

Tsunami

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UN/ISDR Library for Disaster Reduction April 2006

ISDR-BIBLIO



Acknowledgement of donors:



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Indice

ISDR-BIBLIO is a bibliographic compilation of publications available at the ISDR System Library and related to a specific hazard or aspect of disaster reduction.

The first edition of ISDR-BIBLIO, is on tsunamis literature in commemoration of the devastating earthquake of 26 December 2004 that triggered a giant tsunami throughout the Indian Ocean causing the death of mostly 300,000 people as well as extensive damages. This catalogue lists major academic, technical and scientific publications on tsunami as well as reports produced by United Nations agencies.

The ISDR System Library will regularly issue ISDR-BIBLIO based on the theme of the World Disaster Reduction Campaign and upon request for a specific event.

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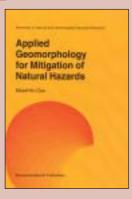
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ID: 153 Applied Geomorphology for Mitigation of Natural Hazards

Series Advances in Natural and Technological Hazards Research, Vol. 15 By Masahiko Oya Kluwer Academic Publishers, 2001 167 pages ISBN 0792367197

There are many natural hazards such as floods, landslides, volcanoes and earthquakes in the Asia-Pacific region. Nevertheless, there are few studies of such natural hazards in this region and knowledge about their mitigation is of the utmost importance. This book documents the use of geomorphological maps showing the state of flooding which allows predictions to be made.

The author has compiled geomorphological maps and documentation of their validation, and the maps allow not only estimation of flooding, but also prediction of soil liquefaction caused by earthquakes. The results of the discussions in this book apply not only to geographers, consultants, engineers and policy makers in Japan and Southeast Asian countries, but also to those from Europe, North America, and Africa.

Areas: Geomorphological studies in europe; validation of a geomorphological survey map; relationships between geomorphic units and flood types of river basins; flooding in semi-frigid zones; differences in geomorphology and flooding between the left and right banks of rivers along the median dislocation line; estimation of land collapse in Japan's mountainous and volcanic regions; Japan's coastal lakes; flood control in Tokyo, Osaka and Nagoya; determining areas at risk of soil liquefaction during an earthquake; use of geomorphological land classification maps in technical assistance to developing countries.



ID: 9414 Caribbean Tsunamis, A 500-Year History from 1498-1998 Series Advances in Natural and Technological Hazards Research, Vol. 20 By K.F. O'Loughlin and James F. Lander Kluwer Academic Publishers, 2004 280 pages ISBN 1-4020-1717-0

Caribbean Tsunamis - A 500-Year History from 1498-1998 broadly characterizes the nature of tsunamis in the Caribbean Sea, while bearing in mind both scientific aspects as well as potential interest by the many governments and populations likely to be affected by the hazard. Comprehension of the nature of tsunamis and past effects is crucial for the awareness and education of populations at risk.

Audience: This book provides a thorough, yet highly accessible review of tsunamis in the Caribbean. It is of interest not only to tsunami and natural hazards specialists at academia and governmental institutes, but also to policy makers and to the general public.

Written for: Tsunami and natural hazards specialists at academia and governmental institutes, policy makers, general public.

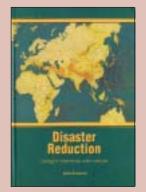


ID: 8772 Developing Tsunami-Resilient Communities Edited by E.N. Bernard, The National Tsunami Hazard Mitigation Program Springer, 2005 VI-186 pages

ISBN 1-4020-3353-2

Tsunamis remain an ever-present threat to lives and property along the coasts of most of the world's oceans. Because of the geographical extent of U.S. coastlines, an earthquake in Alaska can generate a local tsunami for Alaskans and, hours later. a distant tsunami for communities in Hawaii and along the Pacific Coast. This volume chronicles the development and accomplishments of a joint State/Federal partnership that was forged to reduce tsunami hazards along U.S. coastlines the National Tsunami Hazard Mitigation Program. By integrating hazard assessment, warning guidance, and mitigation activities, the program has created a roadmap and a set of tools to develop communities more resilient to local and distant tsunamis. Among the set of tools are tsunami forecasting, educational experiments, early alerting systems, and design guidance for tsunamiresilient communities.

Written for: Coastal community planners, emergency managers, responders, natural hazard policy makers, partnership builders, researchers in oceanography, seismology, and social science, educators, and other researchers/practitioners in the field of natural hazard impacts and risk assessment.



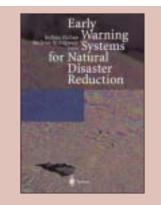
ID: 8678 Disaster reduction: Living in harmony with nature By Julio Kuroiwa, 2004 496 pages ISBN 9972-9999-0-4

The main focus of the book is on disaster reduction, a subject that is addressed from a multidisciplinary and comprehensive viewpoint.

The effect of life-threatening hazards depends on how their magnitude or intrinsic intensity acts on the series of precautionary measures taken to confront them. There is, therefore, a historic process of foresight, strengthening of the social structure, and recognition of the geographic environment, which removes or at least attenuates - the vulnerability of the human condition. The vulnerability of the human species and its organizations is not necessarily fatal. It is possible to control the extent of the damage that can be caused by a given hazard. The less vulnerable the human group has become, the less serious will be the impact of the threatened hazard once it strikes.

Where intense or extreme natural phenomena occur, man can save his life, reduce vulnerability and minimize the element of risk inherent to his constructions by locating his dwelling places in low-hazard areas. This is why we must learn to live in harmony with Nature, listening to her wisdom, and taking care not to destroy the defences she has to offer.

A recurring theme that is emphasized in every chapter is that disaster prevention and mitigation must be carried out by applying the lessons we have learned from Nature itself.



ID: 5980 Early Warning Systems for Natural Disaster Reduction Edited by Jochen Zschau and Andreas N. Küppers Springer-Verlag, 2003 834 pages ISBN 3-540-67962-6

This book offers a comprehensive account of early warning systems developed for hydro-meteorological disasters such as floods, storms, etc. and for geological disasters such as earthquakes, volcanic activity or mountain hazards. One major theme is the increasingly important role in early warning systems played by the rapidly evolving fields of space and information technology.

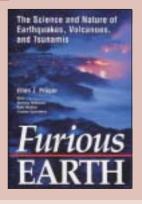
Based on 109 selected contributions by outstanding experts in the relevant scientific and technical fields, presented at the International IDNDR Conference: Early Warning Systems for Natural Disaster Reduction (EWC8) at the GeoForschungsZentrum, Potsdam, Germany, the authors offer a comprehensive overview and in-depth insight into the state of the art and future perspectives for early warning systems. This book is intended for decision-makers in the political arena, scientists, engineers and those responsible for public communication and dissemination of warnings.



ID: 7258 Floods (Volume II) By D.J. Parker Routledge, 2000 317 pages ISBN 0-415-22743-7

This book is one of several on the theme of hazards and disasters which are being written and published by Routledge as a new millennium dawns. These volumes coincide with the end of the United Nations International Decade for Natural Disaster Reduction (IDNDR) (1990-2000), and were partly inspired by that international initiative. At a time when flood hazards are growing in the world, Floods provides an opportunity to draw together and to assess findings from a wide range of research and practical experience in managing flood hazards and disasters. The volumes are designed to bring together both new and landmark research from leading experts worldwide. They include contributions from the very wide range of disciplines which should make contributions to flood hazard and disaster management, and include some contributions by practitioners.

Floods presents the most comprehensive collection to date of new research, providing a rich body of theory and experience and drawing together contributions from over fifty leading international researchers in the field. An extensive range of case-studies covering major floods and regions prone to flooding worldwide are included.

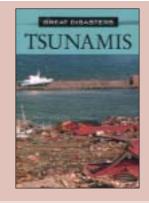


ID: 9408 Furious Earth: The Science of Nature of Earthquakes, Volcanoes and Tsunamis By Ellen J. Prager McGraw-Hill, 2000 235 pages ISBN 0071351612

The Science Behind the Earth's Most Catastrophic Phenomena.

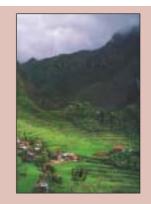
If our planet is a sleeping giant, it slumbers fitfully and awakens in powerful starts. Our familiar landscape bears the scars of hidden forces at work deep beneath it. Furious Earth contains the latest science on these forces and the cataclysmic phenomena they produce earthquakes, volcanoes, and tsunamis.

Furious Earth sheds light on the lifethreatening power and magnitude of nature's mighty trio. With the latest research findings from top scientists in the field, as well as insider's information from the U.S. Geological Survey, this is a comprehensive and fascinating guide to the world of earthquakes, volcanoes, and tsunamis.



ID: 9560 Great Disasters: Tsunamis By Nancy Harris Greenhaven Press, 2003 91 pages ISBN 0737718773

Tsunamis or seismic sea waves are the largest and most powerful waves in the world. These monstrous waves, which can travel back and forth across oceans, reach speeds of 300 to 600 miles per hour. Although tsunamis can go unnoticed in the open sea, their heights can reach 100 to 200 feet in shallow water where they continue to travel inland with tremendous destructive force. Tsunamis are triggered by earthquakes, submarine volcanoes, landslides, or more rarely, by meteorite impacts.

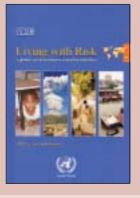


ID: 8672 Know Risk By the Inter-Agency secretariat of the International Strategy for Disaster Reduction (UN/ISDR) United Nations, 2005 376 pages ISBN 92-1-132024-0

Knowing about risks that lead to disasters, understanding how they affect our livelihoods and environment, and dedicating collective efforts to manage those conditions are crucial to protect our lives, our possessions, our social assets and indeed the land, water and natural resources on which human life depends. This is the world of risk that Know Risk addresses.

Know Risk presents a selection of examples and experiences of disaster reduction that responds to the need for identifying good practices and sharing experiences and information, identified by many - including Governments - during the preparatory process for the World Conference on Disaster Reduction (WCDR). It highlights efforts and practices being undertaken in disaster reduction through practical examples of the review of the Yokohama Strategy and Plan of Action for a Safer World adopted in 1994, drawn from communities, academic and technical involvements as well as governments at national and more local levels.

Know Risk is a fully illustrated, 376 page book dealing with the risks associated with natural hazards. Drawing on the experience of 160 authors it is the product of an innovative public-private partnership between the ISDR secretariat and Tudor Rose.



ID: 7732 Living with Risk. A global review of disaster reduction initiatives By the Inter-Agency secretariat of the International Strategy for Disaster Reduction (UN/ISDR) United Nations, 2004 429 pages (Vol. I), 126 pages (Vol. II) ISBN 92-1-101064-0

While the world has witnessed a drop in the number of deaths per year due to disasters over the past ten years, more people are being affected and economic costs are escalating more than ever.

Earthquakes are inevitable, but death in an earthquake is not. Floods are a fact of life, but they need not wash away health, hope and livelihoods. This book is intended for people who have an interest in and practice disaster risk management and sustainable development. It provides guidance, policy orientation and inspiration, as well as serving as a reference for lessons on how to reduce risk and vulnerability to hazards and to meet the challenges of tomorrow.

Natural hazards can affect anyone, anywhere. People are threatened by hazards because of their social, economic and environmental vulnerability, which must be taken into account if sustainable development is to be achieved. Disaster risk reduction therefore concerns everyone, from villagers to heads of state, from bankers and lawyers to farmers and foresters, from meteorologists to media chiefs.

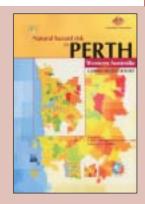
This book brings to light the urgent need for action to be taken - and the people who are doing so - towards building sustainable societies in an increasingly disaster-prone world.



ID: 8661 Natural Hazard Mitigation: Recasting Disaster Policy And Planning By David Godschalk and Edward J.Kaiser Island Press, 1999 450 pages ISBN 1559636025

Natural Hazard Mitigation describes and analyzes the way that hazard mitigation has been carried out in the U.S. under the national disaster law, the Robert T. Stafford Disaster Relief and Emergency Assistance Act. It is the first systematic study of the complete intergovernmental system for natural hazard mitigation, including its major elements and the linkages among them. The book is an informative and eye-opening examination for planners, policymakers, students of planning and geography, and professionals working for government agencies that deal with natural hazards.

Written for: planners, policymakers, students of planning and geography, and professionals working for government agencies that deal with natural hazards.

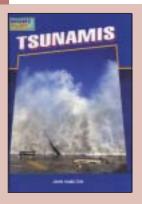


ID: 9563 Natural Hazard Risk in Perth, Western Australia: Comprehensive Report By the Government of Australia, 2005 352 pages ISBN 1-920871-43-8

The Cities Project Perth is a natural hazard risk assessment study conducted by Geoscience Australia and its Federal, State and local collaborators. The project is primarily targeted at emergency managers, risk managers and land use planners who are responsible for reducing natural hazard risk in the most densely populated areas of Western Australia. The project is nationally important because it exposes many risks to Australia's fourthlargest city and recommends mitigation actions, as well as providing best practice methodologies of benefit to all Australian jurisdictions. The four-year project estimated the impact on the Perth community of several, sudden onset natural hazards.

While the world recovers from the worst natural disaster to strike the region in modern history, a positive step has been taken in Australia's fourth largest city revealing how to reduce the impact of natural hazards on its community - Perth.

Produced by Geoscience Australia in partnership with the Bureau of Meteorology and Western Australian state and local agencies, the report assesses the possibility of natural hazards such as flood, severe wind, coastal erosion, earthquake and tsunami, affecting Perth in the future and recommends a number of strategies to minimise the damage from them.



ID: 9582 Nature's Fury: Tsunamis By John Hamilton ABDO Publishing Company, 2005 32 pages ISBN 1596793333

Have you ever been inside a tornado? Heard a blizzard roar by your window, or an avalanche thunder down a mountainside? Experienced a flood? Seen rivers of fire from a volcano, or a brilliant flash of a lightning strike? Have you ever felt an earthquake shake, or taken cover from a hurricane's wrath? The Nature's Fury series is an inside look at some of nature most violent disasters. Where do these events happen? How can they be predicted? What happens after a disaster? Famous storms of the past, up-to-date forecasting technologies, and how to stay safe are included in this book.

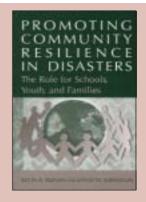


ID: 148 Perspectives on Tsunami Hazard Reduction: Observation, Theory and Planning Series Advances in Natural and

Technological Hazards Research, Vol. 9 By Gerald Hebenstreit Kluwer Academic Publishers, 1997 218 pages ISBN 0-7923-4811-7

Tsunamis remain an ever-present threat to lives and property along the coasts of most of the world's oceans. This volume, comprising papers presented at the 17th International Tsunami Symposium, highlights critical advances in key areas of tsunami hazard reduction. One group of papers describes observational aspects of tsunami research, including reconstruction of events during specific tsunamis, and advanced techniques for measurements and for improving our overall knowledge of tsunami events. Another section applies numerical and observational methods to understanding tsunami generation and propagation and the prediction of tsunami effects in coastal zones. A final part examines the evolving efforts to provide rapid, accurate, and comprehensive warnings to coastal populations. This emphasises the interdisciplinary nature of tsunami research and its ultimate focus: reducing coastal hazards.

Audience: This book will be of interest to researchers and graduate students involved in natural hazards research, physical oceanography, seismology, environmental impact assessment and risk assessment.

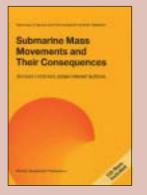


ID: 9866 Promoting Community Resilience in Disasters: The Role for Schools, Youth, and Families By Kevin Ronan and David Moore Johnston Springer, 2005 XII-212 pages ISBN 0-387-23820-4

When large-scale disasters occur, they typically strike without warning-regardless of whether the cause is natural, such as a tsunami or earthquake, or human-made, such as a terrorist attack. And immediately following a hazardous event or mass violence, two of the most vulnerable groups at risk are a community's children and their family members.

This book offers both clinicians and researchers guidance on hazard preparation efforts as well as early response and intervention practices. It emphasizes an evidence- and preventionbased approach that is geared toward readiness, response, and recovery phases of natural and human-made disasters.

This book is specifically geared toward assisting those who work in school or community settings-including school psychologists and counselors, emergency managers and planners, and all mental health professionals-not only to increase resilience after a disaster, but to respond and intervene as quickly as possible when catastrophe strikes. It will assist those charged with the responsibility for helping others respond to and rebound from major traumas, especially clinicians and other professionals who work with children and their family members.

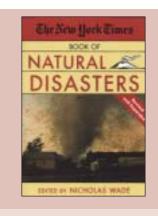


ID: 9415 Submarine Mass Movements and Their Consequences: First International Symposium Sories Advances in Netural and

Series Advances in Natural and Technological Hazards Research, Vol. 19 Edited by Jacques Locat and Jürgen Mienert Kluwer Academic Publishers, 2003, 552p ISBN 1-4020-1244-6

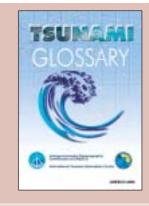
Did you know that the Grand Bank earthquake of 1929 triggered a huge submarine mass movement which broke submarine cables over a distance of up to 1000 km from its source and generated a tsunami which devastated a small village in Newfoundland killing 27 people? The same happened in Papua New Guinea in 1998 with more than 2000 casualties. Submarine mass movements of various sizes and styles are shaping the sea floor and are of concern for many facets of human activities both onshore and offshore. These include the development of natural resources, energy and communication transport, coastal infrastructures and communities.

This book provides a world-wide perspective of submarine mass movements and their consequences. This has been made possible by assembling excellent contributions from active researchers, groups, or institutions, thus providing full coverage of the many scientific and engineering aspects of this type of marine and coastal geo-hazard. It covers fundamental as well as site specific studies from many areas including the Atlantic and Pacific oceans, inner seas like the Mediterranean Sea, and fjords using the most recent technologies from multibeam sonar imaging techniques, 3D seismic analysis, slope stability analysis, to debris flow and tsunami modeling.



ID: 8829 The New York Times Book of Natural Disasters By Nicholas Wade The Lyons Press, 2001 216 pages ISBN 1-58574-393-3

For more than twenty years, the Science Times section of The New York Times has provided up-to-the-minute coverage of the most newsworthy discoveries in science. This book gathers together the paper's finest stories detailing humankind's quest to understand and predict these awesome events. Natural disasters claim the lives of about one million people every decade. Earthquakes, tornadoes, and volcanoes are as terrifiying and powerful as ever, but, as this collection shows, modern science has made astonishing discoveries in the effort to predict where and when they will occur. Readers will also learn about the complex set of weather conditions that contribute to tornadoes and microbursts, and about the swiftness and severity of tsunamis. Potential causes for and effects of global warning are explored, as is the surprising force of nature's fury in such phenomena as avalanches, hurricanes, floods, storms, forest fires, sinkholes, viral pandemics, and others.

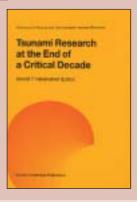


ID: 8801 Tsunami Glossary By the International Tsunami Information Center (ITIC), Intergovernmental Oceanographic Commission (IOC), UNESCO and International Co-ordination Group for the Tsunami Warning System in the Pacific (ICG/ITSU) ITIC, 2005, 20 pages

The phenomenon we call "tsunami" (soo-NAH-mee) is a series of traveling ocean waves of extremely long length generated by disturbances associated primarily with earthquakes occurring below or near the ocean floor. Underwater volcanic eruptions and landslides can also generate tsunamis. In the deep ocean, their length from wave crest to wave crest may be a hundred miles or more but with a wave height of only a few feet or less. They cannot be felt aboard ships nor can they be seen from the air in the open ocean. In deep water, the waves may reach speeds exceeding 500 miles per hour.

The Glossary is divided into sections:

- Tsunami Classification
- General Tsunami Terms
- Surveys and Measurements
- Tide, Mareograph Sea Level
- Acronyms and ITSU Organization
- Bibliography
- Index



ID: 9413 Tsunami Research at the End of a Critical Decade Series Advances in Natural and Technological Hazards Research, Vol. 18 Edited by Gerald T. Hebenstreit Springer, 2002 304 pages ISBN 1-4020-0203-3

This volume, derived from the 1999 International Tsunami Symposium, presents a unique look at the state of tsunami research at the end of the 20th century.

It displays recent progress both in data recovery and reconstructions of historical tsunamis and in detail examination of recent disasters. It shows the tsunami community using both traditional methods of data gathering - searching archives and attempting to simulate past events - and integrating modern technologies - sidescan sonar, GPS, global communications, supercomputers - in the quest to understand tsunamis and improve mankind's ability to mitigate the disastrous consequences of these unpredictable and unstoppable events. It chronicles recent advances in mitigation efforts while illuminating the continuing need for increased efforts.

The papers range from descriptive texts for the non-specialists to fairly technical discussions for those familiar with tsunami research.

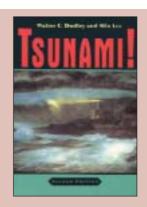
Audience: This book will be of interest to researchers and graduate students involved in natural hazards research, physical oceanography, seismology, environmental impact assessment and risk assessment.



ID: 9867

Tsunami Risk Reduction for the United States: A Framework for Action By the Subcommittee on Disaster Reduction (SDR) and the United States Group on Earth Observations, 2005 27 pages

Tsunamis are low probability but high impact events, and the Indian Ocean tsunami of December 26, 2004 demonstrated international vulnerability. Over the past year investments in tsunami detection and warning have made individuals safer in their homes and places of work. SDR working with its national and international partners, also produced the national plan for tsunami risk reduction to provide a framework for ongoing federal investment in activities that will continue to reduce risks to life and property.

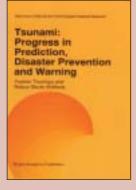


ID: 9557 Tsunami! By Walter C. Dudley and Min Lee University of Hawaii Press, 1998 362 pages, 2nd edition ISBN 0-8248-1969-1

This new edition retains a mix of personalized information, scientific data, and history told in a style that satisfies both technical and lay readers.

The first edition of Tsunami!, published in 1988, provided readers with a complete examination of the tsunami phenomenon in Hawaii. This second edition adds many eyewitness accounts of the tsunamis of 1946 and 1960 and expands its coverage to include major tsunamis in the Mediterranean and off the coasts of Japan, Chile, Indonesia, Fiji, Alaska, California, Newfoundland, and the Caribbean, as well as the 1998 devastation in Papua New Guinea. Dramatic photographs and accounts of experiencing a tsunami firsthand are placed within the framework of the how and why of tsunamis, our scientific understanding of these phenomena, and the current status of the Tsunami Warning System, which is widely used to forecast and measure tsunamis and prepare coastal areas for potentially deadly tsunami strikes.

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ID: 9556 Tsunami: Progress in Prediction, Disaster Prevention and Warning Series Advances in Natural and Technological Hazards Research, Vol. 4 Edited by Yoshito Tsuchiya and Nobuo Shuto Kluwer Academic Publishers, 1995 368 pages ISBN 0-7923-3483-3

The Sixteenth International Tsunami Symposium, TSUNAMI '93, drew more than 150 scientists, engineers and specialists in tsunami research and disaster mitigation from 13 countries. The leading contributions to the symposium, selected after a rigorous reviewing process, are presented here under three broad headings:

- Tsunami generation, propagation and inundation: their prediction and simulation.
- Tsunami disasters: their prevention and mitigation.
- Tsunami observations, and warning systems and plans for improvement.

Audience: Scientists, engineers and graduate students interested in the prediction of earthquakes and tsunamis, tsunami disasters and their prevention and mitigation. Professionals in the field of coastal management and protection.



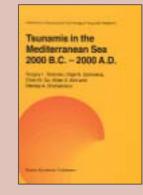
ID: 8804

Tsunami: the Great Waves By the U.S. Department of Commerce, National Oceanic and Atmospheric Administration (NOAA), National Weather Service (NWS), Intergovernmental Oceanographic Commission (IOC) and the International Tsunami Information Center (ITIC)

IOC, Revised 2005, 12 pages

This 12-page glossy brochure provides information on what a tsunami is, how fast and how big they can be, what causes them, and describes programs undertaken to mitigate this hazard, including the development of tsunami warning centers, research programmes, and safety rules describing what to do when a tsunami attack your coastline. This brochure (4th edition) was last updated and revised in June, 2005. It is also available in Spanish and French.

Tsunamis are a threat to life and property to anyone living near the ocean. For example, in 1992 and 1993 over 2,000 people were killed by tsunamis occurring in Nicaragua, Indonesia and Japan. Property damage was nearly one billion dollars. The 1960 Chile Earthquake generated a Pacific-wide tsunami that caused widespread death and destruction in Chile, Hawaii, Japan and other areas in the Pacific. Large tsunamis have been known to rise over 100 feet, while tsunamis 10 to 20 feet high can be very destructive and cause many deaths and injuries.



ID: 5628 Tsunamis in the Mediterranean Sea 2000 B.C.-2000 A.D.

Series Advances in Natural and Technological Hazards Research, Vol. 13 By S.L. Soloviev, O.N. Solovieva, C.N. Go, K.S. Kim and N.A. Shchetnikov Kluwer Academic Publishers, 2000 260 pages ISBN 0-7923-6548-8

This volume contains descriptions of about 300 tsunamis and of similar known phenomena in the Mediterranean Sea. Earthquakes and other processes generating tsunami are also described. The intensity of tsunami waves is estimated, and the causes of tsunami generation are given together with the reliability of the information. The literary data are given on coordinates and magnitudes of tsunamigenic earthquakes. 18 zones of tsunami generation are identified, which have been subdivided into four groups according to the maximum intensity and periodicity.

Audience: The book should be of interest to seismologists, oceanographers, volcanologists, geographers, and specialists investigating natural hazards and their consequences.



ID: 9411 Tsunamis, Case Studies and Recent Developments Series Advances in Natural and Technological Hazards Research, Vol. 23 Edited by Kenji Satake Springer, 2005 VIII-343 pages ISBN 1-4020-3326-5

Twenty papers comprise a timely review of state-of-the-art tsunami research. Various approaches are taken to study tsunamis: fieldsurveys of recent tsunamis; analysis of tidegauge records; numerical simulations of tsunami generation and propagation, tank experiments, and geological studies of tsunami deposits. The papers are also divided into two parts: case studies and recent developments.

The first part reports on tsunamis generated by volcanic eruptions and earthquakes around the Pacific Ocean. The papers include summaries of post-tsunami surveys in the last decade; reports on the two tsunamis in 2003 which occurred in Fiordland in New Zealand and Tokachi-oki, Japan; reports and mechanism of tsunamis from the 1994 Rabaul, 1883 Krakatau and 1741 Oshima eruptions; resonance and delayed peaks observed on the Sanriku coast of northern Japan; studies of tsunami deposits in Japan and Russia used to infer paleotsunamis along the Kuril trench; estimation of tsunami energy along the Aleutian-Alaska and Canadian coast based on historical data.

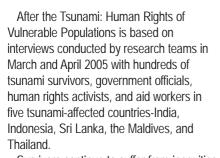
The second part reports recent developments in numerical computations, monitoring, and assessments of coastal hazards. The papers include assessments of future tsunami impacts, based on the past tsunami or marine survey data, for the Ecuador, Portuguese and Korean coasts; adjoint technique for waveform inversion of source parameters; experimental design to study underwater landslides; numerical and experimental studies to evaluate the effects of coastal vegetation and control forests on tsunamis; proposals of new tsunami monitoring techniques using acoustic waves and electromagnetic signals.

ISDR-BIBLIO 1



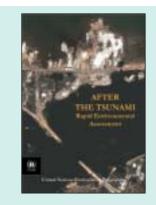


ID: 9451 After the Tsunami, Human Rights of Vulnerable Populations By the East-West Center University of California, 2005 109 pages



Survivors continue to suffer from inequities in aid distribution and substandard shelter throughout countries affected by the December 2004 tsunami. It also documents numerous violations of human rights in the wake of the tsunami, including arbitrary arrests, recruitment of children into fighting forces, discrimination in aid distribution, enforced relocation, and sexual and genderbased violence. Tsunami survivors reported widespread inequities in aid distribution on the part of some government agencies as a result of favoritism and political influence, bureaucratic inefficiencies, and caste affiliation. Government authorities rarely, if ever, investigated such abuses. Finally, government agencies and aid organizations often failed to consult people in affected communities about aid distribution and reconstruction.

The study recommends that governments in tsunami-affected countries should commission an independent study to investigate reports of inequities in aid distribution; increase accountability and transparency of public and private aid providers; and develop mechanisms that will enable tsunami survivors to participate in reconstruction planning and implementation.



ID: 8956 After the Tsunami: Rapid Environmental Assessment By the United Nations Environment Programme (UNEP), 2005 140 pages ISBN 92-807-2565-3

This report is the product of close cooperation between UNEP and national environmental authorities and experts. It provides a preliminary ground-level look at the tsunami's impact on various sectors of the region's environment. It highlights problems in need of immediate attention, underscoring the strong link between environment and sustainable livelihood and the need for improved early warning and disaster preparedness systems.

The earthquake and tsunami of 26 December 2004 devastated coastal communities in 12 countries in the Indian Ocean region, with Aceh Province, Sumatra, Indonesia the hardest hit. This report details the findings of the UNEP Asian Tsunami Disaster Task Force, set up to help national environmental authorities in the affected countries with their assessment and response to the environmental impact of the disaster.

It summarises the interim findings from ongoing assessments in Indonesia, the Maldives, the Seychelles, Somalia, Sri Lanka, Thailand and Yemen, including evidence of environmental concerns that require immediate action.

The short term clean-up programme must be coupled with policy development and strengthened institutions, and the recovery agenda will require the clean-up of contamination hotspots, and rehabilitation of critical livelihoods and ecosystems.



ID: 9845 An Interim Appraisal of the German Contribution to Reconstruction: One Year after the Indian Ocean Tsunami, BMZ Topics 151 By the Federal Ministry for Economic Cooperation and Development (BMZ) 37 pages

One year after the tsunami disaster in the Indian Ocean, the BMZ is presenting an overview of the German support provided to the people in the countries affected. It looks both at support from the German Government and at assistance provided by German churches, civil society organizations, and political foundations.

ISDR-BIBLIO 1



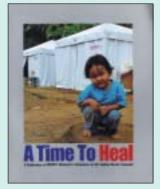
ID: 9761

Assessment of Capacity Building Requirements for an Effective and Durable Tsunami Warning and Mitigation System in the Indian Ocean: Consolidated Report for Countries Affected by the 26 December 2004 Tsunami

By the United Nations Educational Scientific and Cultural Organization (UNESCO), 2005, 195 pages

Between May and September 2005, national assessments of 16 countries in the Indian Ocean were conducted to identify capacity building needs and support requirements for developing an Indian Ocean Tsunami Warning System. National assessments were conducted by international expert teams working together with experts from each participating country. Three-day missions were conducted to each country to meet with national experts from government agencies and non-governmental organizations involved in tsunami or natural disaster management to complete a questionnaire covering all aspects of tsunami warning and mitigation system.

The national assessment missions provided an opportunity to define the components and implementation actions of tsunami early warning and mitigation systems and to identify related capacity building opportunities, and the report provides a summary of the types of guidance documents and capacity building activities that will help to catalyze national actions.



ID: 9870

A Time To Heal, A Reflection of MERCY Malaysia's Response to the Indian Ocean Tsunami By MERCY Malaysia The Writers' Publishing House, 2005 239 pages ISBN 983-3633-00-5

This book is an in-depth look at how MERCY Malaysia responded to the 26 December 2004 tsunami.

This book is a small tribute to the selfless men and women who worked to quell the humanitarian crisis with an outpouring of service and mercy. It is not a book of achievement but rather, a collection of human stories of the survivors and those who have reached out to help those in need.



ID: 9796 Building Back Better: A 12-month update on UNICEF's work to rebuild children's lives and restore hope since the tsunami By the United Nations Children's Fund (UNICEF), 2005 17 pages

One year after the tsunami, UNICEF recounts its role in providing immediate relief and ongoing care to the thousands of families and children affected. Helping bring children back to school, providing immunization services, and assisting with registration, placement and reunification of the separated are but a few of the activities UNICEF undertook in the past 12 months. The report provides country-bycountry breakdowns that include expenditure, plans and challenges, while highlighting children's stories and key partners in relief and recovery.

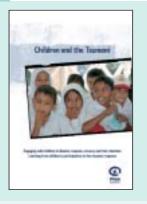
A unique international relief effort prevented any major outbreaks of disease and has since provided for the general health and well-being of hundreds of thousands of people.

The work is far from over. Almost 12 months later, tens of thousands of families are still in temporary encampments and the process of rebuilding is really just beginning to move from conference rooms and drawing boards to bricks and mortar.

Yet every week has brought progress. People have been kept alive and healthy. Families have been reunited. More than 90 per cent of children were back in school within three months. Temporary schools and health centres have been built. And while these basic services have taken shape - often with community consultation - policies and standards are being put in place by national legislatures and local governments.

2

The Indian Ocean Disaster, 26 December 2004



ID: 9619

Children and the Tsunami: Engaging with children in disaster response, recovery and risk reduction, Learning from children's participation in the tsunami response By Plan, 2005 46 pages

This academic report is a call for governments, international institutions and aid agencies to change their perception of child participation and include it in the disaster response, recovery and risk reduction.



ID: 9598 Earthquake-Tsunami Response: ILO Proposals for Reconstruction, Rehabilitation and Recovery By the International Labour Office (ILO), 2005

75 pages

The UN Secretary-General described the December 26, 2004 catastrophe as "the largest natural disaster the Organization has had to respond to on behalf of the world community, in the 66 years of our existence". Twelve countries in Asia and Africa were affected.

The tsunamis flooded coastal areas, wiped away homes and buildings, roads and bridges, water and electricity supplies, crops, irrigation and fishery infrastructure, productive assets and small businesses. The disaster affected poor communities where people mainly lived off the sea and marginal land, as well as destroying or badly damaging a number of towns. Their livelihoods have been destroyed and they have been stripped of their meagre possessions.

The disaster has weakened or destroyed labour market institutions or hampered their functioning. For instance many public and private education and training institutions and employment offices have ceased to exist or function or need considerable change to match the post-disaster needs. The ILO has a number of tools that could be used to do quick first assessment on the adverse impact on the labour market. Labour market information can be set up and oriented to meet the postdisaster needs, including evaluating the volume and types of job seekers and the skills needs for humanitarian, reconstruction and recovery operations. The results of such a labour market assessment will underpin identification of training needs and opportunities for income generation and employment creation.



ID: 9830 From Commitments to Action: Advancements in Developing an Indian Ocean Tsunami Warning and Mitigation System UNESCO/Evan Schneider IOC, 2006 30 pages

This brochure will guide you through our advances so far in implementing a complete end-to-end Tsunami Warning and Mitigation System in the Indian Ocean. The success and efficiency of such a system will always depend in the end on the good governance of each country and on long-term support from national authorities. National centres must move away from their present minimal configuration to develop their own national detection networks, their own riskassessment and preparedness procedures, and their own national educational or awareness plans.



ID: 9621 Hope for Renewal: Photographs from Indonesia after the Tsunami By the East-West Center, 2005 52 pages ISBN 978-0-86638-202-1

Hope for Renewal: Photographs from Indonesia after the Tsunami was created as a tribute to those who died during the Indian Ocean tsunami and to the survivors of the disaster. It is a catalogue inspired by the summer 2005 East-West Center Gallery exhibition of the same name. It chronicles important stages in the aftermath of the disaster, from rescue and recovery to the rebuilding of communities that continues today.



ID: 9420 Human Development Report 2005: International cooperation at a crossroads aid, trade and security in an unequal world By the United Nations Development Programme (UNDP), 2005 388 pages ISBN 0-19-530511-6

Within days of the tsunami, one of the worst natural disasters in recent history had given rise to the world's greatest international relief effort, showing what can be achieved through global solidarity when the international community commits itself to a great endeavour.

This year's Human Development Report takes stock of human development, including progress towards the Millennium Development Goals (MDGs). Looking beyond statistics, it highlights the human costs of missed targets and broken promises. Extreme inequality between countries and within countries is identified as one of the main barriers to human development-and as a powerful brake on accelerated progress towards the MDGs.

This report provides a basis for considering the scale of the challenge. By focusing on three pillars of international cooperation it highlights some of the problems that need to be tackled and some of the critical ingredients for achieving success.



ID: 9775 Humanitarian Exchange, Number 32, December 2005

By the Humanitarian Practice Network (HPN) and the Overseas Development Institute (ODI) ODI, 2005 47 pages

This issue of Humanitarian Exchange focuses on the emergency response to the devastation caused by the earthquake and tsunami in the Indian Ocean on 26 December 2004. As a natural disaster, the tsunami was unparalleled, hitting 13 countries in Asia and east Africa. The unprecedented scale of the destruction and the immediacy of the images beamed around the world led to an outpouring of funding by governments and individuals, with aid pledges to affected countries topping \$11 billion. Within the humanitarian community, there are diverse views about whether all that money has been wisely spent.

This issue of Humanitarian Exchange includes articles on the response from international and local NGOs, donors and the Red Cross movement, highlighting the challenges, opportunities and risks the emergency response encountered. The articles in this issue also focus attention on the nature of accountability, and the need for the humanitarian sector to invest more time and energy in ensuring that affected populations are at the centre of our accountability practices.

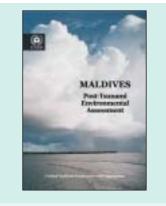


ID: 9193

International Coordination Meeting for the Development of a Tsunami Warning and Mitigation System for the Indian Ocean within a Global Framework: Workshop Report No. 196 By the Intergovernmental Oceanographic Commission (IOC) UNESCO, 2005, 97 pages

The meeting was held at UNESCO Headquarters between 3 and 8 March 2005. It was attended by nearly 300 participants from 21 countries in the Indian Ocean region, 25 other IOC Member States, 24 organizations, and 16 observers. The Meeting ensured that Indian Ocean Member States are fully informed, at the technical level, on tsunami warning and mitigation programmes at the national, regional and global levels.

The meeting adopted a communiqué that provides guidance to all partners regarding the required actions that will lead towards the establishment of an Indian Ocean Tsunami Warning and Mitigation System. It also recommended the establishment of an "Intergovernmental Coordination Group for the Indian Ocean Tsunami Warning and Mitigation System (ICG/IOTWS) and drafted Terms of Reference for the Group



ID: 9846 Maldives: Post-Tsunami Environmental Assessment By the United Nations Environment Programme (UNEP), 2005 100 pages ISBN 92-807-2579-3

In the immediate aftermath of the enormous devastation and suffering caused by the 26 December 2004 Indian Ocean Tsunami, UNEP established the Asian Tsunami Disaster Task Force. At the request of the governments of affected countries, the Task Force has assessed tsunami-related environmental damage, worked to ensure that environment is a part of national recovery agendas, and mobilised environmental recovery assistance. This report elaborates the findings of the rapid assessment in the Republic of Maldives, based on a detailed expert investigation of the tsunami's environmental impacts.



ID: 9614 Moving Beyond the Tsunami: The WHO Story By the World Health Organization (WHO), 2005 143 pages

Some dates and events are stamped forever in the world's collective memory. 26 December 2004 is one such date, when hundreds of thousands of people were killed, and millions were affected, by a severe earthquake and tsunami. Among the countries affected were six Member States of WHO's South-East Asia Region. The scale of devastation and the large number of people affected, across so many countries, was unprecedented.

The disaster left in its wake formidable public health challenges which needed immediate response. These challenges, however, have been used as opportunities to improve health systems to address the needs of the people in the long term. As we move from the emergency phase to the rehabilitation phase, local health capacity and infrastructure have been fortified, and people trained to serve their communities better.

"Moving beyond the Tsunami: The WHO story" narrates how the health needs of the affected people are being met. This book enables us to keep in mind the lessons learnt from the disaster, so that we may serve the people better.



ID: 9765 Responding to Communicable Diseases following the Tsunami in South-East Asia By the World Health Organization (WHO), 2005 95 pages

Communicable diseases, especially those that are epidemic-prone, are the most significant health threat to the internally displaced population after a catastrophe like the Tsunami. It is a document that highlights the challenges faced and describes the key technical activities that were carried out by WHO and national counterparts in all the six tsunami-affected countries to detect prevent and control the communicable diseases.



ID: 9770 Responses to young children in postemergency situations By the Bernard van Leer Foundation, 2005 67 pages

Articles on topics including early childhood development in emergency situations, addressing the rights and needs of tsunami-affected children, rapid child protection assessments in emergency contexts, the impact of conflict on children and care for separated children. It is a joint production with the International Catholic Child Bureau.



ID: 9847 Seychelles: Post-Tsunami Environmental Assessment By the United Nations Environment Programme (UNEP), 2005 60 pages ISBN 92-807-2654-4

The Seychelles island group was struck by a series of powerful tidal surges, resulting from the tsunami, generated by the earthquake off Indonesia on 26 December 2004. As a direct consequence of these tidal surges two people lost their lives, and hundreds of families suffered damage to their home and livelihoods. The effects of the tsunami were compounded by exceptionally heavy rainfall on 29 December, causing flooding, landslides and tree/rock falls.

The Seychelles are globally recognized for the richness of their marine and terrestrial ecosystems, which in turn support the islands' main economic activities; tourism and fishing. There was concern that in addition to its direct impacts on human communities, the tsunami may have caused damage to the islands' environmental values, thereby indirectly affecting livelihoods.

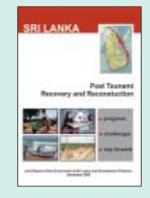


ID: 9622 Sri Lanka, Post-Tsunami Environmental Assessment By the United Nations Environment Programme (UNEP), 2005 84 pages ISBN 92-807-2653-6

Following the launch of "Rapid Environmental Assessment Report" on 22nd February 2005, where UNEP advised countries hit by the tsunami to rebuild in a manner that preserves natural resources for the benefit of the local communities, a new report was issued in Colombo focusing on Post-tsunami assessments in the Maldives and Sri Lanka.

The Maldives report reveals that the Indian Ocean tsunami caused a number of significant impacts on the Maldives environment. The UNEP report concluded that the tsunami generated approximately 290,000 cubic meters of waste on the country's 69 inhabited islands that were severely damaged by the tsunami.

The Sri Lanka report, on the other hand, confirms that in those areas with healthy coral reefs and mangroves, the impacts of the devastating events of December 2004 were significantly reduced. Klaus Toepfer, UNEP's Executive Director, said: "The tsunami in the Indian Ocean taught the world some hard, shocking but important lessons which we ignore at our peril".



ID: 9792

Sri Lanka: Post Tsunami Recovery and Reconstruction

By the Government of Sri Lanka and Development Partners Government of Sri Lanka, 2005 66 pages

This report aims at providing an objective joint assessment of post-tsunami relief, recovery and reconstruction interventions and the way forward. A team comprised of representatives from the government, civil society, and the international community prepared this document, with 20 government institutions, 20 bilateral and multilateral organizations and 18 national and international NGOs contributing relevant details. During October 2005, more than 100 experts and practitioners from these institutions met and prepared detailed summaries of four sectors and seven thematic areas.



ID: 9848 Status of Coral Reefs in Tsunami Affected Countries: 2005 By the Australian Institute of Marine Science (AIMS) and the Australian Government AIMS, 2006 154 pages

The tsunamis of Sunday 26 December 2004 caught many people unprepared and unaware in Indian Ocean countries. This unexpected event struck without apparent warning on a clear day; many local people and tourists were on the beach and some walked over coral reef flats as the water receded to investigate a hidden realm. Within minutes, a series of massive waves returned to carry them away and invade the land. The tsunamis caused massive destruction to coastal resources and infrastructure. This book focuses on the impacts on the natural coastal resources, especially the coral reefs and associated ecosystems, and the responses by the international community. But we cannot ignore that far more damage was done to the lives of people of the region and the world.

The tsunamis however were not totally novel and there has been a long history of previous earthquakes and tsunamis in the Indian Ocean (summarised in Chapter 1, p 17). These are firmly embedded in the folklore of many indigenous communities, who retreated to higher ground before the waves; most of the victims, however, lacked experience of the potential consequences of earthquakes and tsunamis.



ID: 9764

Survivors of the Tsunami, One Year Later: UNDP Assisting Communities to Build Back Better By the United Nations Development

Programme (UNDP), 2006 24 pages

UNDP has published a report on its assistance to the tsunami recovery and reconstruction efforts for the past year. It is meant to provide examples of how UNDP is helping people who survived the tsunami rebuild their lives now, and for the future.

Few events send a universal shockwave, as the scenes of devastation caused by last December's Indian Ocean tsunami did. Yet, as silently as the waves that caused the damage blended back into the seas, the legacy of the tsunami has now largely faded from public view. For the people who lived through the tsunami, however, the devastation wrought by the disaster, one year later, is still very much part of their lives.

The one-year mark is hardly an endpoint on the road to full recovery, and reconstruction is likely to take several years. As the tsunami itself, the huge outpouring of generosity that it generated, was unprecedented, but there is a need to see whether the funds made available did, in fact, help the people who lived through this nightmare.

Much has been achieved this year, but there is still more to be done. Many homes still need building; roads and ports need repairing, and better livelihoods and safer living conditions need to be developed. Working with the governments and communities of the affected countries, as well as with the multitude of donors and other aid organizations, the United Nations Development Programme (UNDP) remains committed to supporting the recovery and longer-term reconstruction process.

This report is a snapshot of UNDP's assistance to the recovery and reconstruction efforts for the past year. It is meant to provide examples of how UNDP is helping people who survived the tsunami rebuild their lives now, and for the future.

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The EU's contribution to the international response to the 2004 Asian Tsunami, achievements, next steps and lessons learned: Discussion Paper, High-level Meeting, Brussels, 20 December 2005 By the Department for International Development, United Kingdom and the European Commission European Commission, 2005

The European Union was among the leaders of an unprecedented international effort, reacting rapidly and generously. In January 2005 the President of the Commission Mr Barroso assured 473 million euro for 2005 and 2006 to help countries affected by the Tsunami.

The European Commission has kept its promises. Only hours after the news broke, the European Commission funded humanitarian assistance. This aid - food, medicines, temporary shelter - will continue to mid 2006 for those families who still need help. As of 15 November 2005, a total of \$103 million in humanitarian assistance has been committed. A further \$20 million will be committed before the end of the year and complete the Commission's pledge of \$123 million for humanitarian aid. More than \$73 million have already been spent.

Soon after, the Commission pledged a support programme of \$350 million to help in the longer-term reconstruction work, particularly in the worst-affected countries. Nearly half of this amount will be committed by the end of the year and the total pledge is expected to be delivered in 2006 as foreseen. More than \$75 million have already been disbursed.

To ensure speed of delivery the Commission coordinates its aid with the governments and pools its funds with other donors. Projects are underway, focusing on rebuilding communities, restarting livelihoods and reconstructing infrastructure.



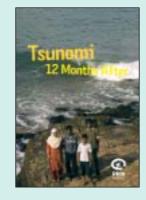
ID: 9793 The Maldives: One Year After the Tsunami By the Ministry of Planning and National Development Government of Maldives, 2005 39 pages ISBN 99915-55-51-X

One year on, the impact of the tsunami is still felt across the country, but the spirit of unity and of communities pulling together in the face of adversity continues to define the recovery efforts in the Maldives. The spirit of cooperation has seen new partnerships forged and existing partnerships strengthened. There is a common commitment to ensure that the Maldives not only recovers from the devastating effects of the tsunami but uses the opportunities presented to make strategic investments in the future and to 'build back better'. These commitments are reflected in the preparation of the Seventh National Development Plan which will encapsulate the tsunami recovery over the next three to five years, as well as lay the foundation for the achievement of the Millennium Development Goals by 2015.

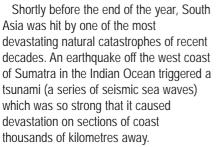
Like the efforts of the past year, this joint report reflects the high levels of cooperation of all those involved in the recovery process. The Government of the Republic of Maldives, the United Nations, the World Bank, the Asian Development Bank, the International Federation of the Red Cross and Red Crescent Societies (IFRC) and members of the Red Cross family, the Government of Japan, national non-governmental organisations and other stakeholders have all come together and made this a genuinely collaborative effort.



ID: 9423 Topics Geo Annual Review: Natural catastrophes 2004 By the Munich Re Group Munich Re, 2005 56 pages



ID: 9620 Tsunami 12 Months After By Plan, 2005 40 pages



By and large, however, 2004 was dominated by extreme atmospheric events and weather-related natural catastrophes, both in terms of the number of events and the monetary losses they generated. The past year thus confirmed the fear that as long been expressed by Munich Re: global warming - very probably triggered by human activity - is leading not only to an increase in the frequency and intensity of exceptional weather events but also to new kinds of weather risks and greater loss potentials.

The gigantic catastrophes of the past year are an emphatic confirmation that the insurance industry must be prepared for new loss dimensions from natural catastrophes. The follow up of the Tsunami 6 months after report tells the stories of children affected by the tsunami and explains why we should listen to children in times of disaster.



ID: 9585 Tsunami 26.12.2004: A tribute, Un hommage, Un homenaje By the International Federation of Red Cross and Red Crescent Societies (IFRC), 2005 89 pages ISBN 92-9139-117-4 Multilingual English-French-Spanish-Arabic

These photographs are an insight into eight months that follow the tsunami, and are published as a tribute to all those people whose lives it affected and in memory of those who died.

We can only support those who lost relatives, homes, jobs and possessions. We can only admire their resilience and courage as they pick up the pieces of their lives in the most painful of circumstances. We can only thank those who reached out to help friends and strangers in the aftermath; putting humanity into action.

For the Red Cross Red Crescent, the tsunami became its largest ever relief operation. Across the affected countries, some 25,000 Red Cross Red Crescent volunteers offered help, distributing food, tents and toiletries, collecting dead bodies, clearing rubble and carrying out first aid. Many of them were themselves victims of the tsunami, yet their dedication never failed.



ID: 9790 Tsunami Evaluation Coalition: Initial Findings

By the Active Learning Network for Accountability and Performance in Humanitarian Action (ALNAP), 2005 20 pages

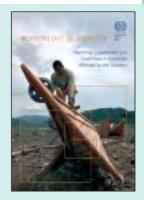
This document presents the initial findings of the Tsunami Evaluation Coalition (TEC) in the wake of the earthquake and tsunamis of 26 December 2004. The TEC is a collaborative effort by aid agencies (donor governments' aid departments, United Nations agencies, non-governmental organisations, and the Red Cross and Red Crescent Movement) to improve humanitarian systems by learning from the response to these events. Another aim of the TEC is to provide some accountability for the humanitarian system to both the giving and receiving publics.



ID: 9794

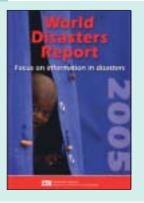
Tsunami Thailand, One Year Later: National Response and the Contribution of International Partners By the United Nations Country Team in Thailand World Bank/UNDP, 2005 122 pages

The report documents the efforts taken by the Thai Government, public, businesses and civil society in responding to the disaster. Unlike the other affected countries, Thailand did not formally appeal for international support, and the Government led an effective emergency response to the disaster including a massive forensic operation to identify the bodies of thousands of victims, which included Thai citizens and foreign visitors. The basic humanitarian needs of the affected communities were addressed within days. The Government put in place special assistance programs and compensation schemes for the victims. The longer-term recovery of the affected communities and the local economy are now the focus of the national response. International partners are playing a strategic role here, and the World Bank is assisting through three Japanese Social Development Fund grants.



ID: 9797 Working Out of Disaster: Improving Employment and Livelihood in Countries Affected by the Tsunami By the International Labour Organization (ILO), 2005 100 pages ISBN 92-2-117766-1

Following the devastation caused by the tsunami, the ILO very quickly set up a task force headed by the Regional Director for Asia and the Pacific to provide immediate support to the work of ILO offices in the four affected countries: India, Indonesia, Sri Lanka and Thailand. ILO was proactive in its response to the disaster, concentrating efforts on the worst affected areas of Indonesia and Sri Lanka. It quickly reinforced the technical staff capacity and support facilities of its offices in Jakarta and Colombo to provide the immediate responses required, including participation in needs assessment missions, undertaking dialogue and partnership with governments, agencies and workers' and employers' organizations and initiating rapid action programmes focusing on employment creation and the protection of vulnerable groups.



ID: 9421 World Disasters Report 2005: focuses on information in disasters By the International Federation of Red Cross and Red Crescent Societies (IFRC), 2005 251 pages ISBN 9291391093

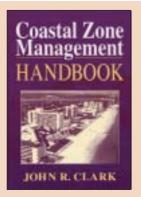
People need information as much as water, food, medicine or shelter. Information can save lives, livelihoods and resources. It may be the only form of disaster preparedness that the most vulnerable can afford. The right kind of information leads to a deeper understanding of needs and ways to respond. The wrong information can lead to inappropriate, even dangerous interventions.

Information bestows power. Lack of information can make people victims of disaster. Do aid organizations use information to accumulate power for themselves or to empower others? The report calls on agencies to focus less on gathering information for their own needs and more on exchanging information with the people they seek to support.

The World Disasters Report 2005 features:

- Data or dialogue? The role of information in disasters
- Hurricane early warning in the Caribbean
- Locusts in West Africa: early warning, late response
- Information black hole in Aceh
- Sharing information for tsunami recovery in South Asia
- Humanitarian media coverage in the digital age
- Radio in Afghanistan: challenging perceptions, changing behaviour
- Disaster data: key databases, trends and statistics

Coastal and mangrove management

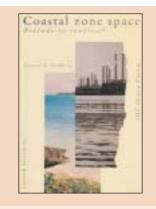


ID: 7770 Coastal Zone Management: Handbook By John R. Clark Lewis Publishers 1998 694 pages ISBN 1-56670-092-2

Coastal Zone Management Handbook comprises the first complete manual on coastal resource planning and management technology. This handbook reflects a global perspective on the natural resources. sensitivities, economics, development, productivity, and diversity of coastal zones. The emphasis is on tropical and subtropical coastal ecosystems, but the information is widely applicable. In addition to its comprehensive coverage of general concepts related to coastal regions, the book describes the strategic basis for coastal management, provides a set of working tools for management and planning activities, and presents case histories of management projects around the globe. Extensive references are provided for each management analysis, practice, technique, and solution.

Coastal Zone Management Handbook is made up of four sections:

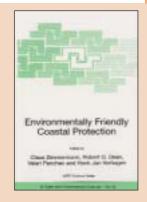
- Management Strategies a description of the Integrated Coastal Zone Management (ICZM) system, standardized in 1989, which balances conflicting needs, maximizes resource benefits, and protects coastal environments.
- Management Methods a presentation of specific management approaches. This section describes techniques, includes planning instructions, and proposes specific management objectives.
- Management Information a general compilation of information about coastal resources and management.
- Case Histories a collection of project histories of coastal zone management from 28 countries.



ID: 9390 Coastal zone space, Prelude to conflict?: IOC Ocean Forum By the Intergovernmental Oceanographic Commission (IOC) UNESCO Publishing, 1994 138 pages ISBN 9-789231-029530

This series, managed by UNESCO's Intergovernmental Oceanographic Commission (IOC), not only presents the scientific aspects of the themes in question but also the issues as debated by society at large. Science is therefore set within the wider context of economics, politics and society.

It is a comprehensive overview of problems related to the coastal zone. The study covers the rising population in the coastal zone; tourism and recreation; the role of the oceans in waste management; farming and raching the sea; transportation; energy from the sea; commercial fishing; offshore minerals; useconflicts and regulatory mechanisms.



ID: 9869

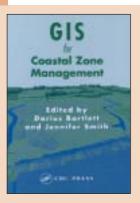
Environmentally Friendly Coastal Protection: Series Nato Science Series IV, Earth and Environmental Sciences, Vol. 53 Edited by Claus Zimmermann, Robert G. Dean, Valeri Penchev and Henk Jan Verhagen Springer, 2005, 276 pages ISBN 1-4020-3299-4

Coast lines have been and still are the centre lines of civilization around the world with still increasing pressure from both sides, the hinterland and the sea, with all its foreseeable and unforeseeable impacts given by nature or mankind. While response of nature to such impacts is flexible in the way that all morphological changes with all the consequences are tolerated as part of the system, man cannot tolerate short-term or long-term changes without being threatened in its physical and economical existence. The objectives of this Advanced Research Workshop (ARW) on Environmentally Friendly Coastal Structures were:

- to contribute to the critical assessment of existing knowledge in the field of coastal and environmental protection;
- to identify directions for future research in that area;
- to promote close working relationships between scientists from different countries and with different professional experience.

Latest trends in research in coastal and environmental protection have been summarized and developed during the meeting. Seventeen papers are presented in this book, attempting to cover as completely as possible all related aspects - coast, engineering structures, water, sediments, ecosystems in their complicated interaction.

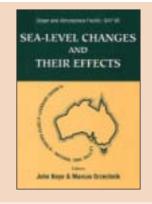
Coastal and mangrove management



ID: 8611 GIS for Coastal Zone Management By Darius Bartlett and Jennifer L. Smith CRC Press, 2004 310 pages ISBN 0415319722

Increasingly used to analyze and manage marine and coastal zones, Geographical Information Systems (GIS) provide a powerful set of tools for integrating and processing spatial information. These technologies are increasingly used in the management and analysis of the coastal zone. Supplying the guidance necessary to use these tools, GIS for Coastal Zone Management explores key technical, theoretical, and applications issues. Drawing on the practical experience of experts in the field, the book discusses recent developments and specific applications.

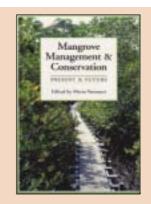
A comprehensive, authoritative, and upto-date overview of the state-of-the-art in coastal zone GIS applications, this downto-earth and practical book puts the science in a management context. The chapters present groundbreaking coastal applications of GIS based decision support tools, spatial data infrastructures, remote sensing technology including LiDAR and CASI, and more. Covering a broad range of topics by international experts, the logical organization supplies a flow and structure to the entire book that makes the information not only easily accessible but immediately applicable.



ID: 9409

Sea-Level Changes and Their Effects: Ocean and Atmosphere Pacific, OAP 95 By John Noye and Marcus Grzechnik World Scientific Publishing, 2001 303 pages ISBN 981-02-3618-2

The articles in this volume will find an audience among coastal developers, marine biologists and environmentalists. They cover a range of topics including the efforts of long-term sea-level rise on coastal flows and its impact on mangrove communities, the determination of longterm sea-level change relative to the vertical motion of the land, to the numerical modelling of short term sealevel changes due to tides, tsunamis and the weather.



ID: 9410 Mangrove management and conservation: present and future By Marta Vannucci United Nations University, 1994 324 pages ISBN 92-808-1084-7

This book contains the highlights of a workshop organized by UNU, the International Society for Mangrove Ecosystems (Japan), and UNESCO's Man and the Biosphere programme (MAB), in March 2000.

A long-term management plan for the sustainable use of mangrove ecosystems is urgently needed. Monitoring, research, and evaluation are vital components of a successful conservation strategy for natural, managed, and man-made mangrove forests.

The contributors to this book outline the key areas for future focus in the stewardship of this vital ecosystem, including appropriate legislation, community participation and empowerment, management agreements between communities, governments and NGOs, and local responsibility for supervision and enforcement of rules and regulations. An Action Plan for the worldwide conservation and use of mangroves concludes the volume.

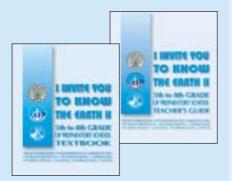
Education

Educational Kit on 'Earthquakes and Tsunamis'

By the International Tsunami Information Center (ITIC) Servicio Hidrográfico y Oceanográfico de la Armada de Chile (SHOA) Intergovernmental Oceanographic Commission (IOC) SHOA/IOC/ITIC, 1997 All available on the ITIC website http://ioc3.unesco.org/itic/









A series of 8 publications in English (also available in Spanish and Russian) covering pre-elementary to high school levels:

ID: 9165

Earthquakes and Tsunamis: Pre-Elementary School Textbook, 27 pages **ID: 9147** Earthquakes and Tsunamis: Teacher's Guidebook Pre-Elementary School, 11 pages

ID: 9089

I Invite You to Know the Earth I: Text for Elementary School 2nd. to 4th. Grade, 29 pages **ID: 9107** I Invite You to Know the Earth I: Elementary School 2nd. to 4th. Grade Teacher's Guidebook,

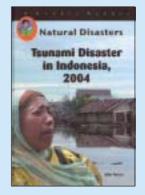
7 pages

ID: 9090

I Invite You to Know the Earth II: 5th. to 8th. Grade of Preparatory School Textebook, 49 pages **ID: 9110** I Invite You to Know the Earth II: 5th. to 8th. Grade of Preparatory School Teacher's Guide, 6 pages

ID: 9108

Earthquakes and Tsunamis: High School Textbook 112 pages **ID: 9109** Earthquakes and Tsunamis: High School Teacher's Guidebook, 29 pages



ID: 9789 Tsunami Disaster In Indonesia, 2004: Natural Disasters By John Albert Torres Mitchell Lane Publishers, 2005 ISBN 1-58415-415-2

December 26, 2004 will long be remembered throughout the countries near the Indian Ocean. That was the day that a killer tsunami struck several countries killing thousands of people. This is the story of that disaster and the remarkable way that the world responded. It is a story of horror and disaster as normal everyday people were forced to become heroes and help save lives as well as rebuild their own.

Hopefully the story will teach people to listen to nature's signs and to be prepared for disasters like this.

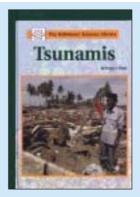
Education



ID: 9114, 9119-9122, 9128, 9131, 9145, 9146, 9167-9168, 9185-9186 Tsunami Education Kit By World Vision of Australia, 2005



ID: 9581 Tsunamis By Margaret W. Carruthers Watts Library, 2005 64 pages ISBN 0-531-12286-7



ID: 9561 Tsunamis By Peggy J. Parks KidHaven Press, 2005 48 pages ISBN 0-7377-3380-2

On 26 December 2004 an underwater earthquake just off the coast of Sumatra displaced a massive body of water causing an enormous tsunami to race across the Indian Oce|an. The tsunami itself touched and unleashed immense devastation in 12 countries and affected many more.

In order to support the desire to understand the causal factors and the long term consequences of the disaster, World Vision, the Australian Red Cross and AusAID have put together this schools kit. The kit goes beyond the immediate disaster and examines how the disaster fits with bigger picture issues of poverty, development and aid.

The kit provides a background for teachers and students on these issues through information and key questions, as well as providing activity suggestions for all age groups.

The kit is divided into primary and secondary worksheets, denoted by a P or an S. However teachers may find it useful to look through the whole kit to give a thorough grounding in all of the issues and to find further activity suggestions. Tsunamis appear as walls of water that sometimes rise as tall as the Empire State Building. They are rare but have the power to wipe out entire coastal villages. The earthquakes, volcanic eruptions, landslides, and asteroids that cause ocean waters to shift can create waves that are extremely fast, strong and unpredictable. Young readers receive an in-depth look at the various ways that tsunamis form and the destruction they're capable of causing. Perhaps most importantly, they discover how disaster planning can mean the difference between life and deth for people in a tsunami's path. This book examines tsunamis, explaining what they are, what causes them, how scientists study them and the destruction they leave in their wake.

Education

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TSUNAMIS	TSINAMIS	What's Derolin ? -A Stery of Particular and Parameter -A Stery of Particular and Parameter -A Stery of Particular and Parameter -A Stery of Parameter -A St
ID: 9558 Tsunamis: Natural disasters By Samantha Bonar Capstone Books, 2002 48 pages ISBN 0736809023	ID: 9559 Tsunamis: Natural disasters By Luke Thompson Children's Press, 2000 48 pages ISBN 0516235680	ID: 9404 What's Derolin? A Story of Earthquake and Tsunami By Kouzou Shindou PARI, 2005 31 pages ISBN 4-901391-61-5 Available in English, Spanish, Portuguese, Japanese and Arabic version.
This book explains why tsunamis occur, the damage they inflict, some famous tsunamis, and how people can protect themselves against these giant waves.	This book defines tsunamis and describes the geologic forces that cause them, as well as the damage they can inflict when the huge walls of ocean water strike land.	"Danger of Earthquake Reminds us that Our Life Is Naive." This book is a picture-book made from the suggestion of the researcher of PARI with cooperation of many persons. Reading this picture-book, not only children but also their parents can enjoy the story and discuss the necessity of disaster prevention. Yoshi met Derolin, a strange creature, in a midnight. An earthquake follows Derolin, and Yoshi needs to survive by himself.



ID: 4658

Riskland Game and Educational Kit: "Let's learn to prevent disasters!"

By the Inter-Agency secretariat of the International Strategy for Disaster Reduction

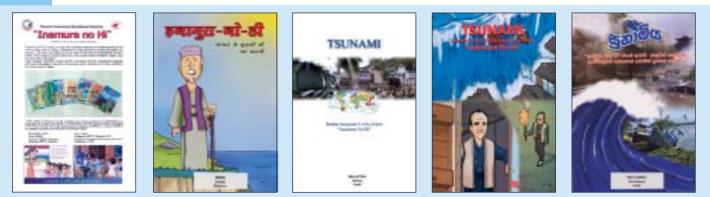
(UN/ISDR) and the United Nations Children's Fund (UNICEF), 2004 24 pages and game kit

UN/ISDR and UNICEF have together produced an educational kit for children called "Let's learn to prevent disasters!". It includes the board game "Riskland" whereby players learn about what they can do to reduce disaster impacts by answering questions and advancing along the board's winding path. The kit and game may be adapted according to the different hazards communities face, and translated into multiple languages. To date, the kit is available in English, Haitian Creole, Maya Kackchiquel, Nepali, Portuguese and Spanish, with translations into over 15 others currently underway.



4

Education



ID: 9425-9442

Tsunami, Lessons Learnt from Japanese Story "Inamura No Hi" By the Asian Disaster Reduction Center (ADRC) Government of Japan, 2005 15 pages Available in English, Malay, Indonesian, Bangladeshi, Sinhalese, Tamil, Hindi and Nepalese.

Tsunami Awareness Educational Materials "Inamura no Hi"

"Inamura no Hi" means fire of rice sheaves. "Inamura no Hi" is a story of a man who noticed a precursor of a large tsunami at the earliest stage and led village inhabitants to a high ground by burning harvested rice sheaves. This story was based on a true story at the time of Ansei-Nankai Tsunami (1854), which claimed around 3,000 lives in the coastal areas of Western Japan.

Asian Disaster Reduction Center (ADRC) developed Tsunami educational materials with basic knowledge of Tsunami in 8 countries, using "Inamura no Hi" story, funded by the Government of Japan.

"Inamura no Hi" booklets have been produced in 9 languages in 8 countries, in collaboration with the members, belonging to the Asian Disaster Reduction and Response Network (ADRRN), a network of NGOs for disaster reduction and response in the Asian region. They distributed 1,000 copies of adult version and 1,000 copies of children version in each country.

Outline of Story of "Inamura no hi"

A big earthquake occurred in the evening. Mr. Gohei, a village chief, became very much worried about tsunami. From the garden of his house on the top of the hill, Gohei looked down at houses situated along the coast. The villagers did not seem to notice that tsunami was coming. "I should warn the villagers at once!" He decided to set a fire to inamura (rice sheaves,) which were made of just-harvested rice crops.

The villagers saw the fire and shouted, "There is fire at the house of the village chief!" They made their way up to the hill. They were shocked to see the burning inamura. They tried to put out the fire at once. But Gohei exclaimed in a loud voice, "Leave the fire as it is. Tell everyone hurry up to the hill. A disaster is coming." They could not understand what was happening. Just then, Gohei pointed out to the sea, and shouted. "Look. Tsunami is coming." The sea water stood up like a wall.

The villagers saw the terrible white water destroying their village. They finally understood that it was the fire that saved their lives. They could not find the words to thank Gohei.

"Inamura no Hi" booklets also include basic knowledge on Tsunami. In order for the tragedy not to repeat itself, we need to share the lessons with other people and teach them about tsunami disaster.

Oceanography



ID: 9868

"An Implementation Strategy for the Coastal Module of the Global Ocean Observing System", GOOS Report No 148 By the Intergovernmental Oceanographic

Commission (IOC) UNESCO, 2005 144 pages

Coastal nations worldwide are experiencing changes in their coastal marine and estuarine systems that jeopardize sustainable development, human health and safety, and the capacity of marine ecosystems to support products and services valued by society. Changes of concern include increases in the susceptibility of coastal populations to flooding, tsunamis, erosion and disease, habitat loss, declines in living resources, harmful algal blooms, and mass mortalities of marine mammals and birds. Such trends reflect the combined effects of both natural processes and human uses.

The coastal module of the Global Ocean Observing System (GOOS) is intended to develop an integrated and holistic approach to addressing six goals for the public good:

- improve the capacity to detect and predict the effects of global climate change on coastal ecosystems;
- improve the safety and efficiency of marine operations;
- control and mitigate the effects of natural hazards more effectively;
- reduce public health risks;
- protect and restore healthy ecosystems more effectively; and
- restore and sustain living marine resources more effectively.



ID: 9807

Big Waves: Tracking Deadly Tsunamis In 2004 Science Year, The World Book Annual Science Supplement, 2003. By Dr. Laura Kong World Book, 2003 16 pages

Scientists hope to save more lives by learning better ways to predict the approach of killer waves. This special Oceanography report was published in 2004 Science Year by World Book.



ID: 9388 Waves, Tides and Shallow-Water Processes By Evelyn Brown The Open University, 2005 227 pages ISBN 0750642815

This book begins by describing waves, their measurement and characteristics, their behaviour in shallow water, and unusual waves. Next, the book considers mainly theoretical aspects of sediment movement and deposition by currents, before discussing wave action in the littoral zone, tidal current action on tidal flats and in estuaries, and the interaction of waves, tides and river flow in deltas. Finally, shelfsea processes are examined, including an outline of their mineral resources.

This Volume belongs to a series on oceanography. It begins by describing the characteristics of waves and tides, and their behaviour in shallow-water. After outlining the sources of sediment supply to the oceans, it considers some theoretical aspects of sediment movement and deposition by currents. After looking at wave action in the littoral zone, it explores the interplay of tidal currents, river flow and wave action in estuaries and deltas. The final Chapter provides an overview of shelf processes.

videos

Le dessous des cartes: Tsunamis, un phénomène naturel Proposé par Jean-Christophe Victor Arte France, 2005 Duration: 11 minutes http://www.arte-tv.com/ddc The power of knowledge

Story of a little boy from Semilieu, Indonesia Produced by the Inter-Agency secretariat of the International Strategy for Disaster Reduction (UN/ISDR), 2005 Duration: 3 minutes

Le Tsunami qui a touché l'Asie en décembre 2004 a choqué par son ampleur, sa force de destruction et sa soudaineté. Mais il n'est pas un phénomène exceptionnel, tout simplement parce que nous vivons sur une terre dynamique en mouvement. Les cartes permettent de comprendre ces mouvements régis par la techtonique des plaques. When the Indian Ocean Tsunami hit in December 2004 over 250,000 people were killed throughout Asia, but on one small island, just 40km from the epicenter of the earthquake, almost the entire population survived, thanks to the people's inherited knowledge of tsunamis, handed down from each generation to the next. The 26th December 2004 looked like just another normal day on Simeulue. Eleven year old Anto Suryanto and his friends were on the beach playing football when the island was hit by a major earthquake. Anto tells his story and how traditional knowledge saved his life.

Everybody's business

Film on the Hyogo Framework for Action Produced by the Inter-Agency secretariat of the International Strategy for Disaster Reduction (UN/ISDR), 2005 Duration: 10 minutes http://www.unisdr.org/eng/mediaroom/video/hf-everybody-business.wmv

Every year more than 200 million people are affected by drought, floods, cyclones, earthquakes, wildfires and other disasters associated with natural hazards. Growing populations, environmental degradation and global warming are making the impacts worse, creating greater disasters and making the need to find better ways to protect people more urgent.

In January 2005, a month after the Indian Ocean tsunami, the worlds' 168 governments adopted a ten-year plan to make the worldplanet safer from future disasters. The Hyogo Framework for Action sets out ways to make nations and communities more resilient, and better able to cope with such continuous setbacks to their development.

At it's heart is collaboration: disasters affect everyone, and are therefore everybody's business. Disaster reduction is part of everyday's decisions- choices on how we do agriculture, build health centers, educate our children, plan our cities- can either make us more vulnerable or more resilient.



Lessons save life

Story of Tilly Smith Produced by the Inter-Agency secretariat of the International Strategy for Disaster Reduction (UN/ISDR), 2005 Duration: 5 minutes http://www.unisdr.org/eng/mediaroom/video/tilly-tsunami-hr.wmv

Tilly Smith, an eleven year old schoolgirl was on holiday in Thailand with her family when the tsunami hit in December 2004. She recognized the signs of the receding sea and warned her parents of the impending tsunami, which led to hotel guests being rapidly cleared from the beach and saved the life of dozens of people. Tilly's story highlights the critical importance of basic education in preventing the tragic impacts of natural disasters.

120 Days After Tsunami Dec 26, 04: Experiences and Lessons Learn of Thailand

By the Health Technical Office, The Bureau of Policy and Strategy, Office of the Permanent Secretary, The Ministry of Public Health, Thailand Edited by Luecha Wanaratna, MD, 2005 Save Your Lives from Tsunami! Planned and produced by Japan Meteorological Agency (JMA), 2004 UN/ISDR Library for Disaster Reduction International Environment House 7-9 Chemin de Balexert CH-1219 Châtelaine Geneva, Switzerland Office 1-53/1-65, Tel. (41 22) 917 88 59 www.unisdr.org/library darricau@un.org





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