers of global environmental change
- *E* to the *effects* of the linear, non-linear or chaotic interactions within the 'hexagon' on environmental scarcity, degradation, and stress;
- *I* to extreme or fatal *impacts* of human-induced and climate-related natural hazards (storms, flash floods, flooding, landslides, drought);
- *SO* to *societal outcomes*: internal displacement, migration, urbanization, crises, conflicts, state failure, and
- R to *response* by society, business community, state where both traditional & modern technological knowledge can make a difference.

Hazards cannot be prevented, their **impact** in terms of deaths, affected people, economic & insured damages can be reduced by policies & measures that link protection with empowerment of the people to become more resilient.

PEISOR Model

Pressure	Effect	Impact	Societal Outcome	(Policy) Response
Causes of Global Environmental Change (GEC)	Socio-economic Interaction Environmental scarcity, degradation and stress	Natural and human-induced hazards	Individual choice (survival dilemma) Societal response	National and international political process, state, societal and economic actors and knowledge

Direct natural link: climate change and extreme weather events

GLOBAL ECONOMIC AND POLITICAL CONTEXT AND CONDITIONS
(security dilemma between states in the international system)

Pressure column:

Water — Soil
Biodiversity

Climate Change

EARTH SYSTEMS

- - - -

HUMAN SYSTEMS

Population

Socio-economic process

Rural Systems — Urban Systems

Effect column:

(environmental)

Degradation
(soil, water, biodiversity)

Stress

Scarcity
(soil, water)

Impact column:

Natural hydro-meteoro-logical hazards
- storm (hurricane, cyclone)
- floods, land slides
- drought, forest fire
- heat wave

Geophysical hazards
- earth quakes
- tsunamis
- volcano eruption

Technological and human-induced hazards
- accidents
- deliberate acts (terrorism)

Societal Outcome column:

Individual/family/community choice
(survival dilemma)
- stay at home & suffer
- move (migrate)
- protest & fight (violence)

Migration — Conflict Avoidance Prevention Resolution

Political process

Crisis — Conflict

Societal response
- massive migration (rapid urbanization rise)
- internal crisis
- violent conflict
- conflict avoidance, prevention, resolution

(Policy) Response column:

State

Decision

Society — Economy

Coping with GEC & environmental stress
(adaptation & mitigation)

Knowledge
(traditional & modern Scientific/technological)

NATIONAL ECONOMIC AND POLITICAL CONTEXT AND CONDITIONS)

Socio-economic process (human forces and human systems)

Feedback

P: Pressure: Interactions of GEC

5. How to securitize HUGE

- Human, Gender and Environmental Security (HUGE) combines a **wide gender concept** (vulnerable: including children, elders, indigenous and other vulnerable groups) **with a human-centered focus on environmental security and peace challenges**.

- HUGE analyzes the **patriarchal,** violent and exclusive structures within the family and society questioning the existing process of social representation-building and traditional role assignation between genders. HUGE asks for the **obstacles to overcome** the consolidated discrimination of women and poor, but also narrow feminist approaches of male-female opposition.

- HUGE's '**human security**' includes equity, development and conflict resolution through social organization, specific governmental policies, private ethical investments and legal reinforcements by stimulating socio-political participation of women, young, elders and marginal.

- At the **international level** HUGE analyses the potential of free and equal access to world and regional markets and the limits due to existing trade distortions.

- HUGE revises the **obstacles for world solidarity** to support poor countries with financial aid, technology and debt relief.

- HUGE includes a **healthy environment**, integral management of natural resources, prevention and remediation practices to reduce vulnerability and to stimulate resilience-building through bottom-up organization combined with top-down policies and institution-building.

- **Nonviolent conflict resolution** is central for personal and social identity in a world where processes of unification and diversification are occurring quicker than ever.

- HUGE includes consolidation of **participatory democracy and governance**, promoting conflict prevention, nonviolent conflict resolution and peace-building: a **'huge' solidarity** process of sustainable, inclusive, just and equal development.

Human, Gender, Environmental Security

Determina-tion Which security?	Reference object: Security of whom?	Value at risk: Security of what?	Source(s) of threat: Security from whom or what?
National security	The State	Territorial integrity	State, substate actors
Human security	Individual, humankind	Survival of humankind people	Natural events, state, globalization
Environmental security	Ecosystems, rural and urban systems, water and food	Sustainability	Humankind, natural events
Gender security	Gender relations, indigenous people, minorities	Equity, identity, social relations, solidarity, tolerance, culture	Patriarchy, totalitarian institutions (élites, governments, religious fundamentalism, dominant cultures), intolerance, violence

Climate Threats, Disasters and Impacts

Permafrost thaw e.g.,

Increase in heatwaves e.g.,

Increase in drought, desertification

Hurricanes, floods

Dangerous sea level rise

Dangerous sea level rise e.g.,

Increase in heavy rain e.g.,

Increase in droughts

Earthquakes

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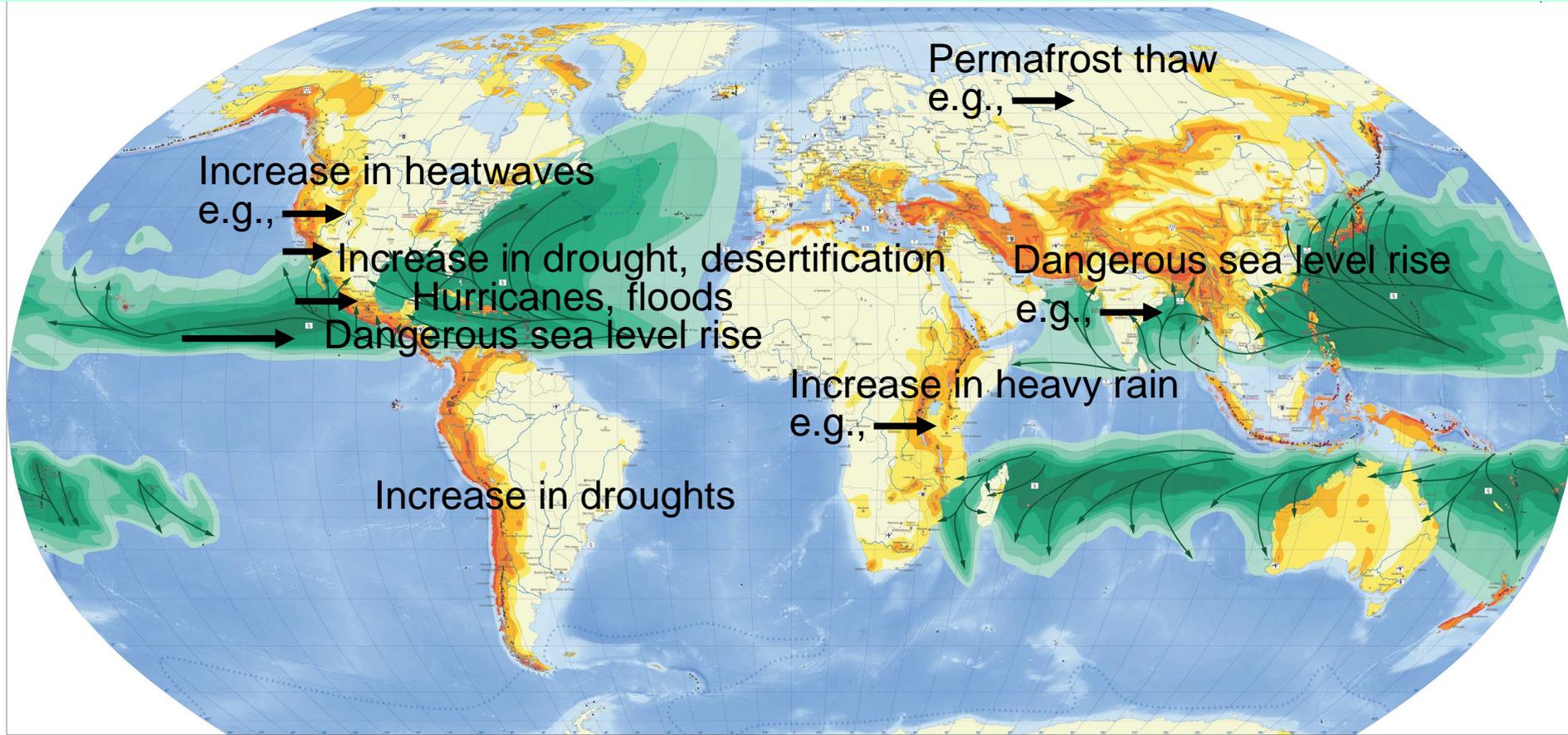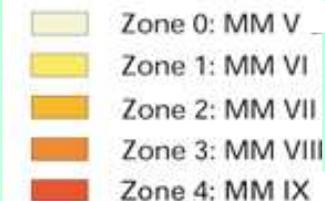
MM: modified Mercalli scale

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
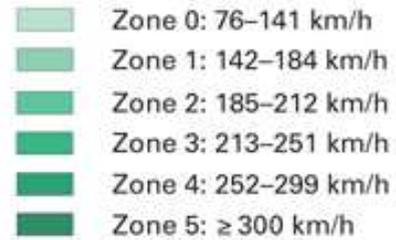
Threatened Ecosystems

Figure 5.1 Status of terrestrial ecoregions

Legend:
- Critical or endangered
- Relatively stable or intact
- Vulnerable
- Ecoregions with no ongoing threat

Note: An ecoregion is a large unit of land containing a geographically distinct assemblage of species, natural communities, and environmental conditions.

Source: WWF 2006
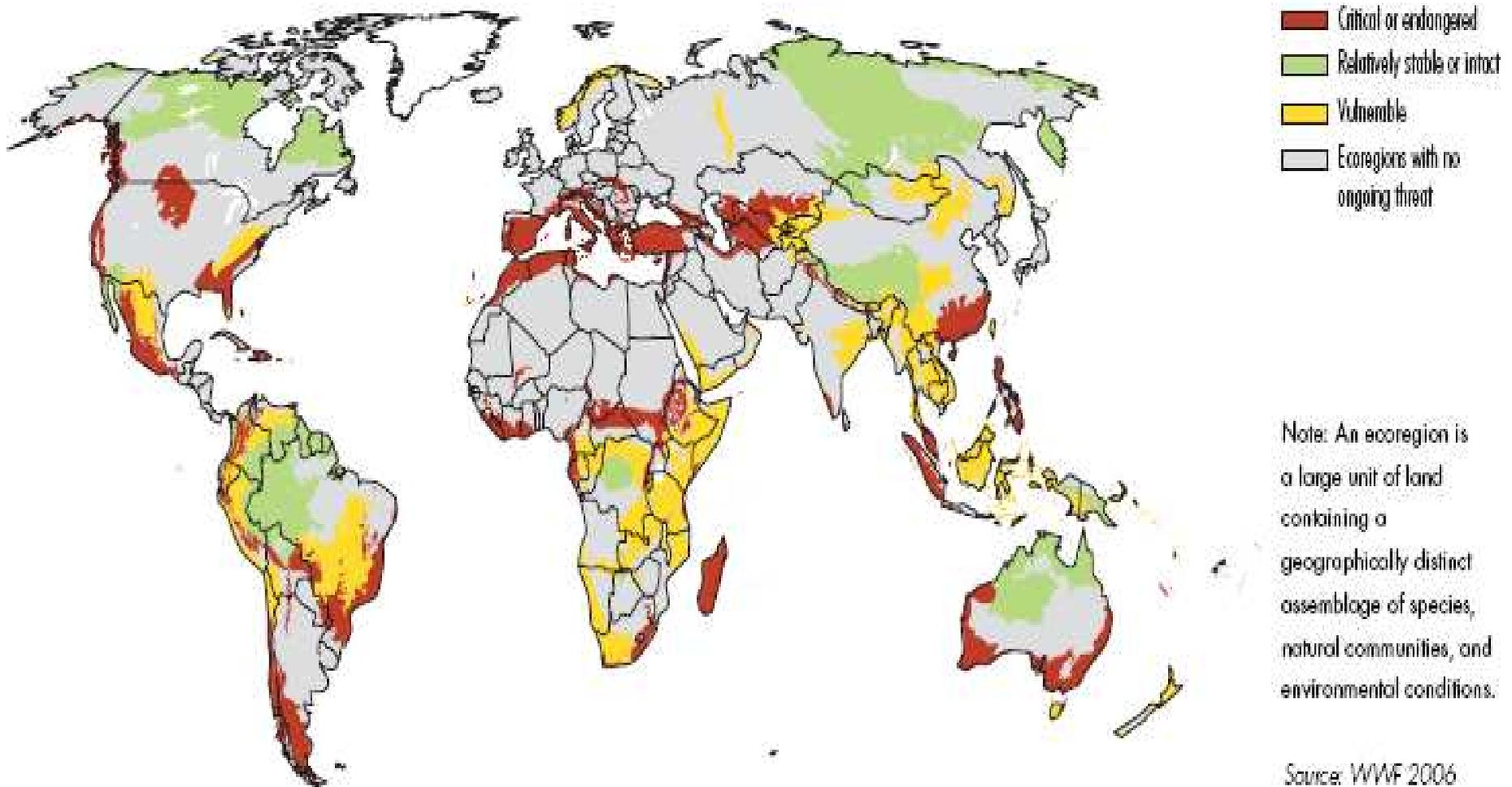
Desertification, erosion, land degradation

- **110 countries** are potentially at risk. UNEP estimates that desertification costs the world **US$ 42 billion/year**. **Africa** alone looses some **US$ 9 billion/year** (Lean 2008: 10). The continent with the highest proportion of severely or moderately desertified drylands is North America (74%), but also 13 European countries suffer from desertification.
- **30% of the earth** is deteriorated due to overgrazing, overuse of land, poor irrigation methods, deforestation, urbanization, climate variability and change, human-induced increase in food, water and soil due to population growth, modernization processes, livelihood changes and waste.
- **Loss of yield productivity**, water and food scarcity, inadequate land management and poverty are key drivers of forced migration of people from drylands to humid regions where new desertification trends surge from an increased **demand on the carrying capacity of the land**.

# Key factors of drylands' degradation
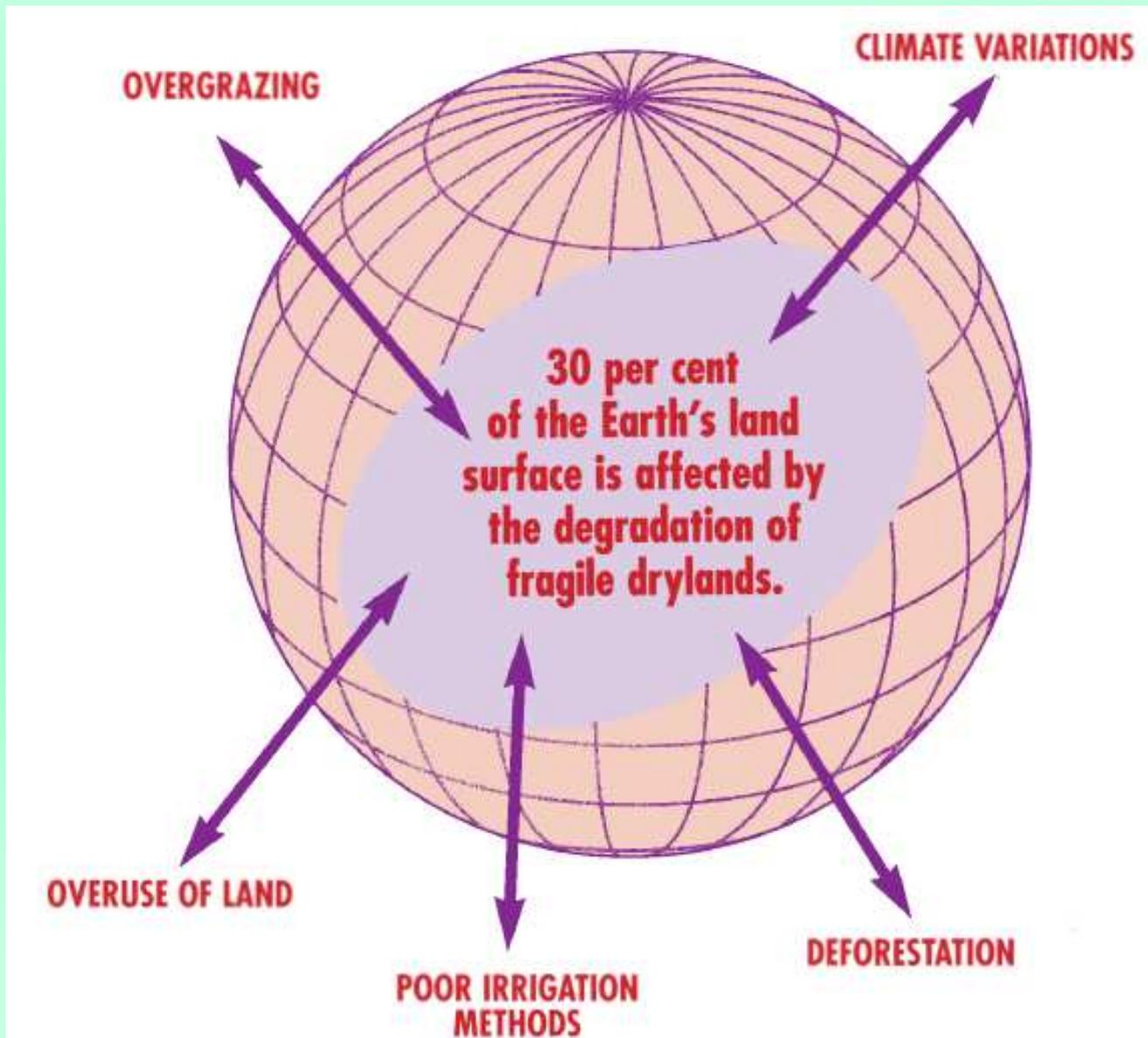
# Global soil degradation
(% of affected area)
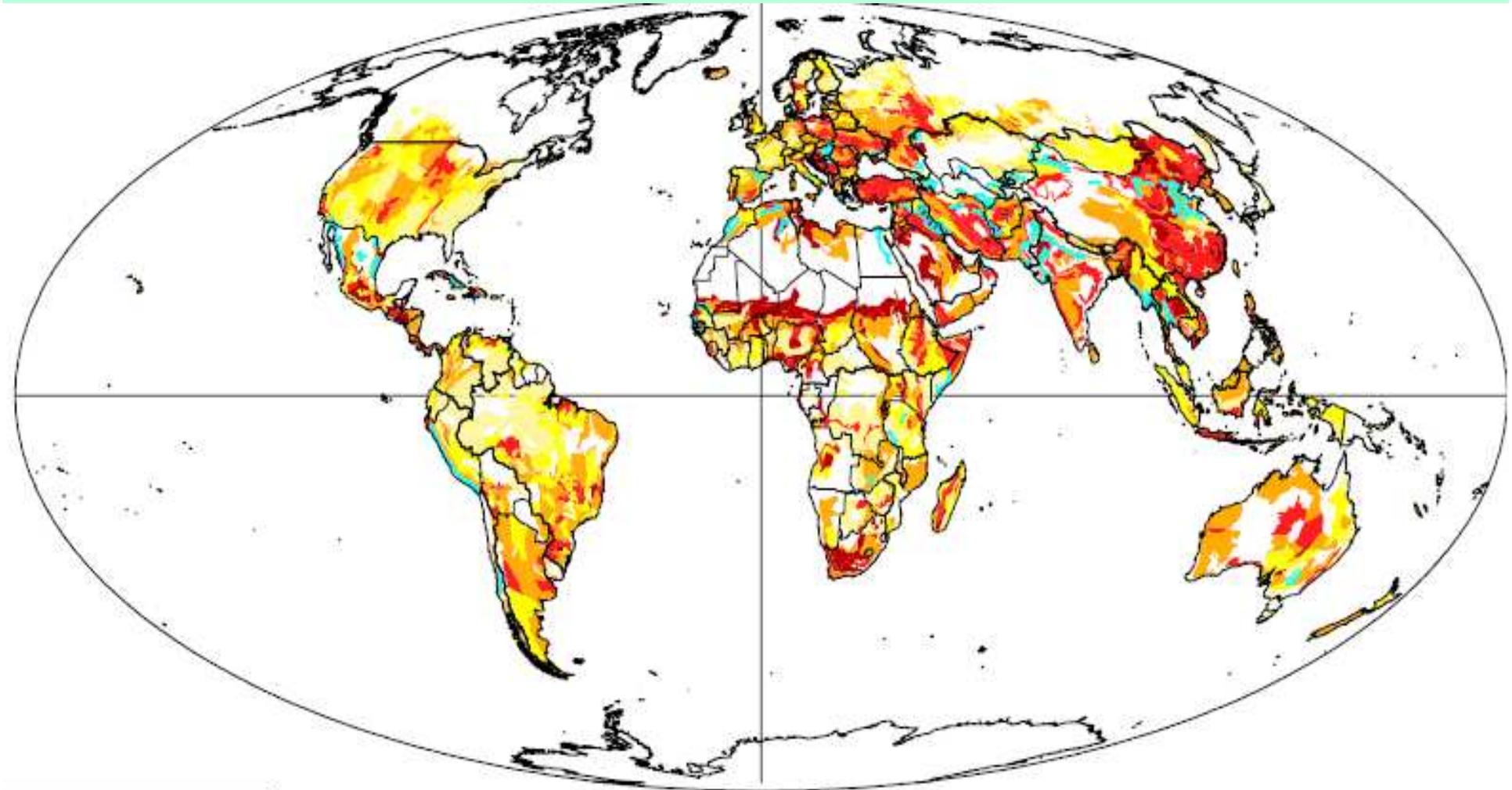
Mitigation, adaptation, resilience and social vulnerability

Integral policy: poverty alleviation and environmental recovery

Environmental, water and food security?
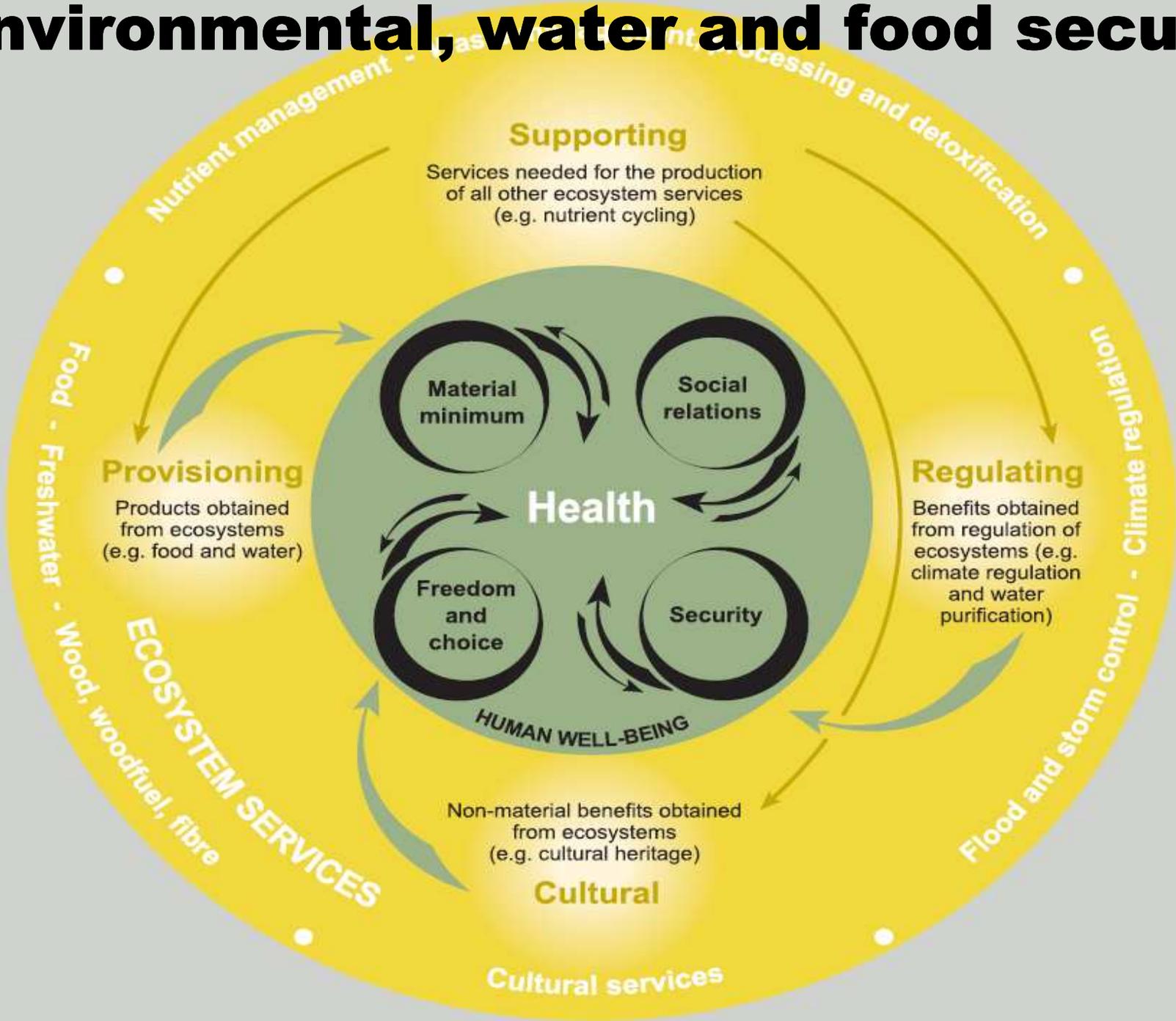
Ecosystem Services and Well-being

CONSTITUENTS OF WELL-BEING

ECOSYSTEM SERVICES

Provisioning
- FOOD
- FRESH WATER
- WOOD AND FIBRE
- FUEL
- ...

Supporting
- NUTRIENT CYCLING
- SOIL FORMATION
- PRIMARY PRODUCTION
- ...

Regulating
- CLIMATE REGULATION
- FLOOD REGULATION
- DISEASE REGULATION
- WATER PURIFICATION
- ...

Cultural
- AESTHETIC
- SPIRITUAL
- EDUCATIONAL
- RECREATIONAL
- ...

LIFE ON EARTH - BIODIVERSITY

Security
- PERSONAL SAFETY
- SECURE RESOURCE ACCESS
- SECURITY FROM DISASTERS

Basic material for good life
- ADEQUATE LIVELIHOODS
- SUFFICIENT NUTRITIOUS FOOD
- SHELTER
- ACCESS TO GOODS

Health
- STRENGTH
- FEELING WELL
- ACCESS TO CLEAN AIR AND WATER

Good social relations
- SOCIAL COHESION
- MUTUAL RESPECT
- ABILITY TO HELP OTHERS

Freedom of choice and action

OPPORTUNITY TO BE ABLE TO ACHIEVE WHAT AN INDIVIDUAL VALUES DOING AND BEING

Source: Millennium Ecosystem Assessment

ARROW'S COLOR
Potential for mediation by socioeconomic factors
- Low
- Medium
- High

ARROW'S WIDTH
Intensity of linkages between ecosystem services and human well-being
- Weak
- Medium
- Strong

Future scenarios and policy
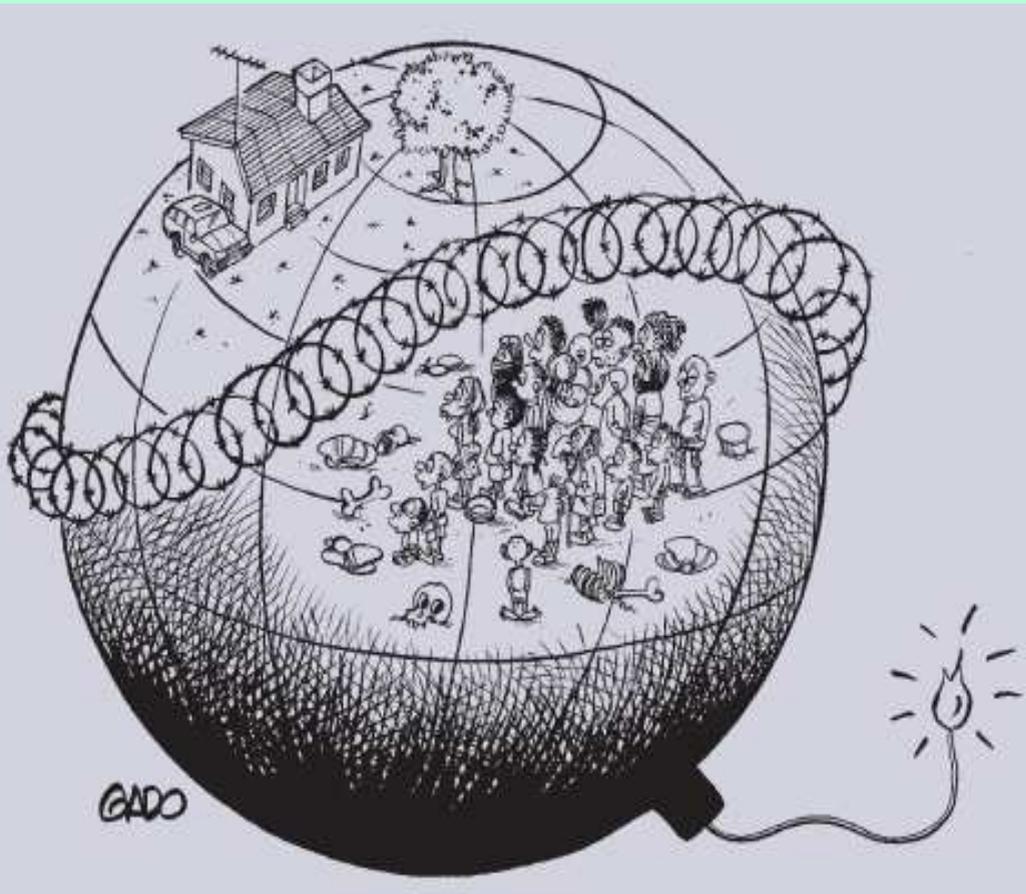
1) **cooperation** with solidarity vs. isolationism and elite behaviour; 2) **cultural diversity** vs. economic monopoly; 3) **peace with ahimsa** vs. himsa; and violence; 4) **spirituality** vs. secularity.

Conflictive Situation: Widening, Deepening & Sectorialization of Security Threats, Vulnerabilities & Risks Challenges,
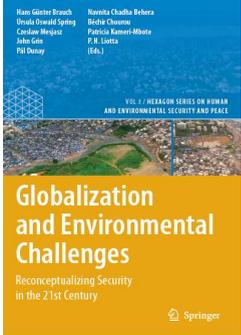
Security dimension⇒ ⇓ Level of interaction	Military	Political	Economic	Environmental ⇓	Societal
Human and social groups (women, children, elderly) Human security ⇒	Drug war human, arm, drug, organ trafficking	Failed state Public insecurity	Food and health security Employment, income security	**Cause & victim**	Food, water and health security Gender security
Societal, community security	Border control	Public (in)security	Water, Food & Health sec.	⬆⬇	⬆⬇
National security	War on terrorism since 2001 shrinking (in USA since 2001 ⬆ & since 2009 ⬇)		Energy security, maquila, cheap labour force	⬆⬇	Energy Food, Water & Health security
International and Regional security	Merida agreement including Central America		Water& virtual water security	⬆⬇	Water & soil security
Global and planetary security ⇒	Terro-rism	Intern. Migration, drug and human trafficking	Financial crisis, money laundering	CC; GEC; biodiversity loss, desertification	Health security

Regional peace, sustainable development, participative governance

- medium and long-term problems related to security and co-operation in the region;
- improvement of regional capacity and mechanisms to prevent, manage and resolve crises through political and not military means;
- creation of development & democratic institutions with representative governments and protection of human rights, social rights and fundamental freedoms;
- sustainable growth and poverty alleviation with direct involvement of women.

Ecofeminism

- Ecofeminism promoted sustainable subsistence in hand of women for food and wealth of their families, communities and the planet

- non-violent management of nature and society

- peaceful and nonviolent conflict resolving society

- confronted with globalization and rape capitalism, organized crime and depletion of nature, ecofeminism allied to other social movements for an inclusive peace behaviour in daily life (Reardon 1996; Boulding 2000; Oswald 1990; Campos 1995).

Patriarchal Mindset

Exponential Growth ("more, more, more")

MIMETIC DESIRE LEADS TO MIMETIC VIOLENCE
IN THE PURSUIT OF
WEALTH ACCUMULATION
POWER & DOMINATION
WORLDLY HONORS

Solidarity Ethos

Sustainability Enabling

MIMETIC DESIRE FOR NONVIOLENCE

LEADS TO
GENDER EQUITY
WEB OF PARTNERSHIPS
TRUTH, FREEDOM, CARE

Sustainable Development

Human Person Integration

MIMETIC DESIRE FOR A SIMPLE LIFE

FOCUSED ON
HUMAN DIGNITY AND
HUMAN GROWTH IN
BODY, MIND, SPIRIT

Sustainability Ethos

Human Habitat Enhancement

MIMETIC DESIRE FOR ECOHEALTH

LEADS TO
GLOBAL STEWARDSHIP
HUMAN HABITAT LEGACY
SUBSIDIARITY NETS

**FROM SUSTAINABILITY TO
SUSTAINABLE NONVIOLENCE AND
SUSTAINABLE HUMAN DEVELOPMENT**

Girardian: Revision of the Process Model, 2005

Sustainable Development and Sustainable Peace with HUGE
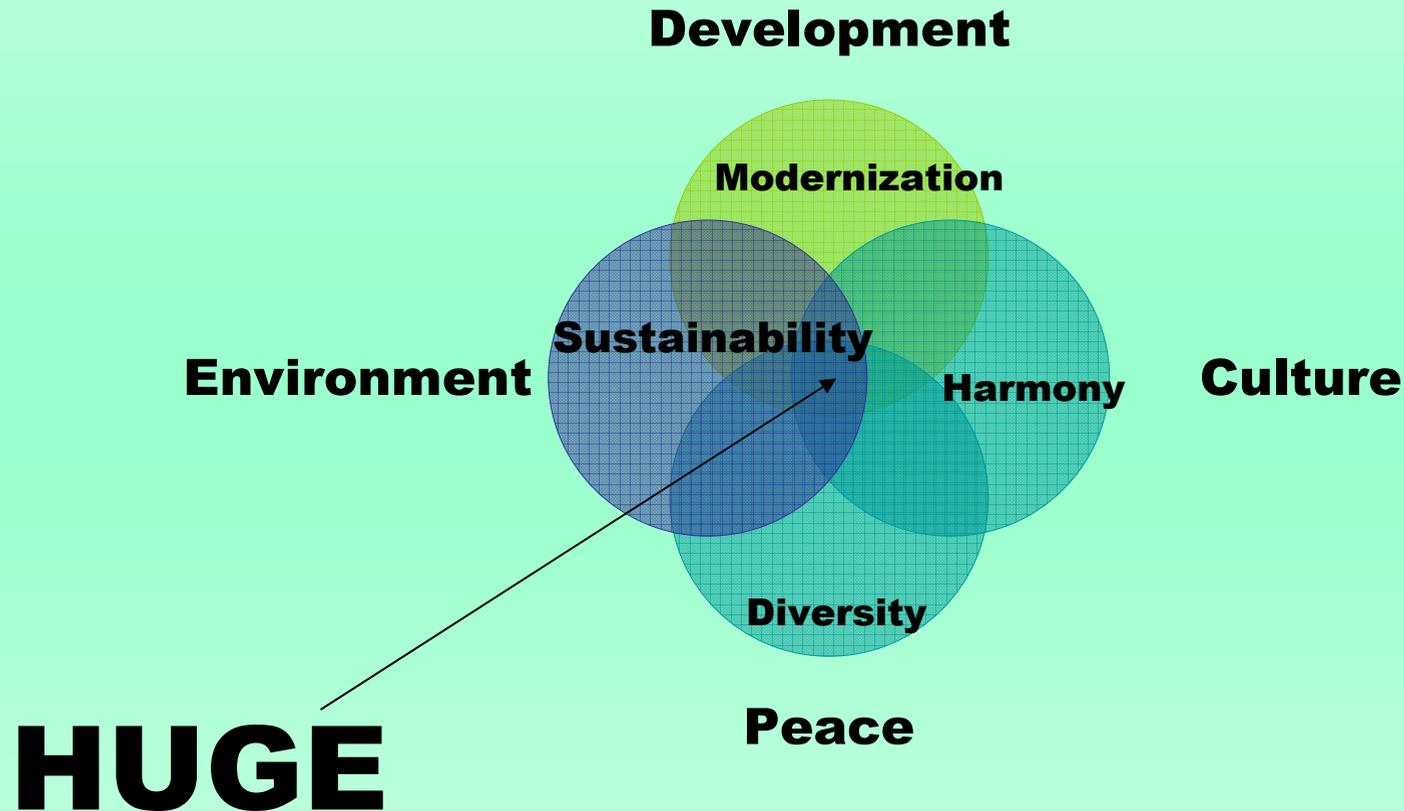
Development

Modernization

Environment

Sustainability

Harmony

Culture

Diversity

Peace

HUGE

Thank you for your attention
http://www.afes-press.de/html/download_oswald.html