
Resolution on Natural Disasters

Whereas the tsunami caused by the magnitude nine earthquake of December 26, 2004 wreaked havoc on island and coastal communities in the central and eastern Indian Ocean, and

Whereas this disaster makes self-evident the need to improve capabilities for alerting coastal and island populations to tsunamis and their effects,

The International Geographical Union directs the attention of the scientific community, especially the attention of its sister Unions in the International Council for Science (ICSU) concerned with the earth sciences, and especially the attention of its sister Unions in the International Social Science Council (ISSC), to the need for integrated knowledge-building strategies and co-ordination with respect to the following considerations:

- tsunamis, though dramatic, are but one component of a vast family of disasters caused by natural processes and human behaviour. Consequently, holistic views incorporating conceptual and methodological approaches that integrate physical, ecological, and behavioral perspectives should be adopted by all scientists concerned with earth processes.
- the Ocean Global Observing System (GOOS) and the global monitoring systems recommended by Agenda 21, Chapter 17, of the United Nations Conference on Environment and Development (UNCED) do not function effectively in any part of the ocean, coastal, and island world. Moreover, they are designed to monitor physical processes rather than spatial manifestations of human behaviour. Hence, efforts are needed to expand global monitoring systems, to disseminate quickly and widely the information they produce, and to increase the monitoring of human effects on earth surface processes.
- educational systems must assess the physical processes that cause natural disasters, the ways human communities exacerbate disasters and their consequences, and the policies and programs needed to prevent and mitigate disasters. Therefore special efforts are needed to integrate educational elements from physical and human geography.
- public awareness of natural disasters and the implementation of prevention and mitigation programs at all geographical scales must be expanded, particularly in regions where catastrophic consequences of tectonic processes are likely to cause great destruction;

Accordingly, the International Geographical Union Commits Itself to:

Strengthening co-operation with non-governmental scientific organisations (particularly with the sister unions of ICSU), inter-governmental coalitions, and local organisations in order to establish and upgrade global monitoring systems, educational and training programs and services, and spatial planning and environmental management;

Mobilizing its commissions and task forces to design and conduct investigations aimed at improving knowledge of the interactions between physical processes and human behaviour especially its Commission on Hazards and Risks and its Task Force on Vulnerability.

Recommending that its Commissions and Task Forces investigate the physical processes and related human behaviour that affect long-term climate change and its effects on biogeochemical cycles;

Recommending further that its Commissions and Task Forces examine human processes that are coupled with natural systems and physical processes, with the aim of better understanding how they influence such crucial problems such as fresh water management, coastal erosion, and desertification, on which the 2000 Millennium Declaration of the United Nations and the 2002 Plan of Implementation of the World Summit on Sustainable Development (WSSD) focused;

Drawing useful lessons from case studies in order to improve spatial planning and environmental management in regions and places subject to natural disasters;

Encouraging its Commissions, Task Forces, Regional Networks, and National Committees to convene scientific meetings to discuss the interactions between natural disasters and human behaviour;

Supporting any effort carried out by the ICSU GeoUnions Joint Initiative to improve assessment and to design social behavioural approaches to natural disasters with specific reference to Megacities and to coastal and island settlements.

Inviting the *Oceans 21* programme, convened jointly with the Intergovernmental Oceanographic Commission (IOC) of UNESCO, to include natural disasters in its science plan and to focus on the need to enhance educational and training tools and on initiatives aimed at helping local institutions and organisations improve spatial planning and environmental management.

Encouraging the local organising committees of IGU regional conferences and international geographical congresses to host sessions on the natural disaster prevention and mitigation.