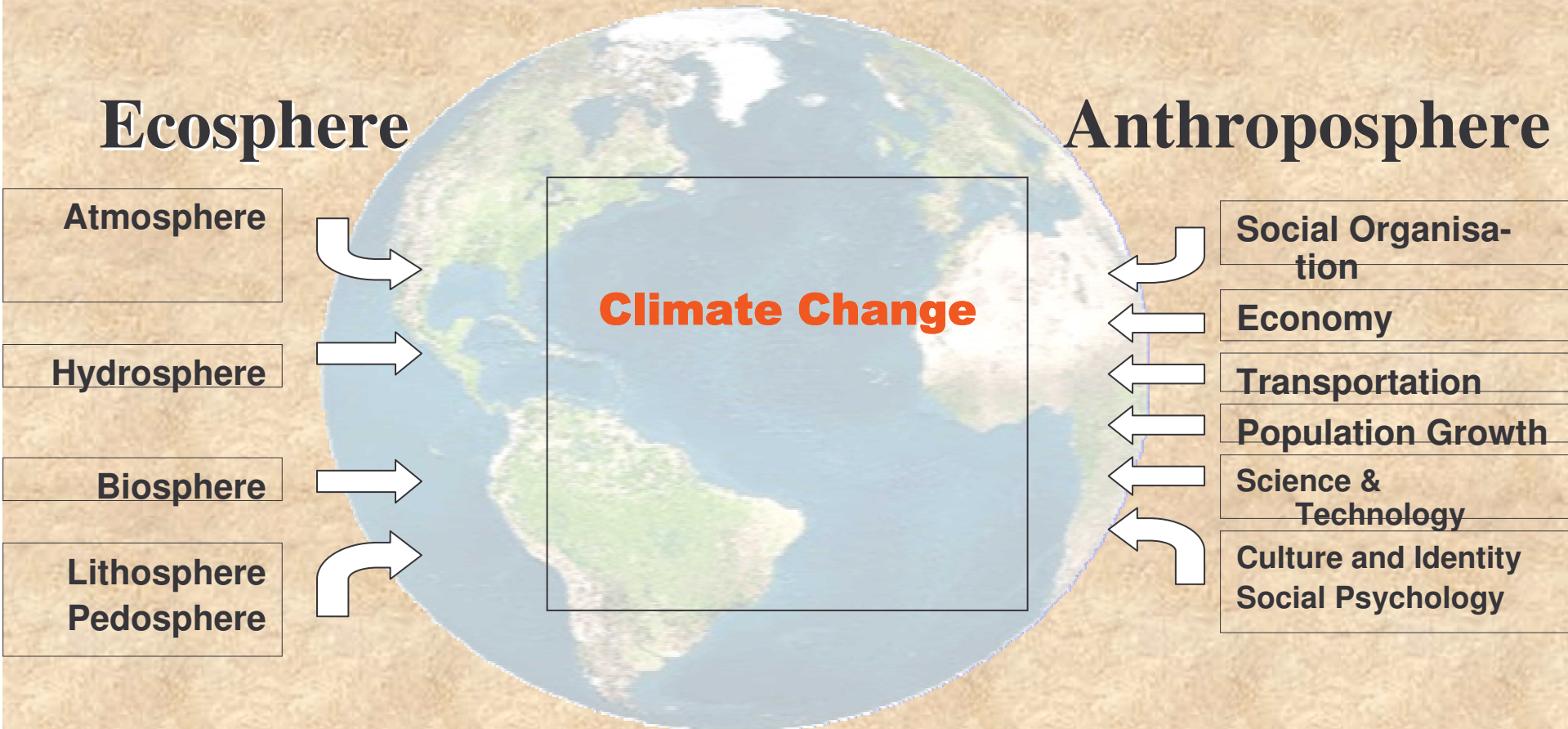**International Women Leaders
Global Security Initiative, November 2007**

Climate Change: A Gender Perspective on Human and State Security Approaches to Global Security

Úrsula Oswald Spring

CRIM-National University of Mexico

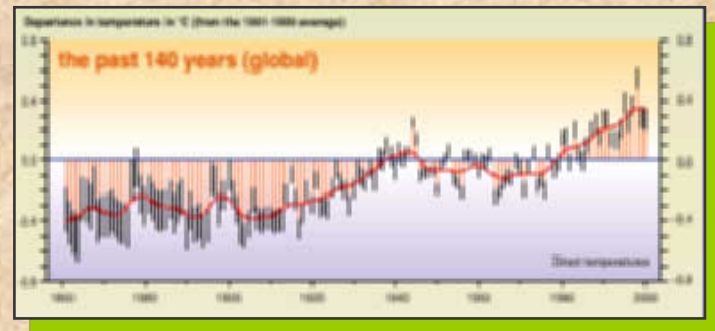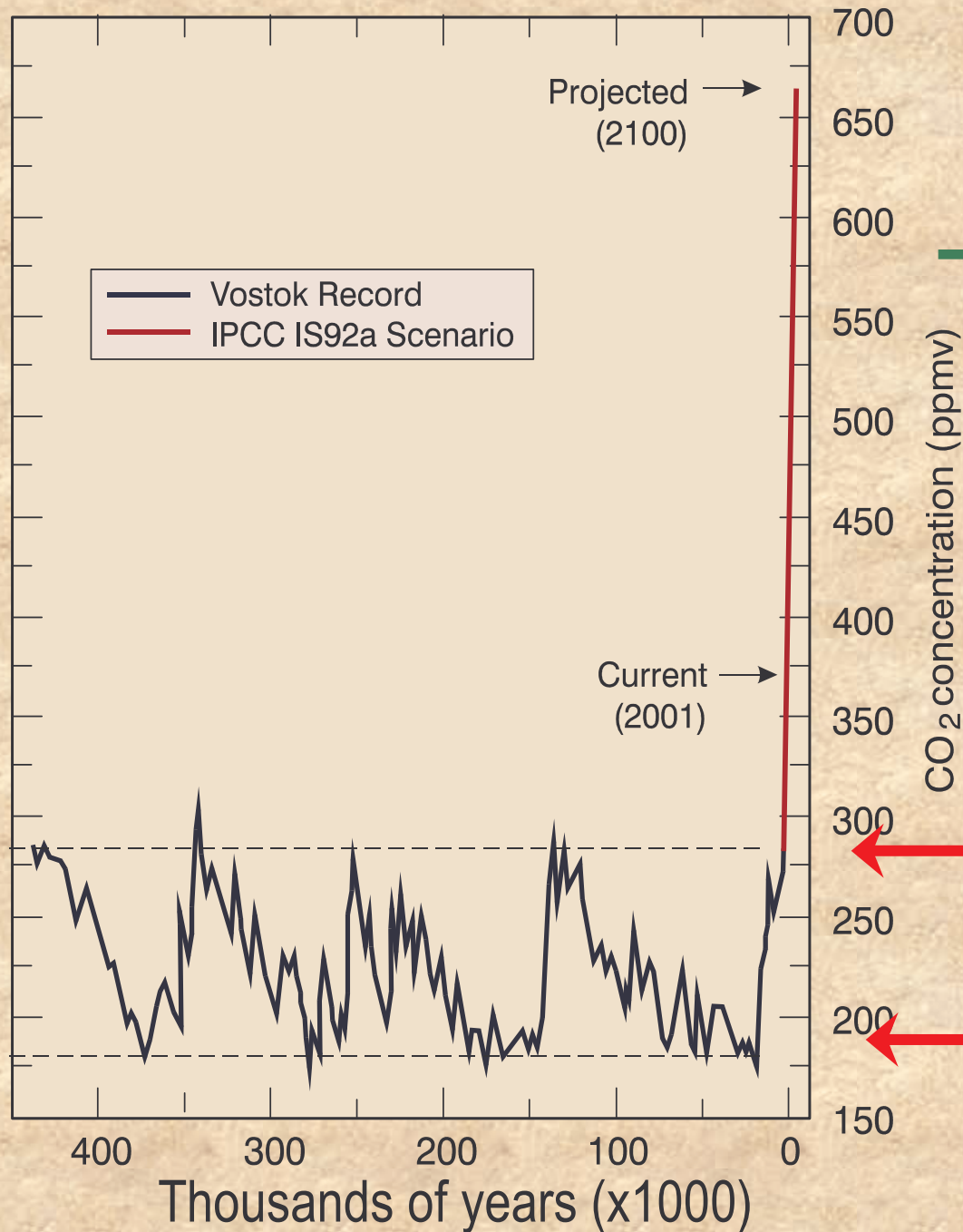**MRF Chair UNU-EHS on Social Vulnerability**

Climate Change (CC) and Security

Ecosphere

- Atmosphere
- Hydrosphere
- Biosphere
- Lithosphere Pedosphere

Climate Change

Anthroposphere

- Social Organisation
- Economy
- Transportation
- Population Growth
- Science & Technology
- Culture and Identity Social Psychology

Direct outcomes of Climate Change

1. Increase in temperature; heat and cold waves
2. Rise in sea levels
3. Storms and floods
4. Desertification and loss of soil fertility and erosion
5. Irreversible ecological changes and destruction of ecosystems
6. Effects on livelihood, food production, water security and life quality
7. Increase in migration from poor countries
8. Possible hotspots and conflict zones
9. Possible large-scale changes (Amazon, Gulf Stream, depleted Asian monsoons, etc.)

Past and Future of CC

GCP 2001
IPCC 2001, 2007

Projected Impacts of Climate Change

Global temperature change (relative to pre-industrial)

0°C	1°C	2°C	3°C	4°C	5°C

Food

Falling crop yields in many areas, particularly developing regions

Possible rising yields in some high latitude regions

Falling yields in many developed regions

Water

Small mountain glaciers disappear – water supplies threatened in several areas

Significant decreases in water availability in many areas, including Mediterranean and Southern Africa

Sea level rise threatens major cities

Ecosystems

Extensive Damage to Coral Reefs

Rising number of species face extinction

Extreme Weather Events

Rising intensity of storms, forest fires, droughts, flooding and heat waves

Risk of Abrupt and Major Irreversible Changes

Increasing risk of dangerous feedbacks and abrupt, large-scale shifts in the climate system

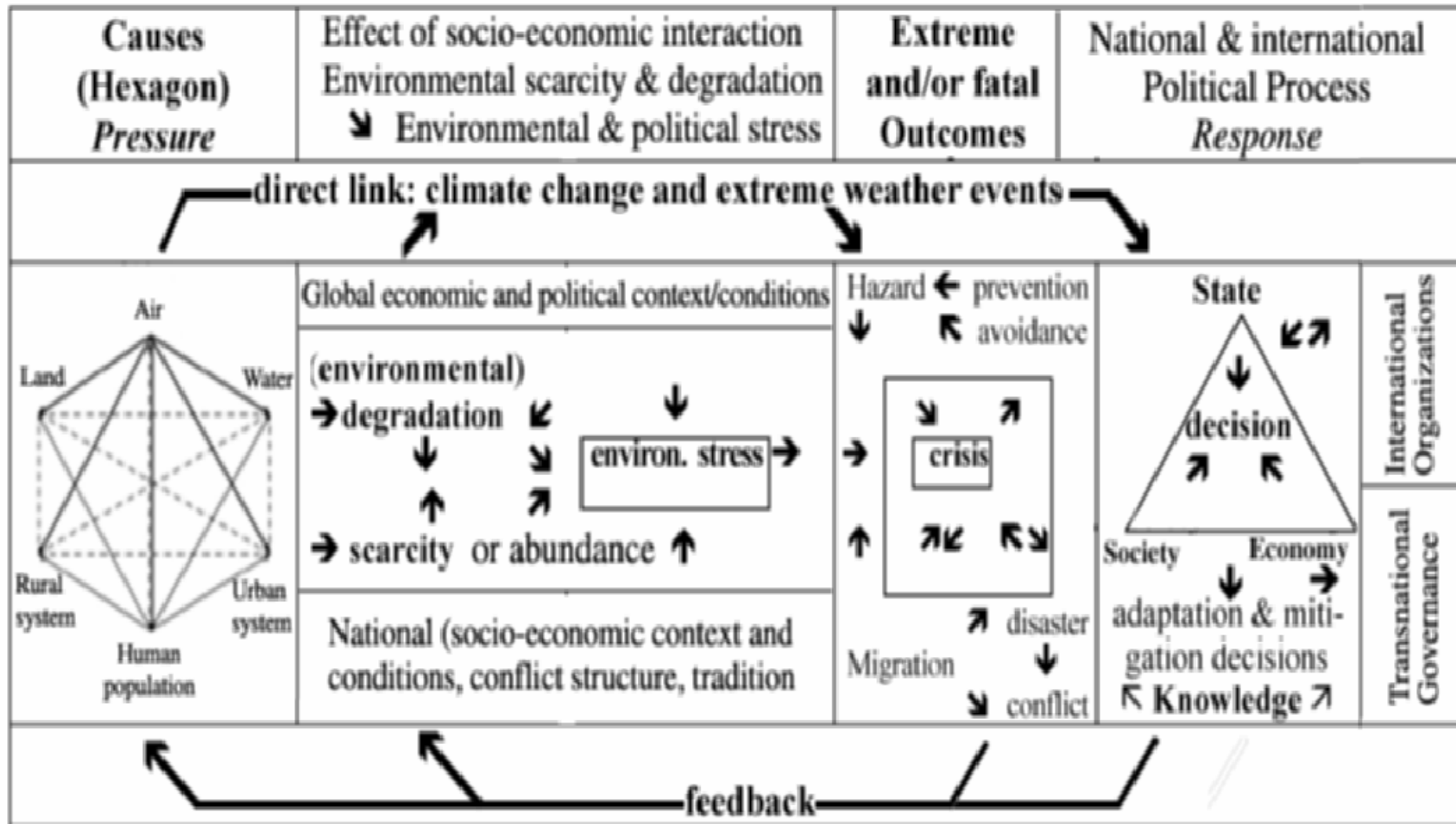# Threats, Disasters and Social Vulnerability

CC and State Security

1. Degradation cycle:
   – CC causes crises and conflicts (disasters, pollution, scarcity and abundance of resources)
   – Conflicts cause environmental damage

2. Disasters can induce different outcomes: Peace agreement in Aceh; greater intensity among Singhalese-led government and Tamil rebels (aid distribution, control of resettlements)

PEISOR Model: Global Change, Environmental Stress and Extreme Outcomes

Source: Brauch 2008

Economic Impact of Climate Change

- UNFCCC: in 2030 between 1.1-1.7% of global investment: 67 -100 billion USD/year
- Additional investment for reducing greenhouse gases: 200 to 210 billion USD
- Passivity ("doing nothing") increases costs enormously
- Investment in prevention substantially reduces final costs
- Ethical business goes beyond immediate profit motives
- Sustainable related values, strategies and practices mitigate impact of CC-related disasters and social inequality and reduce social vulnerability.

Social Vulnerability

- Social vulnerability is an historical and accumulative result of poverty and unequal access to material and cultural consumption.

- Increase susceptibility of a community or person confronted with hazard impacts.

- Poor women and heads of single household are at greater risks.

- Hazard impacts empower affected people and prepare them to cope with disasters.

CC and Human Security

Human, Gender and Environmental Security (HUGE)

Level of expansion	Determination **Which security?**	Mode of expansion, Reference object **Security of whom?**	Values at risk **Security of what?**	Source(s) of threat **Security from whom or what?**
Without	National security (political, military)	The State	Sovereignty, territorial integrity	Other States, terrorism, sub-state act., guerrilla
Increased	Societal security	Nations, social groups	National Unity, national identity	(States), Nations, Migrants, Alien cultures
Radical	**Human security**	**Individuals (Humankind)**	**Survival, livelihood, quality of life, cultural integrity, equality, solidarity**	**The State, nature, globalization, poverty, fundamentalism**
Ultra-radical	**Environmental Security**	**Ecosystem, urban and agricultural system**	**Sustainability, biodiversity, Anthropocene**	**Humankind, Nature, GEC**
Trans-radical	**Gender security**	**Gender relations, indigenous, youth, elders, minorities**	**Equity, identity, social relations and social representations, cultural diversity**	**Patriarchy, totalitarian institutions (élites, governments, culture, religions), intolerance**

Source: Bjørn Møller, 2003:279 and Úrsula Oswald, 2001, 2004, 2008

Pillars of Human Security

1. **Freedom from fear** (political, criminal violence: Canadian approach; Human Security Report, UNESCO, HS Network)

2. **Freedom from want** (poverty, justice, governance, systems of rule: Japanese approach; UNDP 1994; CHS 2003: Ogata/Sen: Human Security Now 2003)

3. **Freedom to live with dignity** (UNO, Kofi Annan: In Larger Freedom 2005)

4. **Freedom from hazard impacts** (reducing vulnerability, enhancing coping capabilities from natural and human-induced hazards; Bogardi/Brauch 2005; Brauch 2005)

CC and Enviornmental Security

Impact on Environmental Security

1. "Development that meets the needs of the present generation without compromising the ability of future generations to meet their own needs" (Brundtland Comission)

1. Disasters confront the vulnerable with a survival dilemma

Survival Dilemma

Hazard Disaster → ... Prevention Avoidance of Conflicts

Crisis

Migration ←→ Conflict

Climate change and environmental stress creates risks, threats and conflicts affecting people, above all women, children, elders with a survival dilemma:

- ✓ **To stay and die of hunger, thirst and violence and wait for external support**
- ✓ **To send part of the family abroad and live from remittances**
- ✓ **To migrate into urban slums with poor life quality**
- ✓ **To migrate internationally and struggle for water, land, food, jobs and livelihood**
- ✓ **Environmentally or war-induced migration as refugees**

CC and Gender Security

Gender Vulnerability

- Indian Ocean tsunami 2004: males out-survived females by a 3:1 ratio (Aceh, Sri Lanka); the Pakistan earthquake ratio was: 4:1.

Reasons:

1. External: women could not swim, wore sari, had long hair and worked mostly inside their homes

2. Gender identity: is " a social construct regarding culture-bound conventions, roles an behaviors for, as well as relationships between and among, women and men, boys and girls" (Krieger, 2001). It explains how a society identifies women as careers and how women assume this role for self-identification.
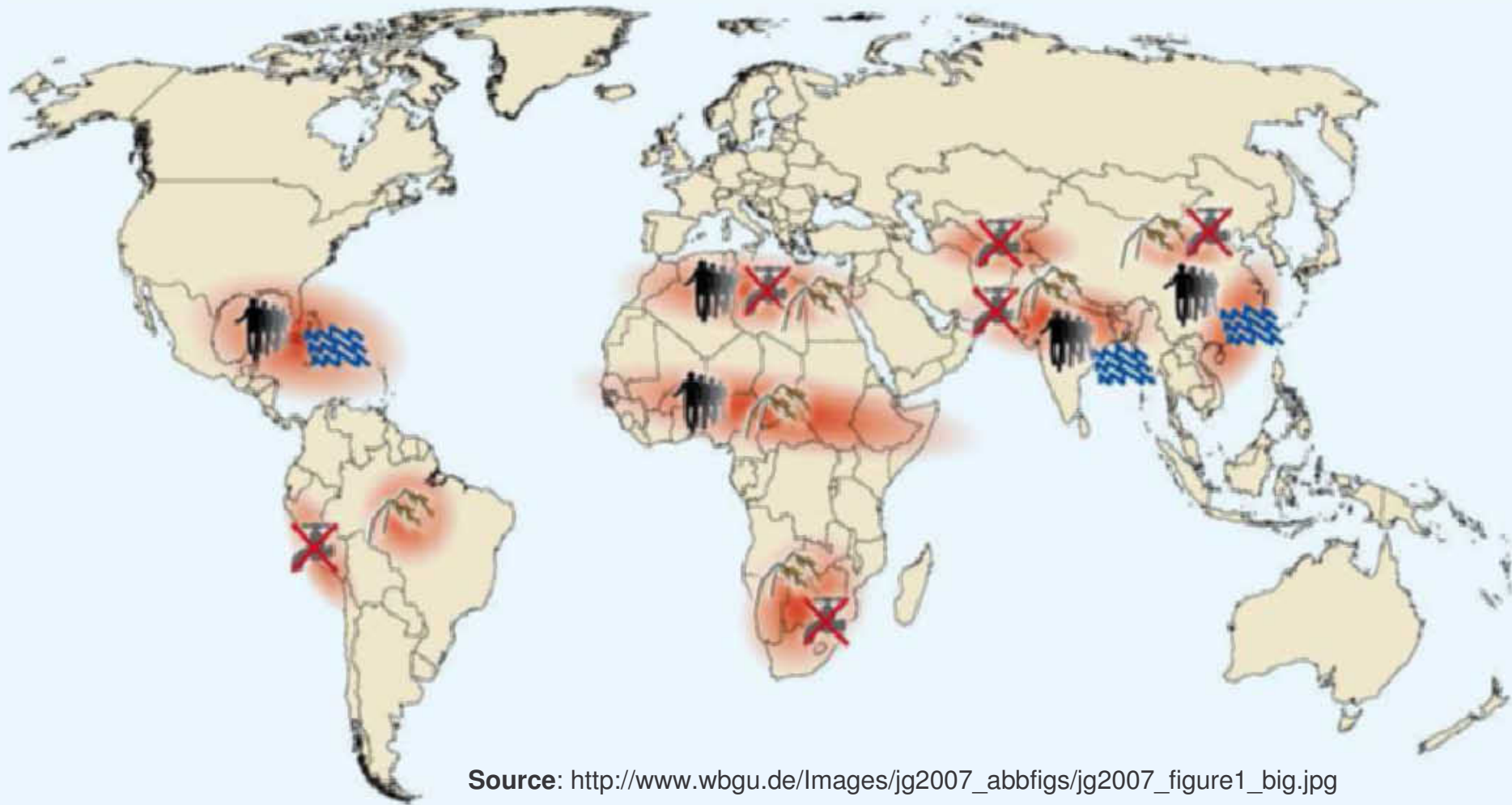
Gender security: Threats from patriarchal system represented by authoritarian governments, religious institutions and elites.

Human, Gender and Environmental Security: HUGE

- **Top-down policies:** equality in development processes, sustainable governmental policies; stable governance and public security; just redistribution of scarce resources; law reinforcement, stimulation of sociopolitical participation of women, youth and elders; ethical businesses; free and equal access to markets; dignified livelihood, food security, health care, education and training.

- **Bottom-up:** internal organization for healthy environment, integral resource management; prevention and remediation practices; economy of solidarity; resilience-building could prevent long-term effects (famine, violent conflicts, refugees).

- **Nonviolent conflict prevention and resolution:** tolerance; political and cultural diversity; participatory democracy; democratic decision making with cultural diversity.

- **A 'huge' solidarity process of sustainable** and intra- and inter- generational equality and development, reinforced by international and local collaboration, solidarity and nonviolent conflict management and risk reduction.

Conflict constellations in selected hotspots

Climate-induced degradation of freshwater resources

Climate-induced increase in storm and flood disasters

Climate-induced decline in food production

Environmentally-induced migration

Hotspot

Women Leaders addressing CC

- Gro Harlem Brundlandt: Commission on Sustainability
- Angela Merkel: G-8 meeting Heiligendamm and Post-2012 Process
- Margaret Beckett UNSC on CC as security issue
- Mary Robinson: UNHCHR, WWL
- Lorena Aguilar: IUCN
- June Zeitlin: WEDO
- Rigoberta Menchu, M. Wangari,
- Francisca Rodríguez/Alicia Muñoz: ANAMURI
- Etelvina Masioli: Brazilian Landless Movement

Prevention

Prevention

1. Reduction of 50% of greenhouse gases (GHG) by 2050: Post 2012
2. Resource conservation
3. Recycling and reuse
4. Restoration of deteriorated ecosystems (forests, corral reefs, mangroves)
5. River basin management
6. Actions against land erosion and desertification
7. Disaster risk reduction and risk management
8. Early warning systems
9. National preventive disaster systems
10. Gender-related disaster responses and training
11. Reduction of social vulnerability: 53% of disaster dead from countries with low human dev. index

Gender Empowerment mitigates CC

- Complex networks sustain human life in normal times. Vulnerability increases during disasters an conflicts.

Alternatives:

1. Develop complex networks and training to support social resilience.
2. Active female and male participation in education and disaster risk reduction.
3. In resilient societies women educate, care and maintain cultural and historical memory.
4. Survival strategies are basically in the hands of women.
5. Empowerment of women reduces gender violence and insecurity prior, during and after disasters.

Alternatives

Women's Key Role in Emergencies

1. Anticipation, early warning and prevention: effective routines reduce victims

2. Climate change threatens livelihood, food and water security

3. Resilience-building reduces the survival dilemma

4. Empowerment of women increases solidarity

5. Sustainable and ethical businesses create sustainable energy and new technologies

6. Science and technology develop alternative energy sources and restoration of ecosystems

CC: Holistic Sustainable Development

1. Anticipation, early warning, prevention and preparation
2. Legal and financial disaster and risk management (top-down)
3. Empowerment and resilience-building (bottom up)
4. Environmentally-friendly and ethical businesses
5. Science and technology: green-house gases must globally be reduced 50% by 2050: Small businesses boost the local and national economy and create new jobs, industries and services
6. Decentralized systems of energy, often at small scale, are supplied with renewable energy sources (wind, solar-thermal, photovoltaic, sea and waves, biogas, biomass from waste, geothermal, hydro energy)
7. Guarantee of basic livelihood or the most vulnerable including health care, food sovereignty, education and training, democratic access to and sustainable use of natural resources, participative planning.
8. Women are able to contribute to sustainable livelihood

Conclusion

1. The International Women Leader Global Security Summit can foster integration of diverse security concerns into an integrated policy perspective (strengthen governments, relief agencies, environmental organizations, peace activities and conflict resolution groups, technology and businesses)

2. Global security challenges posed by CC are urgent and women play a key role in adaptation, mitigation and resilience-building.

3. Coordinated stakeholders and transdisciplinary approaches are able to mitigate negative outcomes and social failures.

4. No simple solution: biofuel from waste to avoid future famine and food insecurity

5. Forests are habitat of wild fauna and flora and mitigate GHG

6. Corral reefs, mangroves, swamps and wetlands mitigate disasters and host great biodiversity.

7. The complexity of CC requires adaptation, social agreements and a new ethic for production and consumption

8. The future is becoming more complex and highly uncertain. Technology itself is becoming a factor for risk. Everyone will have to learn to live with new risks, uncertainty and complex threats, where diversity, openness and solidarity will be the most important parameter for survival of humanity and the Earth

Thank you for your attention

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