

# Emerging Challenges



# HUMAN SECURITY – 7 dimentions

*economic*

*food*

*health*

*environmental*

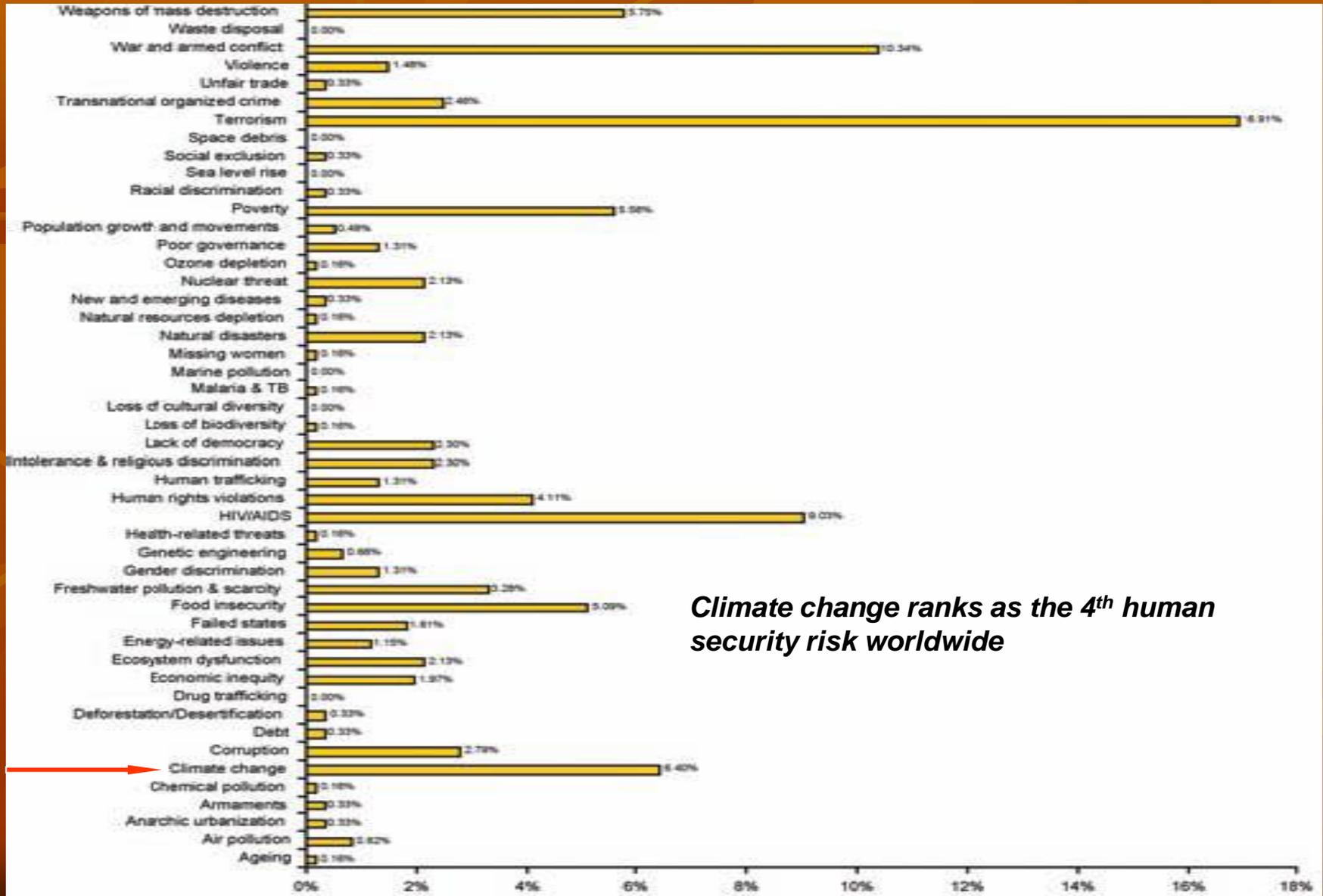
*personal*

*community*

*political*

# Main human security threats and risks

Main human security risks, currently attracting human attention, & financial resources



*Climate change ranks as the 4<sup>th</sup> human security risk worldwide*

# UNESCO Human Security Questionnaire (HSQ)

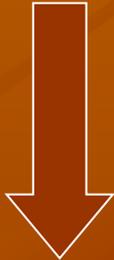
## Question 6

Which approaches and policy tools do you think can best address human security risks and threats?  
(number of answers per category and per choice)

	1 <sup>st</sup> choice	2 <sup>nd</sup> choice	3 <sup>rd</sup> choice	10 <sup>th</sup> choice
Normative approach	25	14	12	27
Precautionary approach	15	13	10	18
Ethical approach	14	22	21	17
Interdisciplinary approach	36	23	12	11
Regional networking	12	21	22	9
Human security indicators	17	18	34	12
Alert system	8	17	11	21
Advocacy	3	6	19	20
Education	38	17	19	2
Training	4	15	9	21
<b>Total</b>	<b>172</b>	<b>166</b>	<b>169</b>	<b>158</b>

# UNESCO's values on ethical foundations of human security

Provide solid ethical foundation



Support it by long-term policies



Face the challenges of human security



# UNESCO's commitment to human security

1. In 2002 human security became one of the Organization's twelve strategic objectives as reflected in its Medium-Term Strategy for 2002-2007
2. UNESCO is launching a new series of publications:  
*Promoting Human Security: Ethical, Normative and Educational Frameworks*
  - (a) the need to have a *solid ethical foundation*
  - (b) buttressing that ethical dimension by *placing existing and new normative instruments at the service of human security*

# The UN humanitarian machinery

- **Emergency Relief Coordinator**
- **Inter-Agency Standing Committee (IASC)**
- **Consolidated Appeals Process (CAP)**
- **Humanitarian Response Review**

# How UNESCO is involved

- Reconstruction of educational systems
- Promotion of cultural diversity including protection of cultural/natural heritage at risk
- Reconstruction and promotion of independent and pluralistic media
- Rebuilding scientific cooperation for improving capacity in disaster reduction response and the restoration of biological diversity

# UNESCO's commitment to human security



*United  
Nations*

*Educational*

*education for all*

*Scientific*

*natural, social, human sciences*

*Cultural*

*culture, communication, information*

*Organization*

# UNESCO's Medium-Term Strategy (31/C4)

*Strategic objective 4 – Promoting principles and ethical norms to guide scientific and technological development and social transformation*

*Sub-objectives: standard setting, policy formulation and awareness-raising regarding ethical issues*

- a) *UNESCO will serve as a interdisciplinary, multicultural and pluralistic forum for issues pertaining to ethics of science and technology*
- b) *UNESCO will support and advise Member States in elaborating appropriate guidelines, policies and normative instruments on ethical issues*

# UNESCO's functions

UNESCO operates on global, regional, sub-regional and country levels as a:

- Laboratory of ideas
- Standard-setter
- Clearing house
- Capacity builder
- Catalyst for international cooperation

# How does UNESCO intervene

- With *technical expertise* within its spheres of competence
- As a *facilitator* in leading complex and multi-stakeholder initiatives towards reconstruction and reconciliation
- As an *adviser* on the development of evidence-based educational, cultural, scientific and media policies from emergency contexts towards reconstruction and development
- By *linkage* with civil society in particular professional networks and communities, such as teachers, students, media and cultural professionals
- As a *promoter* of norms and standards

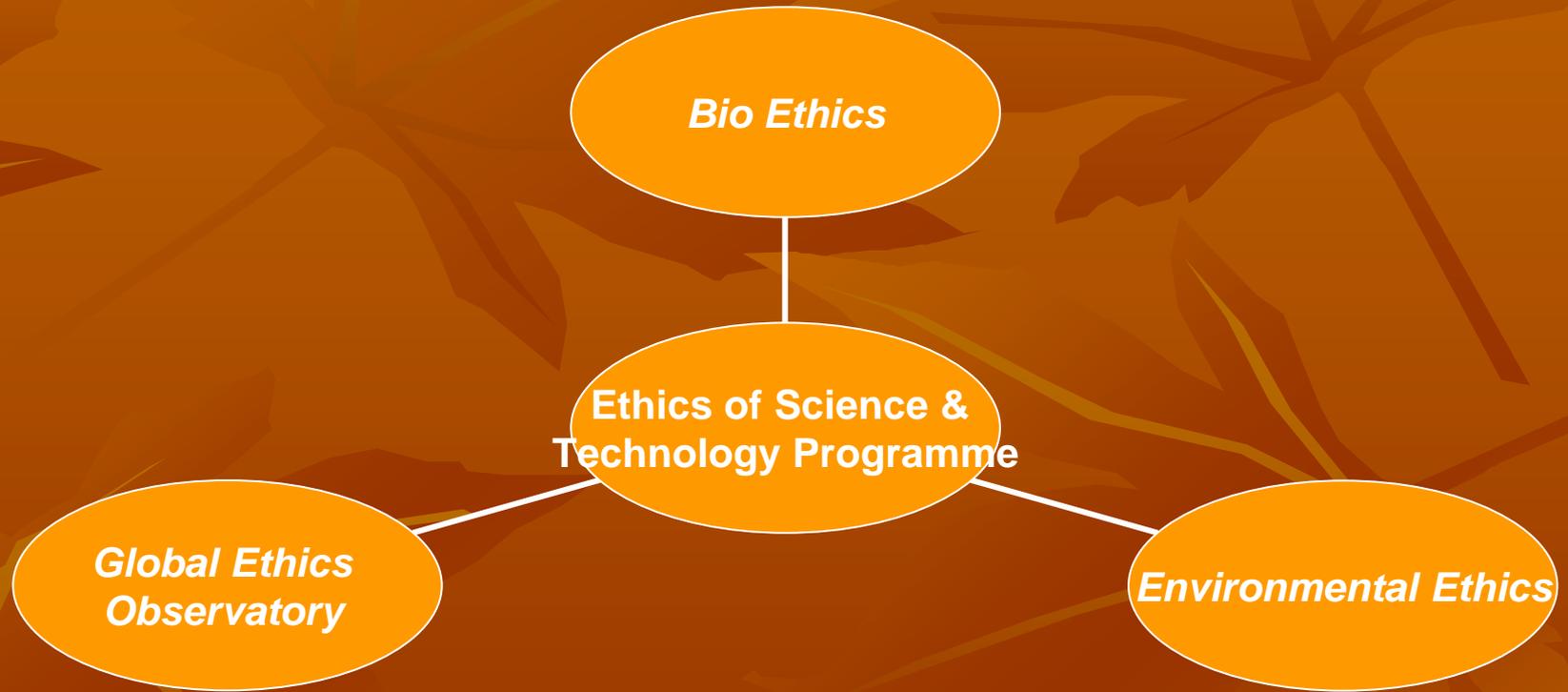
# Ethics of science and technology at UNESCO

## WHY UNESCO

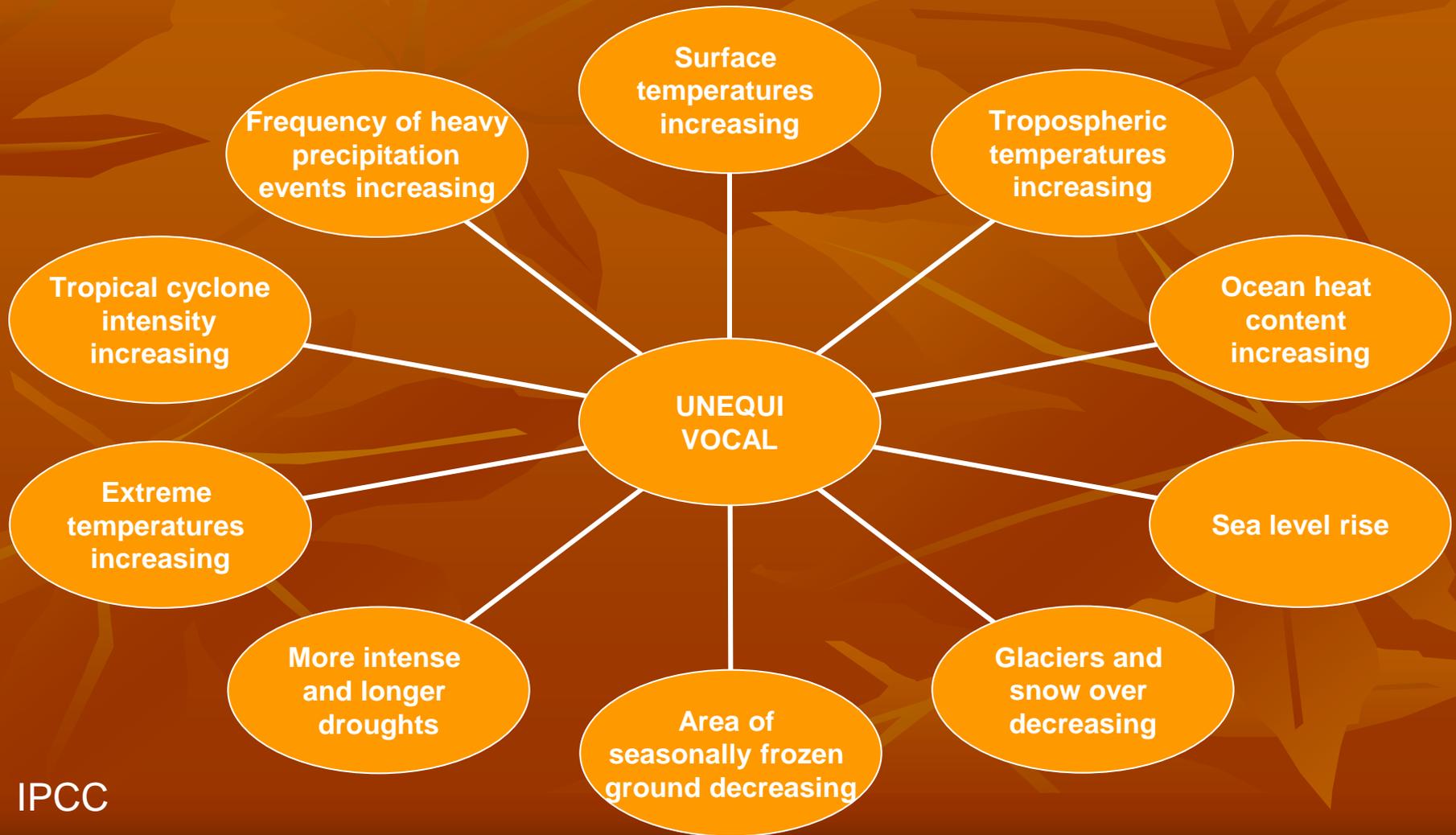
*The science & technology we have today can and should protect the lives and property of people*

- UNESCO is the primary UN Agency with a specialized mandate in the human and social sciences
- It is strategically and appropriately positioned to promote global ethics framework

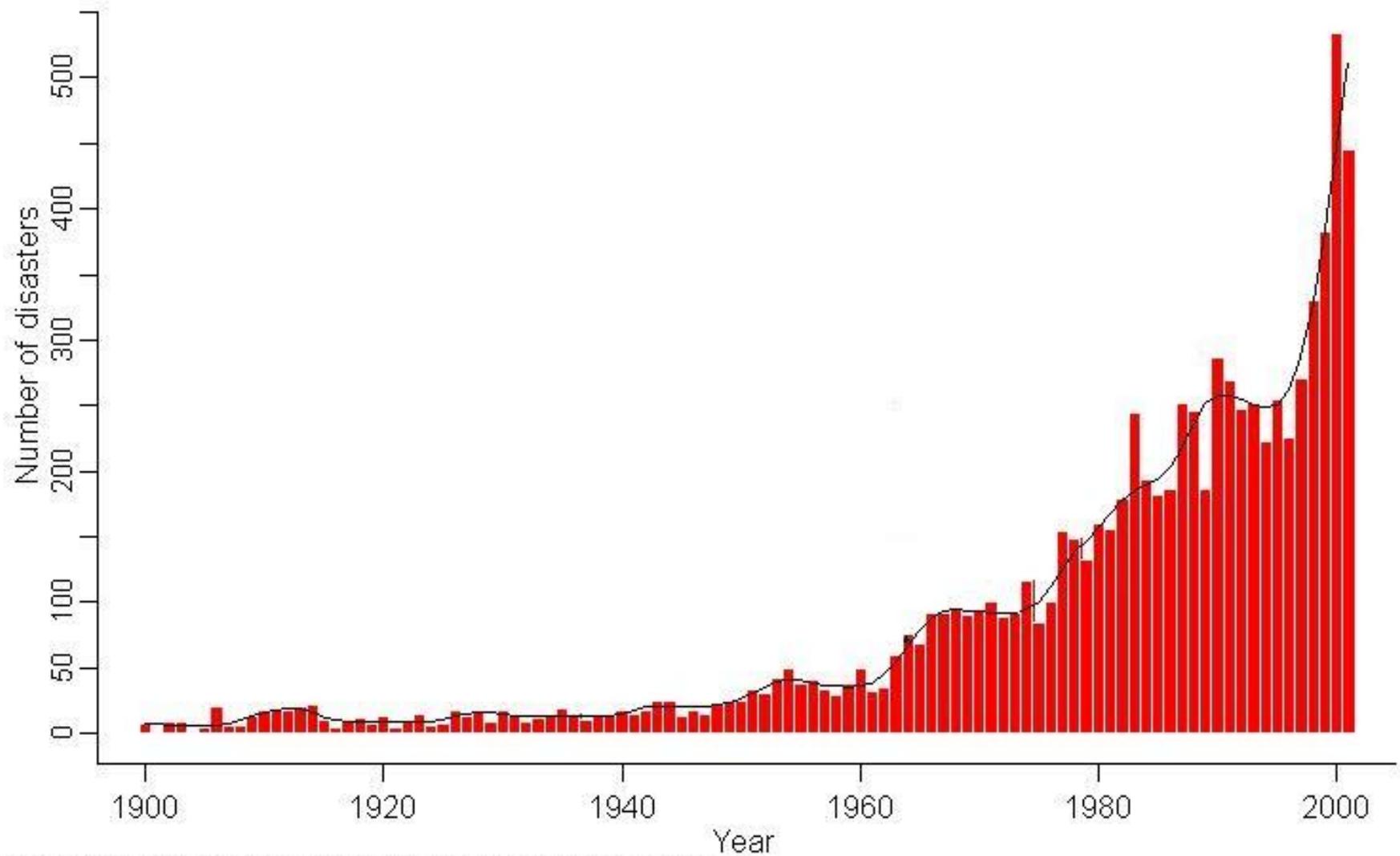
# Ethics of science and technology at UNESCO



# Climate change is unequivocal and global

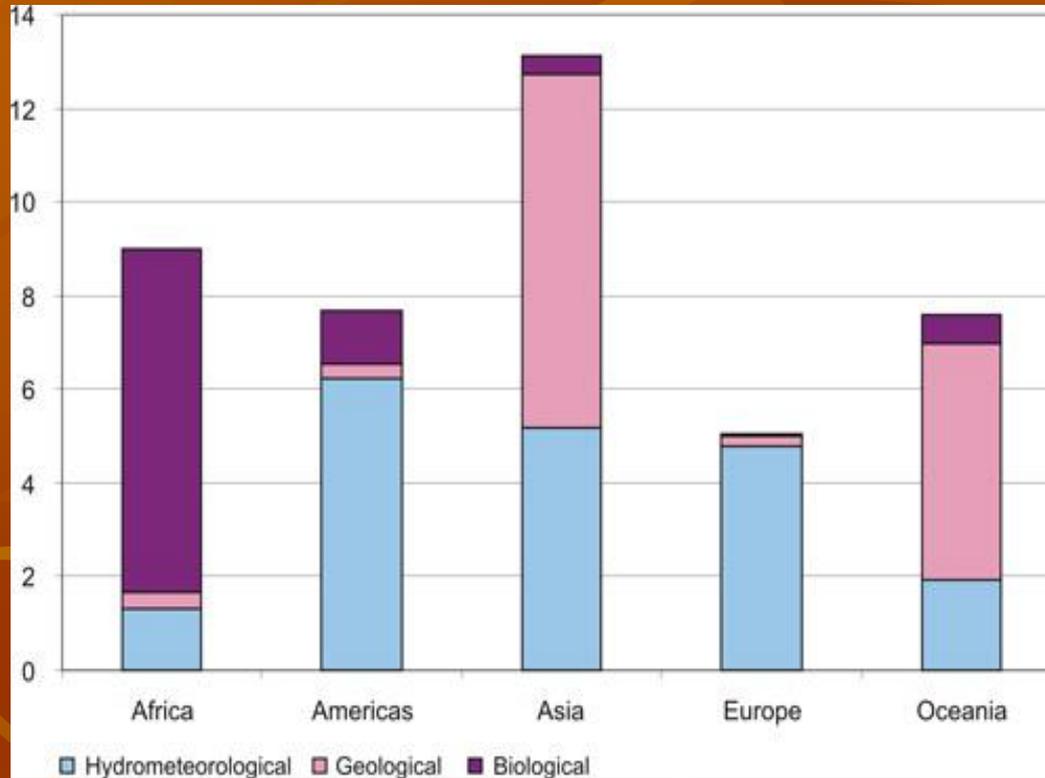


# Natural disasters reported



EM-DAT: The OFDA/CRED International Disaster Database  
(<http://www.cred.be>)

Average number of people reported killed, per million inhabitants by continent and disaster origin  
1991 - 2005



Source: ISDR

## Number of people reported killed by type of disaster and level of development

1991 - 2005

	Flood	Wind storm	Drought*	Slide	Earthquake & tsunami	Volcanic eruption	Epidemic	Total
OECD	2150	5430	47516	426	5910	44	442	61918
CEE+CIS	2635	512	3109	1176	2412	0	568	10412
Developing countries	97061	65258	12599	9369	397303	900	47616	630106
Least developed countries	20127	149517	3320	1739	9247	201	70588	254739
Countries not classified	99	767	57	23	2277	0	104	3327
Total	122072	221484	66601	12733	417149	1145	119318	960502

\*: Drought related disasters category includes extreme temperatures

Source: ISDR



***It is the poorest people who are the most affected***

# DISASTERS

## NATURAL DISASTERS

## HUMAN DISASTERS

### SUDDEN

### SLOW

### ENVIRONMENTAL

### TECHNOLOGICAL

- Earthquakes

- Tsunami

- Volcanic Eruptions

- Floods

- Landslides

- Storms, Hurricanes

- Cyclones

- Climate Changes

- Desertification

- Drought

- Climate Changes  
(greenhouse effect)

- Deforestation

- Uncontrolled town  
planning, megapoles

- Drying Lakes

- Chemistry (Bhopal,  
India)

- Nuclear (Chernobyl,  
Ukraine)

- Oil spill (Exxon  
Valdez/Alaska)

INTERACTIONS COMPLEX DISASTERS

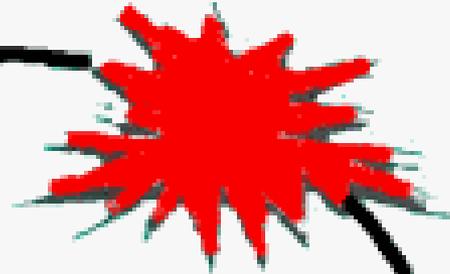
# Disaster Cycle

**Disaster Impact**

**Social awareness**

**Preparedness**

**Education and training**



**emergency  
search, rescue**

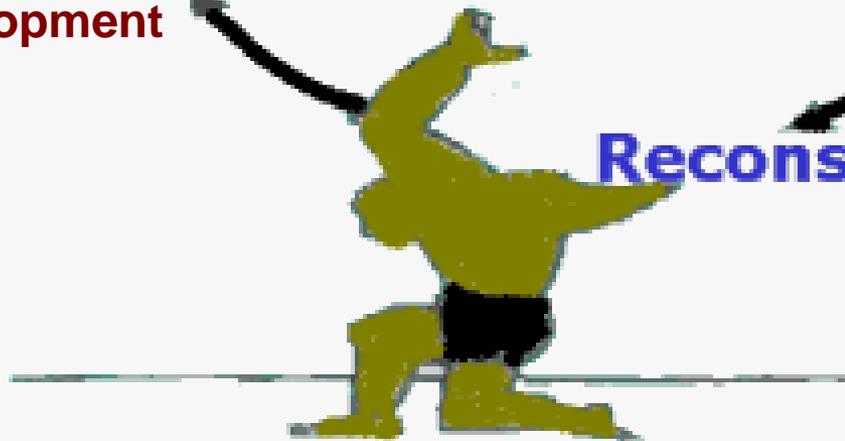
**Relief**

**Rehabilitation**

**recovery**

**Reconstruction**

**Mitigation**  
**development**



# **Paradigm Shift**

**From**  
**post-disaster reaction**  
**To**  
**pre-disaster action**

## BREAKING THE LINK

- Risk assessment
- Prevention
- Preparedness
- Emergency response

**Hazards are inevitable**

**Disasters are not inevitable**

A diagram illustrating the relationship between Hazard, Vulnerability, and Risk. The words "HAZARD", "VULNERABILITY", and "RISK" are each enclosed in a blue oval with a white border. The word "HAZARD" is on the left, followed by a white "x" symbol, then "VULNERABILITY" in a larger oval, followed by a white "=" symbol, and finally "RISK" in a smaller oval on the right. The background is a textured orange-brown color with faint leaf patterns.

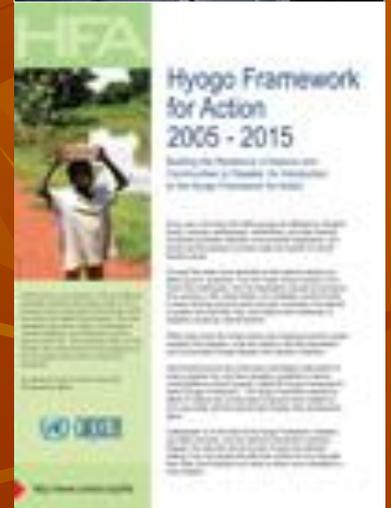
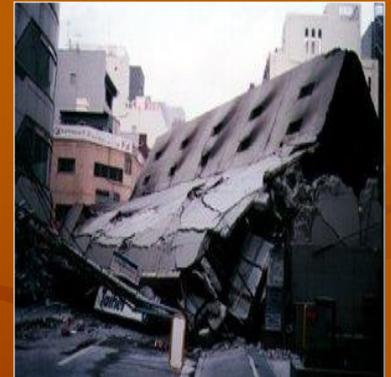
$$\text{HAZARD} \times \text{VULNERABILITY} = \text{RISK}$$

A diagram illustrating the relationship between H, V, and R. The letters "H", "V", and "R" are each enclosed in a blue rectangle with a white border. The letter "H" is on the left, followed by a white "x" symbol, then "V" in a larger rectangle, followed by a white "=" symbol, and finally "R" in a smaller rectangle on the right. The background is a textured orange-brown color with faint leaf patterns.

$$H \times V = R$$

# INTERNATIONAL STRATEGY FOR DISASTER REDUCTION (ISDR)

- ✓ objective: To reduce disaster risk, worldwide, focussing on nations and communities
- ✓ The instrument: Hyogo Framework for Action 2005-2015
- ✓ The vehicle: ISDR system - 'movement'



# The United Nations system engaged in disaster reduction



World Meteorological Organization



World Health Organization

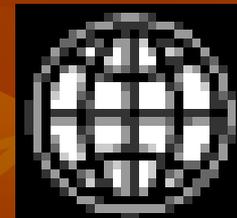


For every child  
Health, Education, Equality, Protection  
ADVANCE HUMANITY



UN-HABITAT

United Nations Human Settlements Programme



WORLD BANK

# Long-term Goals

- **Observation and early warning networks of natural hazards**
- **Hazard risk mapping**
- **Disaster-resistant building codes**
- **Education for disaster reduction**
- **Help make schools safer**
- **Promotion of public awareness through communication**
- **Protection of cultural monuments and sites**

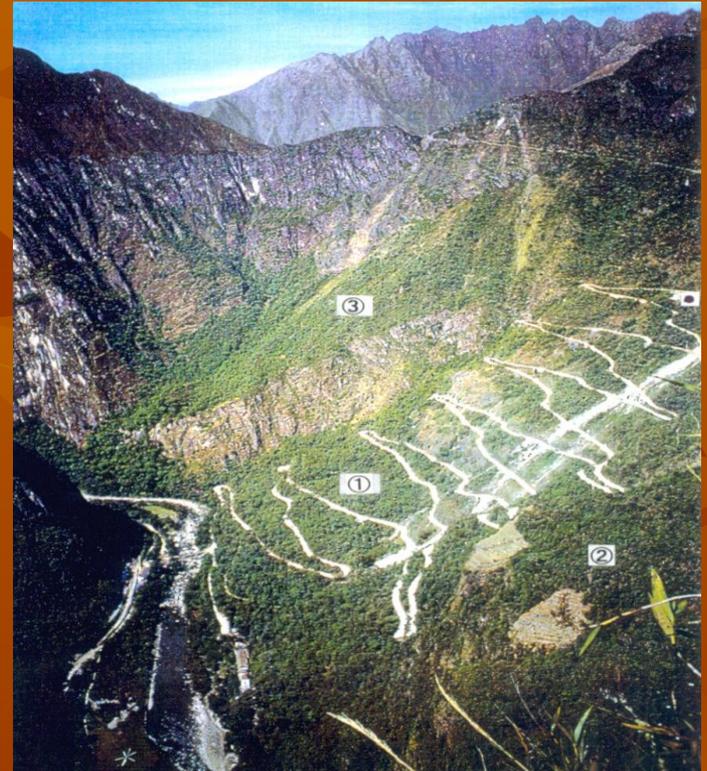


# UNESCO Science and Technology programmes in Disaster Reduction

- Natural hazards programme
- International Geoscience Programme (IGCP)
- International Hydrological Programme (IHP)
- Man and Biosphere (MAB) Programme
- Programmes of UNESCO's Intergovernmental Oceanographic Commission (IOC)
- Engineering programmes

# UNESCO's response to natural disaster

To protect  
educational buildings  
and cultural heritage



Landslides, Machu Pichu, Peru  
International Programme on  
Landslides supported by  
UNESCO

# UNESCO's response to natural disaster

**To strengthen environmental protection for the  
prevention of natural disasters**

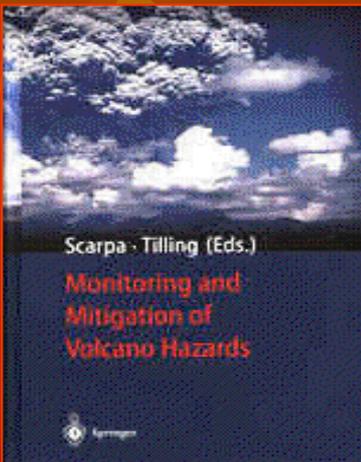
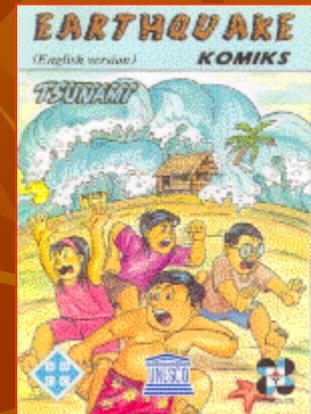
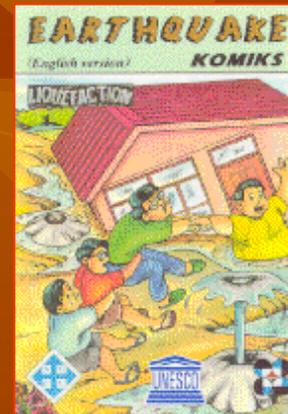
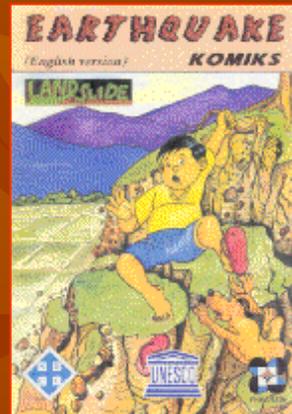


**Planting a tree, St Vincent in the Grenadines, 2003**

**UNESCO CSI project**

# UNESCO's response to natural disaster

To enhance preparedness and public awareness through education and training



# UNESCO's response to natural disaster

**And, when catastrophes do strike, to foster post-disaster investigation, recovery and rehabilitation**



**UNESCO post earthquake mission, Bam, Iran 2003**