

Emerging Challenges



HUMAN SECURITY – 7 dimentions

economic

food

health

environmental

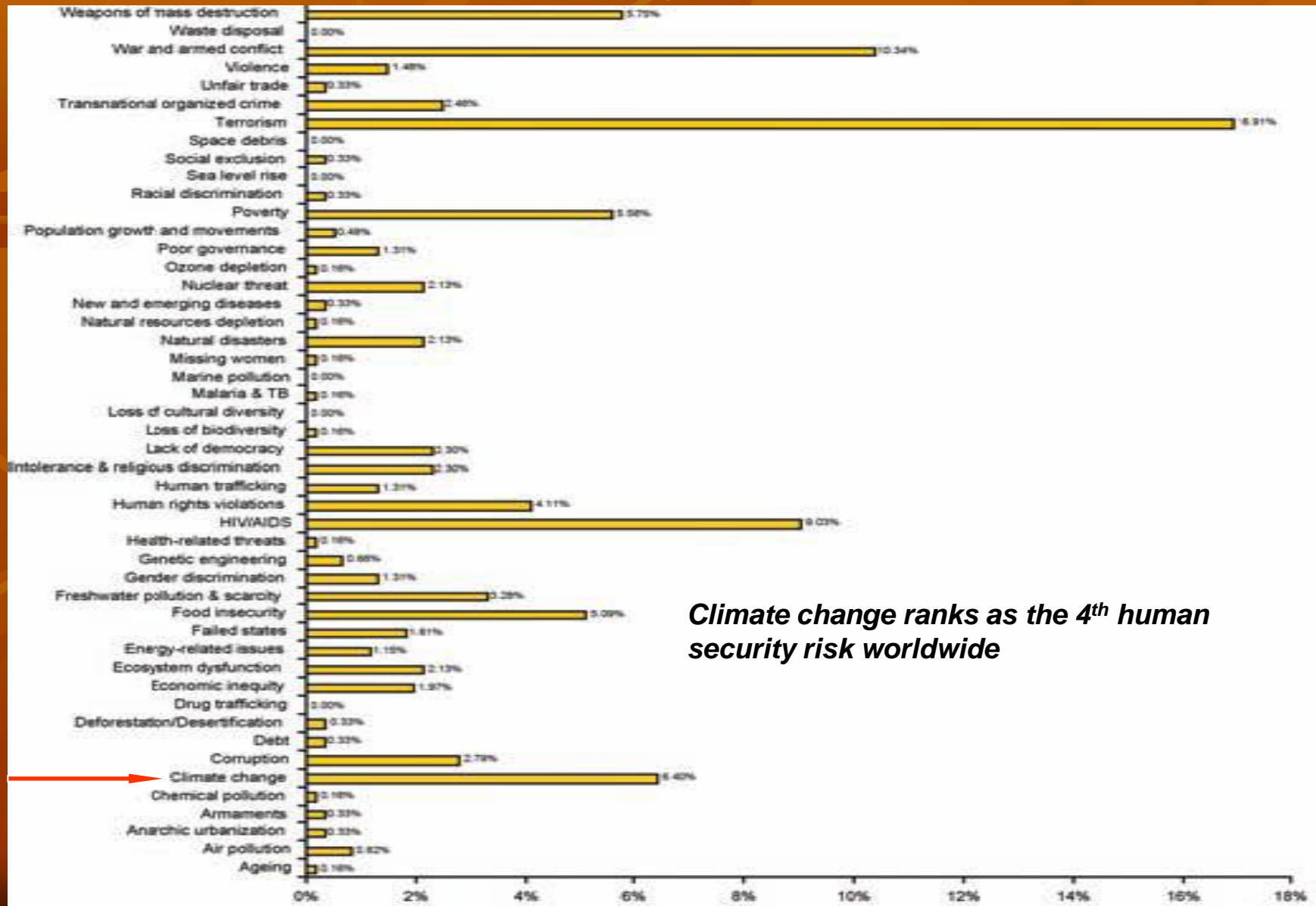
personal

community

political

Main human security threats and risks

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



Climate change ranks as the 4th 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 st choice	2 nd choice	3 rd choice	10 th 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
Total	172	166	169	158

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

UNSECO 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

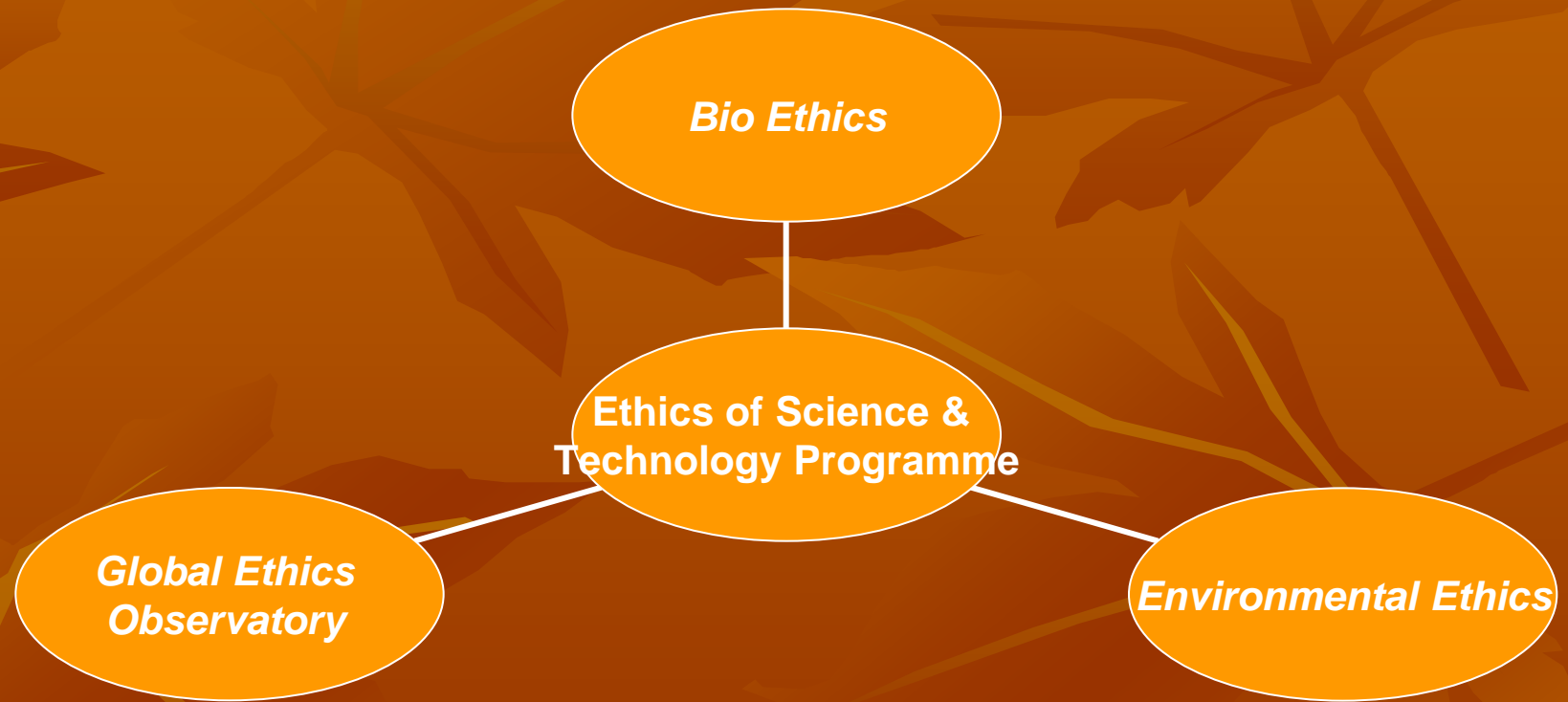
Ethics of science and technology at UNESCO

WHY UNESCO

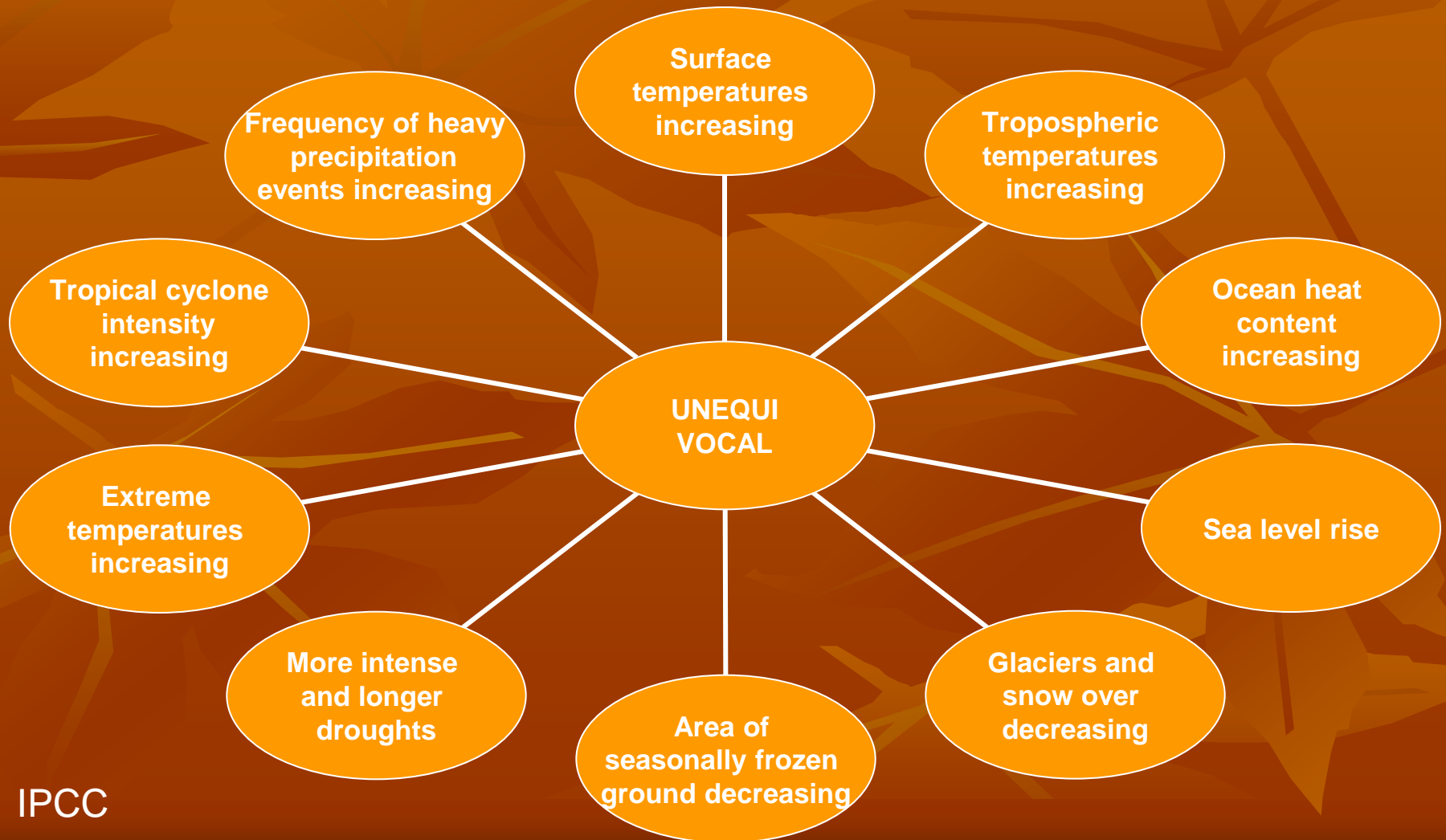
The science & technology we have today can and should protect the lives and property of people

- 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

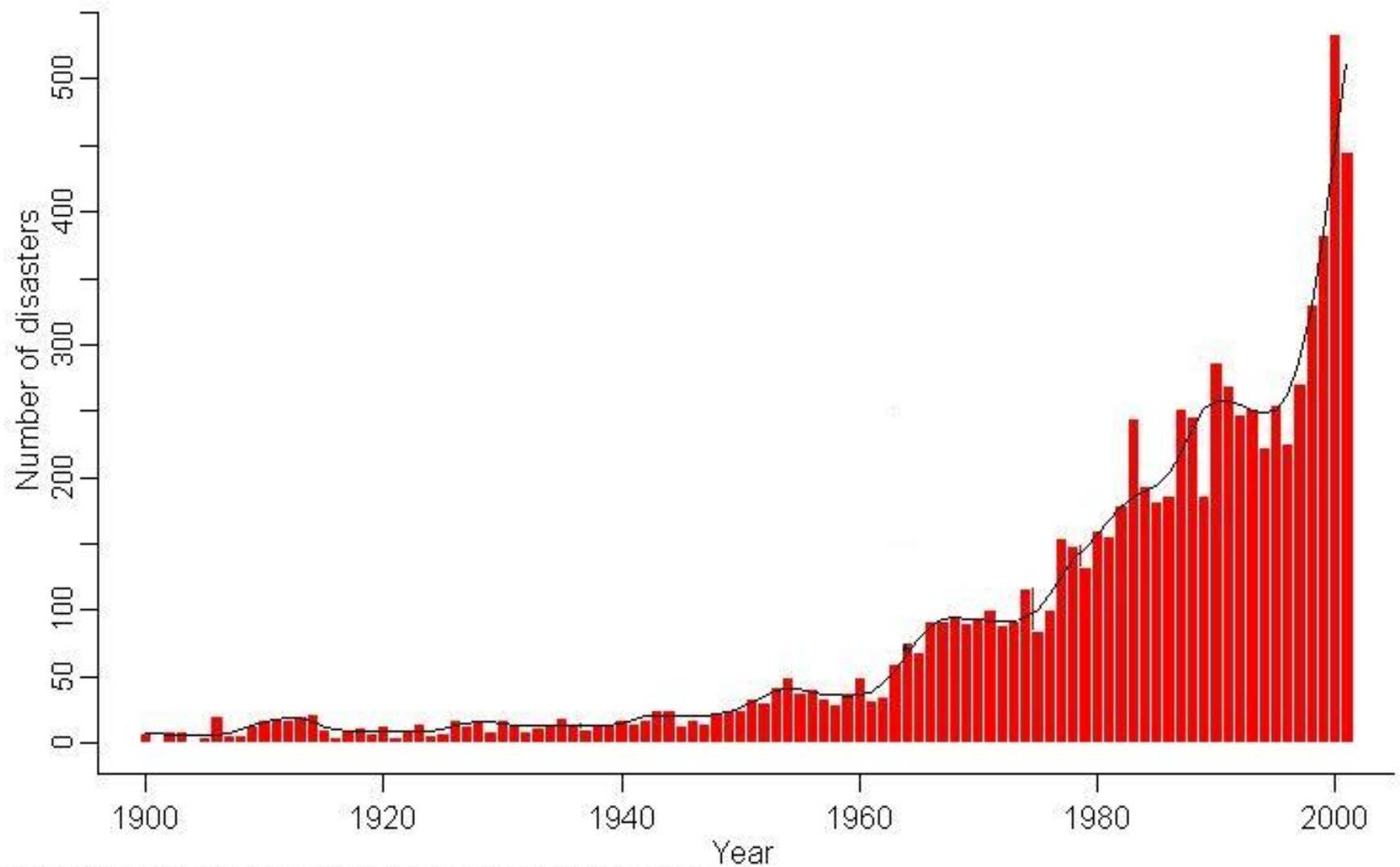
Ethics of science and technology at UNESCO



Climate change is unequivocal and global

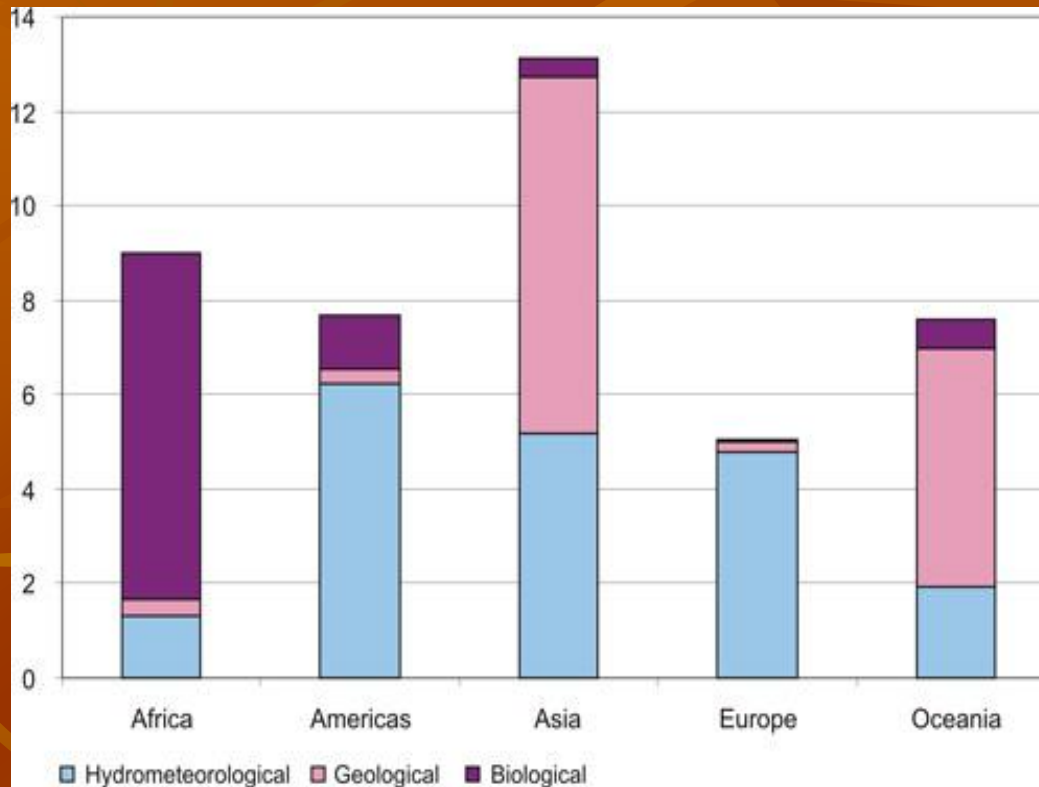


Natural disasters reported



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

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graph TD; DISASTERS --> NATURAL_DISASTERS[NATURAL DISASTERS]; DISASTERS --> HUMAN_DISASTERS[HUMAN DISASTERS]; NATURAL_DISASTERS --> SUDDEN; NATURAL_DISASTERS --> SLOW; HUMAN_DISASTERS --> ENVIRONMENTAL; HUMAN_DISASTERS --> TECHNOLOGICAL; INTERACTIONS([INTERACTIONS COMPLEX DISASTERS]) --> SUDDEN; INTERACTIONS --> SLOW; INTERACTIONS --> ENVIRONMENTAL; INTERACTIONS --> TECHNOLOGICAL;
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NATURAL DISASTERS

SUDDEN

- Earthquakes
- Tsunami
- Volcanic Eruptions
- Floods
- Landslides
- Storms, Hurricanes
- Cyclones

SLOW

- Climate Changes
- Desertification
- Drought

HUMAN DISASTERS

ENVIRONMENTAL

- Climate Changes (greenhouse effect)
- Deforestation
- Uncontrolled town planning, megapoles
- Drying Lakes

TECHNOLOGICAL

- Chemistry (Bhopal, India)
- Nuclear (Chernobyl, Ukraine)
- Oil spill (Exxon Valdez/Alaska)

INTERACTIONS COMPLEX DISASTERS

Disaster Cycle

Disaster Impact



Paradigm Shift

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

BREAKING THE LINK

- Risk assessment
- Prevention
- Preparedness
- Emergency response

Hazards are inevitable

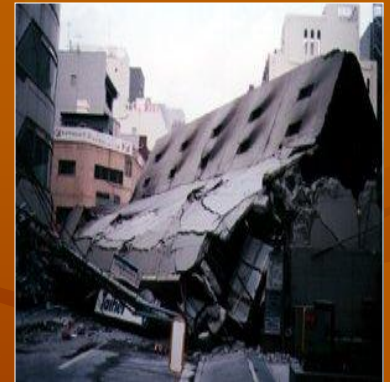
Disasters are not inevitable


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

$$H \times V = R$$

INTERNATIONAL STRATEGY FOR DISASTER REDUCTION (ISDR)

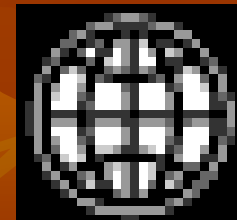
- ✓ objective: To reduce disaster risk, worldwide, focussing on nations and communities
- ✓ The instrument: Hyogo Framework for Action 2005-2015
- ✓ The vehicle: ISDR system - 'movement'



The United Nations system engaged in disaster reduction



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



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

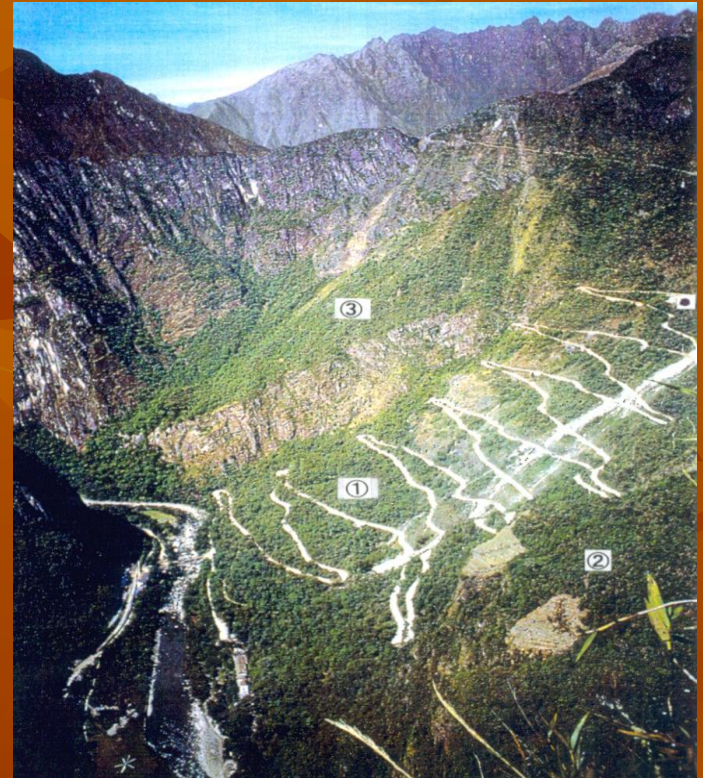


UNESCO Science and Technology programmes in Disaster Reduction

- 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**

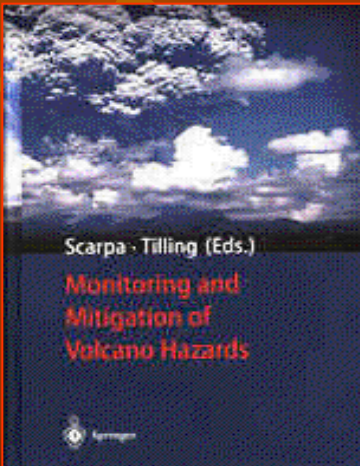
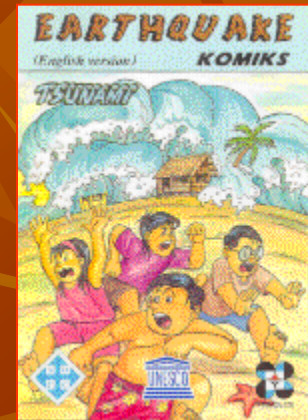
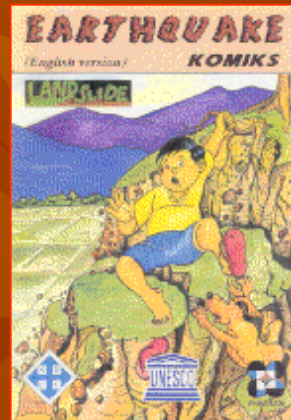


Planting a tree, St Vincent in the Grenadines, 2003

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