

UNESCO - NSF

**WORKSHOP ON AWARENESS-RAISING IN  
DISASTER MANAGEMENT**

Held at the Ceylon Continental Hotel, Colombo  
from 21 – 24 February 2006

**SUMMARY PROCEEDINGS**

*National Science Foundation*



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## **INTRODUCTION**

### **The Backdrop**

The Workshop on Awareness Raising in Disaster Management developed by CAVAL training of Australia, and sponsored jointly by UNESCO, New Delhi and the National Science Foundation of Sri Lanka, was held at the Continental Hotel Colombo from 21-24 February 2006. The countries represented at this Regional Workshop included the SAARC Nations – Bangladesh, India, Maldives, and Sri Lanka, as well as selected South East Asian countries – Indonesia, Malaysia and Thailand.

The Workshop was designed to develop the overall preparedness of local stakeholder groups towards disaster management. It was the vision of the organizers that this Workshop would help the participating countries through their representative, share experiences and develops practical models for public awareness on disaster management.

### **Objectives of the Workshop**

The key objectives of the Workshop are:

1. Provide basic principles about awareness raising campaigns with regard to:
  - a) Reach of the campaign, i.e. how many persons does the campaign reach.
  - b) The complexity or simplicity of the content, and what amount of information does the public receive with a suitable approach.
  - c) The extent to which the public is personally involved in activities.
  - d) The extent of influence imparted on the target audience in respect of the campaign content.
  - e) To create information literacy, and how to formulate information about disaster management (as part of the awareness campaign).
2. Assess the current status of awareness-raising in disaster management in the participating countries of the Region.
3. Design a campaign model based on optimal conditions of different approaches such as public relations (PR), advocacy, personal communications, and educational programmes in schools.

### **Expected Learning Outcomes:**

- Knowledge of the basic principles of public awareness-raising campaigns – e.g. identifying the target audience, defining the campaign message and content, and developing an effective communications plan.
- Awareness of strategies for developing and promoting information literacy capabilities within communities.
- Understanding of the current status of awareness raising in disaster management in the participating countries of the Region.
- Ability to plan, prepare, promote and present information about a specific subject or topic of interest e.g. disaster management.

## **Themes to be covered**

- The underpinning principles of public awareness-raising and information literacy in communities.
- Strategies for developing and promoting information literacy capabilities within communities.
- Planning, preparing, promoting, and presenting information about a specific subject or topic of interest e.g. disaster management.
- Developing a practical awareness-raising campaign model for disaster management combining different approaches and techniques.

## **Operational Framework of the Workshop**

A situation analysis and an overall outlook of the basic principles of planning and promoting awareness raising campaigns to be presented by the Training Manager of CAVAL Training, Australia would set the background and focus of the Workshop in its correct perspective. This presentation would be followed by a discussion where clarifications on critical issues could be sought, and the expected outputs of the Workshop discussed.

This presentation would be followed by country papers that describe the experiences in the Region in relation to awareness creation on disaster preparedness and disaster management.

In between the country presentations, group exercises are planned to provide hands-on experiences on the mechanics of facilitating awareness raising campaigns, using possible pathways and especially the media.

The Workshop is finally expected to formulate realistic recommendations on organizing awareness raising campaigns in relation to early warning systems, disaster preparedness, and disaster mitigation and management.

## SUMMARY PROCEEDINGS

### Inauguration

The Workshop proceedings commenced with the Address of Welcome delivered by Prof. Sirimali Fernando, Chairperson of the National Science Foundation. In her brief address, Prof. Fernando recalled the poignant experience of the December 2004 Tsunami, and the need to motivate people to respond with expediency in disaster situations, for which a sound awareness campaign must be organized.

Prof. M.T.M. Jiffry, Chairman of the Special Committee on Popularization of Science of NSF, speaking next referred to the aims of the Committee in making people aware of the scientific basis of natural hazards, and how they should respond in the event of a natural disaster. He explained that issues relating to awareness creation included creating awareness on risks involved, promoting measures for disaster reduction, ensuring preparedness to face a disaster, ensuring the inclusion of basic issues in school curricular, and the use of media to stimulate disaster resilience.

Dr. Susanne Ornager, Adviser for Communication and Information in Asia and Pacific of UNESCO Bangkok, addressing the inaugural session said that annually over a million people are affected by disasters for which the cost of reconstruction and rehabilitation amounts to over US\$ 30 billion.

UNESCO's concerns she explained, include disaster mitigation and management, reducing long lasting effects on development strategies especially because countries with a low level of development are prone to greater impacts, facilitate development of multi-pronged strategies and ensure that the corporate sector is properly informed in relation to pollution.

The final address was by Hon. (Prof) Tissa Vitarana, Minister of Science and Technology. The Minister in his inaugural address said that fatalism so common among people tends to create fatalistic attitudes, and then resign to live with disasters, which in itself is a negative consideration. He said that therefore there has to be a determination to change the mindset of people at all levels. He also said that the people need to examine the issues in terms of both cultural and regional aspects because of the varying situations from country to country. While considering common approaches, it is absolutely necessary to take note of the specific needs of the country, and evolve rational and scientific strategies to ensure disaster preparedness.

In conclusion the Minister made out the point that one should develop an appropriate system taking into consideration both similarities and differences between countries of the Region.

Dr. M C N Jayasuriya Director of the National Science Foundation proposed the Vote of Thanks.

### Technical Sessions

The Technical Session commenced with brief introductory comments on the Workshop by Prof.M.T.M.Jiffry and Dr Ananda Gunatillaka.

The key issues that were introduced by the speakers were: 1) How best could information be utilized for awareness raising, 2) The need to establish partnerships within communities and between communities to enable collective actions, 3) the need to influence the political leadership,

4) need to provide information in local languages and 5) the civic society to take the initiative for translation of information to local languages. It was however, conceded that the Workshop should not be expected to provide long-term solutions.

The main presentation at the technical sessions was by Mr. Richard Sayers, Training Manager CAVAL Training, on the basic principles of planning and promoting awareness raising campaigns.

Mr. Sayers recounting the impact of the Tsunami that struck several South and South-east Asian countries, referred to the Katrina hurricane of the USA as an example of the consequences of being complacent. Discussing principles of awareness planning campaigns, he said that communication is there everywhere, irreversible, complicated, and worst of all, likely to fail. If equipment is used in channeling information, then such equipment must be available to others as well. The complexities in communication are diverse and may involve not only the channel that is used, but also environmental factors that include the physical space, external distractions, credibility of the communicator, recipient's level of education and the design of the message.

According to Wiio's Law communication usually fails, except by accident, due largely to differences in language, culture, personal or lost information.

It is of utmost importance that the message is unambiguous and simple, and that it will be interpreted in a manner, that minimizes damage. In terms of Wiio's Laws, the importance of a news item is inversely proportional to the square of the distance. Discussing the rules of communications, Mr. Sayers said that one must know the purpose, the audience and the likely problems. It is necessary to use a mix of approaches and communicate a little at a time, and should assume little or no success until proven otherwise.

Raising public awareness of an issue is to inform a community's attitudes, and behaviour with the intension of influencing them positively in the achievement of a defined purpose or goal. In an awareness – raising campaign, there has to be an organized effort to inform and mobilize the audience. It must also be decided as to whether the message has to be single or multiple within the same theme.

An efficient campaign strategy uses a variety of different communication approaches to ensure that the central message is received and understood by a diverse audience.

Among common approaches are, public meetings, leaflets and posters, undertaking trainer training workshops, exhibitions and displays, radio broadcasts, using a celebrity as a spokesperson, stories and songs, schools and libraries and political advocacy.

Mr. Sayers finally explaining the planning steps and strategies for an awareness raising campaign, said that in the first instance it is necessary to clearly understand the central message to be communicated, the goals to be achieved, the authority required, the nature of the target audience, the overall reach, the means of communication, the amount of information to be disseminated, the level of public involvement, the campaign timeframe, and lastly the measures for monitoring and evaluating success.

## *Sri Lanka Country Report*

The Sri Lankan representatives, Prof. M.T.M.Jiffry and Mr. Janaka Mudalige, presented the first country report.

Speaking first Prof. Jiffry explained that natural disasters are aberrations in the course of nature, which are presumed to be beyond the domain of human control, or caused by human intervention itself, impacting on a vulnerable population. The types of natural disasters experienced in Sri Lanka include, floods, cyclones, landslides, lightening, drought, epidemics, coastal erosion, tsunamis and on a smaller scale earth tremors.

In the past disaster management and mitigation have been undertaken on an ad hoc basis, largely because the affected areas are relatively small, and limited to fairly well recognized locations. However, the magnitude and devastation of the scale of the tsunami that struck Sri Lanka and several other Indian Ocean countries in December 2004 has jettisoned authorities, civil society, and all other organized groups to the reality of seeing the extent of unpreparedness, either to face and mitigate such calamities, or manage an expedient recovery plan.

However, the government realizing the need for prompt and organized action, immediately established an Interim Committee on Disaster Management. This was followed by the institution of a Disaster Management Center, and the appointment of Parliamentary Select Committee on Disaster Management. Subsequently a separate Ministry for Disaster Management was established. Presently several Ministries are involved in awareness raising on how to respond to such unforeseen natural disasters. These include the Ministry for Disaster Management, the Ministry involved in Disaster Rehabilitation, Ministry of Science and Technology, Ministry of Health, Ministry of Education, Ministry of Environment, and the Defence Ministry. Among the other agencies involved independently in awareness raising campaigns are the National Science Foundation, National Building Research Organization, Department of Meteorology, Mines Bureau, National Aquatic Resources, Research and Development Agency, Coast Conservation Department and several NGOs. These agencies and groups have been involved in awareness raising on natural disaster amongst various audiences. The campaigns undertaken include distribution of information leaflets, posters and booklets, articles in newspapers, community workshops and seminars, programmes for youth and journalists, drama, art and essay competitions, discussions on electronic media, disaster preparedness drills, and inclusion in school curricula.

The future plans for disaster preparedness include streamlining the activities of all agencies, and targeting the youth and school children by organizing special training programmes for teachers and community leaders, and utilizing formal, non-formal, and informal methods to reinforce such knowledge.

The second part of the Sri Lankan country presentation was by Mr. Janaka Mudalige attached to the Ministry of Defence. His presentation was largely a simple and highly impressive live demonstration of a newly developed communication system, whereby information of an impending disaster prompted by an Early Warning System, is almost instantaneously conveyed and disseminated to all potential disaster localities through the network of Police Stations, with all necessary information and instructions on the impending disaster, and how to evacuate target

groups, or mitigate the impact of such a disaster. This alarm and communication system had been developed jointly by the technical staff of the National Operations Room in the Defense Ministry, in technical collaboration with the University of Moratuwa. The system is operated through a specially programmed mobile telephone, that links a disaster zone located anywhere in Sri Lanka with the National Help Desk situated in the National Operations Room. The system operates 24 hours a day with imprints in both English and Sinhala.

The use of GIS technology facilitates the pinpoint identification of the disaster location.

In conclusion Mr. Mudalige said that since this communication network operates outside the normal Police communication center, there is no cause for any confusion in the messages transmitted through this new system.

### *Discussion*

A key issue that was raised by the audience, during the discussion stage that followed the presentation, was the lines of authority to act on an alarm given by an early warning system, or by a relevant state agency such as the Department of Meteorology. It was explained that a Senior Superintendent of Police attached to the National Operations Room had been delegated authority to act on behalf of the Inspector General of Police. Hence the message is carried through without any delays or hurdles.

### *Bangladesh Country Report*

The second country paper to be presented was that of Bangladesh, which was a joint presentation by Ms Hosne Ara Begum and Mr. Moklesur Rahman. Tracing the history of natural disasters Ms Ara Begum said that 68 percent of the country is affected by natural disasters, with the cyclone of 1991 being the worst, with a death toll of 138,882 people. Bangladesh is affected by floods, tropical cyclones, storm surge, tornados, river bank erosion, drought, earthquakes and arsenic poisoning, and is considered to be one of most disaster prone countries in South Asia.

Following the devastating cyclone of 1991, the Government of Bangladesh had decided to adopt a holistic approach for disaster management and mitigation, in which a paradigm shift was envisaged through relief and response to comprehensive disaster management. The overall objective of this plan was to strengthen the capacity of the country to reduce acceptable risk, and improve response and recovery management at all levels, and to effectively integrate and manage Bangladesh's food security system. The operational mechanism was the institution of a National Disaster Management Bureau (DMB) that includes an Inter-Ministerial Disaster Management Co-ordination Committee that co-ordinates the activities of several operational committees.

DMB is responsible to create public awareness on the severity and risks, and to formulate programmes and projects, while maintaining effective liaison with government agencies, donors and NGO's, to ensure co-operation and co-ordination in all aspects of disaster management.

The main activities of DMB are; strengthening disaster management and risk reduction capacity of the Ministry of Food and Disaster Management; integrating risk management within the core business of government; ensuring knowledge management; mainstreaming disaster management

into national policies strategies and action plans; and ensuring capacity at community level for disaster risk reduction.

The formation of an Advocacy Advisory Group under the comprehensive Disaster Management Programme comprising 21 eminent personalities, and the development of a comprehensive advocacy strategy has been considered as important turn of events.

As an outcome of mainstreaming efforts of disaster management in development planning, all urban planning measures include a risk reduction strategy, that comprise selection of stakeholders, advocacy efforts for a legally binding building code, finalization of the Disaster Management Act, awareness raising among City Co-operation commissioners, and undertaking mock exercises on earthquake rescue operations. Awareness raising programmes include essay competitions, distribution of booklets containing information about disasters, TV debates, and training for university students. All these efforts have led to substantial achievements especially at the community level.

#### *Discussion*

The discussion that followed this presentation focused on the issues of the target population for awareness raising. In contrast to the situation in Sri Lanka, where the current efforts on awareness raising was focused on school children and youth, Bangladesh concentrated awareness raising at the community level. It was agreed that Sri Lankan efforts had a futuristic approach, while Bangladesh with its very frequent occurrences of disasters considered the immediate needs.

#### *Country Report of India*

The third country paper was by India, which was presented by Ms Sujatha Chaklanobis and Mr. K.V.S.P. Rao. India is traditionally vulnerable to natural disasters due mainly to her unique geo-climatic conditions. The main causes of disasters are floods, droughts, cyclones, earthquakes and landslides.

About 60 percent of the country's land mass is prone to earthquakes of various magnitudes, while 40 million hectares of land are prone to floods, 8 percent for cyclones, and 68 percent to droughts. Other causes of lesser intensity are avalanches and tsunamis.

During the period 1988 to 2001 the most intense earthquake was in January 2001, while damages due to rain, landslides and floods was most severe in 2000. The worst cyclone damage was in October 1999, when 9887 lives were lost. The damages due to drought were highest in the year 2000. India had experienced three tsunamis since 1941, of which the most devastating was the tsunami of 26<sup>th</sup> December 2004, which resulted in a loss of 12,400 lives. Among the awareness-raising programme initiated by India, is a capacity building activity for 10,000 engineers on earthquake mitigation. There is also an accelerated urban earthquake vulnerability reduction programme in 38 cities, apart from a number of sensitization workshops for engineers and architects conducted in 36 cities.

Awareness generation, public education and capacity building in preparedness and planning, are projects implemented under a Disaster Risk Management Programme, supported by UNDP, USAID and EU.

The Government of India has taken several initiatives to mitigate the impact of droughts, which include, Drought Prone Area Programme, Desert Development Programme, National Watershed Development Programme, Integrated Water Development Programme and the Integrated Afforestation and Eco-Development Programme.

Under the Risk Management Programme, training had been provided for a large number of persons, which included representatives of *Panchayati Raj* Institutions, government functionaries, engineers, architects, and also for master trainers and teachers.

In respect of large scale awareness raising, a steering committee has been constituted to generate profiles for mass media campaigns through both electronic and print media, and preparation pamphlets and posters.

India has also developed its early warning system for the operation of which authority has been delegated to the Indian Meteorological Department. In addition a pilot project has been launched by the Geneva Softwear Technologies based in Bangalore, funded by the Technology Development Board of the Department of Science and Technology.

In conclusion the delegates said that a new initiative is to be launched through the establishment of a National Emergency Management Authority.

### *Discussion*

At the discussion that followed this presentation, the need for regional or SAARC level website or network was stressed, especially to exchange experiences, strengthen early warning mechanisms, to co-ordinate scientific programmes for awareness raising in mitigation, and management of the consequences of natural disasters.

### *A Practical Exercise*

At the halfway stage of the workshop a preplanned practical exercise was introduced to the participants on the role of media in communication. The introduction to the exercise was through presentation on "Communicating Natural Disaster Risk Using Mass Media", by Mr. T.R.Gopalakrishna from the Department of Mass Media and Communications studies of the University of Madras, Chennai.

Discussing the role of media, Mr. Gopalakrishna, made out that the popular expectation was that the media should be a watchdog, an amplifier, a catalyst and an agenda setter. However, the role of media has also given rise to concerns and criticisms especially in relation to creating sensationalism that cause public panic; in reporting inaccurate and bias views; of being selective in terms of themes and topics, and in giving preference to specific events rather than issue of significance.

In the context of media reporting, mainly due to the general unpreparedness, inconsistent messages prompted by the demand for supply of essentials, tend to result in unnecessary wastage. On the other hand, staff limitations in print media offices has led to news reporting that is based on limited sources of information, and often devoid of investigative studies. Media offices are also constrained by inadequate skills in drawing and analysis of information, while journalists often tend to approach news reporting on an ad hoc, incident –oriented manner rather than in an organized fashion.

On the whole therefore, there is a major gap between the supply or sourcing side of information and the gathering and communicating side of information, especially in relation awareness raising in a disaster context. The reason adduced for this gap is that the professional rules and norms of journalists are usually in conflict with goals, tasks, and approaches of disaster managers.

Analyzing expectations versus what is ultimately received through media, Mr. Gopalakrishna summarizes that media instead of being a considered partner or ally, is often seen as a hostile observer and critique. Again if media is to be an amplifier of messages, it cannot send biased or distorted messages. The media also while not reflecting the perceived reality, tends to construct their own media reality.

However, in order to understand the media potential in disaster mitigation, early warning should become a risk communication, and the public perception of a risk is critical, especially because mass media gives easy access to a larger public. It has also to be recognized that mass media can contribute proactively at every stage of a disaster; and also that journalists are not information channels, but interpreters and gatekeepers.

At the conclusion of this presentation, the participants, reassembled in small working groups to undertake the practical exercise, which simply necessitated the groups to discuss the possible role, strategy, and response of the media in a “no-disaster” situation. The exercise brought out a several critical issues on how the media should respond in terms of situation analysis, awareness-raising, ensuring preparedness etc, which were considered important in the formulation of the Workshop recommendations.

### *Country Report of Indonesia*

The country report for Indonesia was present by Dr. Lukito Hasta Ptatapo and Dr Pariatmono. Introducing the subject, the delegates said that between 1900 and 2004, there had been 212 earthquakes of which 182 (86%) were out in the sea. Out of these 53 were in the shallow sea, while 86 earthquakes generated tsunamis. Based on these statistics Indonesia is said to experience a tsunami every 2-½ years. The tsunami generated in December 2004 accounted of 132,000 confirmed deaths, 37,000 reported missing, and 572,000 people displaced. The total losses have been valued at US\$ 4.5 billion.

Describing the December 2004 tsunami, the speaker said that the tsunami was generated by a shallow offshore epicenter earthquake, measuring 9 in the Richter scale. It resulted in a strong ground shaking that lasted 4 minutes, which prompted immediate movement of people living in close proximity to the earthquake site. The tsunami that followed produced waves ranging from 4 to 35 meters in height, a phenomenon never experienced by Indonesia.

In relation to disaster mitigation and management, the Government has established the Reconstruction and Rehabilitation Agency. The Ministry of Research and Technology has been assigned the task of co-coordinating various agencies in the development of tsunami warning systems throughout the country. The key elements necessary for this purpose have been identified. For seismic monitoring the necessary units include 100 seismographs and 500 Accelerographs, and in respect of database for tsunami modeling and sea level monitoring, the units required include 22 Dart-Buoys and 120-tide gauges. It has also been planned to install 27 continuous GPS near tide gauges, and 10 GPS near the buoys.

Several big earthquakes have occurred along the West Coast of Indonesia, which have generated tsunamis. Based on paleo-tsunami research, the next big earthquake with tsunami effects is forecast to occur near Padang City, which has a population of over 800,000 within an area of 694.96 sq. km.

Accordingly a community preparedness programme had been developed which had a test run without any prior warning on 26<sup>th</sup> December 2005 (one year after last tsunami), on a simulated early warning operation. The exercise was a demonstration of "end to end" simulation of the Indonesian Tsunami Warning System, which has the capacity to distribute information of an impending tsunami within 10 minutes.

Concluding the presentation the speaker said that a National Media campaign has been organized to increase the awareness of the people as well as of the government officers on disaster response and management.

### *Discussion*

The discussion that followed centered on the simulated early warning alarm, and the mock exercise undertaken to evacuate people from the projected disaster zone. The exercise, which was shown to the participants on video, was very impressive as the target population was quite unaware that the exercise was only a practical drill.

### *Country Report of Malaysia*

This presentation was made by Mr. Lee Chong Hoa of the Buddhist Tzu Chi Foundation of Malaysia, which is a non-governmental organization that is associated with disaster management.

Significantly the Malaysian Government did not have an official representative at the Workshop. Mr. Lee Chang Hoa said that Malaysia is very fortunate because the country has not experienced major natural disasters, although minor earth tremors, landslides, floods and drought conditions have occurred. However, the December 2004 tsunami caused 68 deaths.

The major functions of the Tzu Chi Foundation is to relieve suffering and bring happiness for people in distress. It is a charity organization that operates in 36 countries with over 150 branches and over 5 million members worldwide. It receives financial support through public donations, charity drives, and by undertaking recycling projects.

The Foundation's Tsunamis relief work involved 1941 families for whom hot food, cash and goods relief were provided. In disaster situations, the Foundation acts within a few days to provide hospital care, home care, provision of basic necessities to victims, and also participate in cleaning up disaster areas, as well as in re-construction work.

In brief therefore, the NGO organizes disaster relief and disaster management activities purely on a voluntary basis.

### *Discussion*

The discussion that followed this presentation centered on how an NGO such as this Foundation operate and co-ordinate disaster relief outside the state administrative structure. In reply the speaker said that the Government administrative structure is always required, especially when activities have to be co-ordinated among different sectors, and the government's assistance is always available in such instances.

### *Country Report of the Maldives*

The country presentation on behalf of the Maldivian Islands was a video strip with a running commentary, which showed and explained the impact of the December 2004 tsunami. The video showed how the destructive waves struck the islands, the damage that was caused, and how reconstruction was initiated and completed.

### *Country Report of Thailand*

The country report of Thailand was presented by Mr. Pisnupong Anunatpauich. Explaining the disaster management operations in Thailand, the speaker said that the Committee on Natural Disaster Warning Centre (NDWC) operates directly under the Prime Minister. NDWC is responsible for, 1) Providing early hazard warning, 2) collecting data for disaster management, and 3) developing computer software for disaster management. It also operates a call center which links 5000 mobile phones that pass on messages by SMS.

The NDWC communication system is expected to expand to all regional centers with provision for capacity building. It receives advance information on cyclones from the Meteorology Department, storm signals from the National Hydrographic Center and earthquakes from the Geological Survey.

In conclusion he said that the Tsunami Warning System that had been developed by NDWC has been successfully test run as a drill.

### **Concluding Session**

Before the final session of the Workshop, two special reports were presented by resource persons. One of these resource presentations was by Ms Paromita Pain sub-editor and reporter for the Hindu Newspaper. Ms Pain spoke on the subject "Children and Disasters – Reaching out to Special Audiences".

Children and Youth are the most vulnerable to disasters of any kind, natural or otherwise. Therefore she said that communication campaigns designed to help children understand and cope with disaster in an educated manner is today as important as creating awareness about the effects of drugs, alcohol and AIDs.

Physically children are particularly vulnerable to biological, or chemical agents, because they breathe more times per minute than adults, which also means that they would get relatively larger doses of the substances in the same period of time.

Children she said are also vulnerable to agents that act on, or through the skin, because their skin is thinner, and they have a larger surface to mass ratio than adults. Young children may also not have the cognitive ability to figure out how to flee from danger, or to follow directions from others. On the other hand an educated and trained child will deal with disaster and emergency of any kind far better than an untrained child.

For these reasons, it is necessary that any communication campaign targeting children should involve paediatric health care experts, as well as key facilities, institutions and agencies that care for children.

It has also to be understood that young children can easily confuse messages. Therefore wording is important and provides the meaning in a positive manner that helps those hearing or reaching the messages knows how to act.

Children are most concerned with events of their own lives and their personal world. Hence messages will have to be implied into their own daily routine.

The view that "children should be seen and not heard" must be discarded. She further said that facilitators must not worry that talking about disasters will make children fearful. On the contrary, children are more frightened by what is whispered or not mentioned about than by matter-of-fact discussion.

Visual literacy is what children demand today. Its potential should therefore be harnessed to get messages across to those unable to read. Visuals are often more compelling than reading matter because it is easier to cognitively process a visual than writing. It is also necessary for teachers to take advantage of the way kids entertain themselves today, and employ those same media and thinking habits for better learning. Finally she said a reiteration of messages is a must at least every 6 months.

The second resource lecture was by Mr. Richard Sayers of CAVAL Training Australia, on the theme, "Fundamental Principles of Information Literacy using the Seven Pillars Model".

Mr. Sayers said that sheer abundance of information would not in itself create more informed citizens without a complementary understanding and capacity to use information effectively. Explaining information literacy he said that it refers to – a) the set of skills required, b) ability to identify, find, retrieve, evaluate, use, and communicate information, and c) seek information from a variety of sources.

Accordingly information literate people can recognize their needs for information, and use information to resolve problems and create new knowledge, as well as use information literacy for lifelong learning.

Mr. Sayas pointed out that information literacy works best in communities with real needs, while health and natural disasters are strong catalysts for information literacy.

Information literacy provides the means to overcome what is described as the "Digital Divide", which reflects global intensities in digital and electronic means of information exchange, and the "Data Smog" which concern the volume, intensity and speed with which information transfer and assimilation must be tolerated.

In order to understand and explain information literacy, several different models have been put forward of which the "Seven Pillars of Information Literacy", developed in UK is considered to be a simple but effective conceptual model. This model ensures a progression from basic to sophisticated skills, with a practical framework, combining two sets of skills namely, knowing how to find information, which comprise four mechanisms, and knowing how to use information, which comprise 3 approaches.

Finally he explained how the 7-pillar model can be applied to achieve the best results.

## RECOMMENDATIONS

The last session of the Workshop was devoted to a comprehensive review of the proceedings, in order to formulate a set of recommendations in accordance with its expected outcomes. The following are the recommendations finally endorsed by the participants:

**Recommendation 1:** Ensure Regional cooperation for exchange of information through networking of institutions.

*Purpose*

- For sharing of information on Risk Estimates through analysis of real-time data from research institutes.
- Sharing lessons in best practices and educational/communication material on public awareness.

*Operationalization* : On-line clearinghouse/portal

*Partners* : UNDP/UNESCO

**Recommendation 2:** Developing of culturally adaptive communication programmes.

*Purpose*

- Develop a generic tool for development of communication campaigns
- Plan for inclusion of cultural factors and adaptation to local culture

*Operationalization* : Tool kit or manual.

*Partners* : UNESCO

**Recommendation 3:** Incorporate awareness raising into school curriculum

*Purpose*

- Increase knowledge of disaster management and mitigation
- Ensure sustainability through life-skill training methodology

*Operationalization* : Training modules for teachers. Train the trainers workshop. Information modules about specific disasters.

*Partners:* UNESCO

**Recommendation 4:** Work with local media to mainstream coverage of disaster-related issues during continuous hazard phase.

*Purpose*

*Operationalization* : Development of guidelines and background/briefing for media.

*Partners*: Media organizations, UNESCO

**Recommendation 5: Deepen our understanding of audiences**

*Purpose*

- To improve the reach of our messages/campaigns.
- To jointly develop feasible hazard adjustments plans/programmes.
- To improve our understanding of natural disaster risk and factors contributing to adoption of hazard adjustment recommendations amongst target audiences.

*Operationalization*: Methodology/research design, report on public perception of risk.

*Partners*: Academia/research institutions, UNESCO

**Recommendation 6: Formation of a listserv within the Region**

*Purpose*

- Information sharing

**Recommendation 7: Form a core group with representation from within the Region to ensure progress of recommendations 1 – 6.**



# *Annexes*

# Introduction to the Basic Principles of Awareness-raising Campaigns

Richard Sayers  
CAVAL Training  
Australia

## Your presenter today

Training Manager, CAVAL, Australia  
Honours degree, political science  
Masters degree, library and information management  
Qualified trainer and facilitator  
Associate Fellow, ALIA  
Member, Aust'n Institute of Management  
Library manager for 15 years  
Teaches marketing and leadership

## And ...

Experienced his first tropical cyclone at age three!



## Context

On the morning of Sunday 26 December a severe earthquake in the ocean off the coast of northern Sumatra caused tsunamis (tidal waves) that devastated communities in the Indian Ocean ... The lack of warning systems and emergency response plans reminds us that preparedness for natural disasters is a vital aspect for coping with them when they occur.

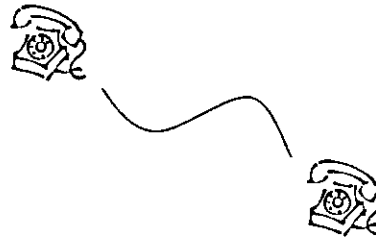


## Presentation overview

- Principles of communication
- Awareness-raising defined
- Planning a campaign
- Defining the message
- Describing the audience
- Communication strategies
- Communicating to children
- Public involvement / influence



## "Pass it on"



## Principles of communication

- Communication is everywhere
- Communication is irreversible
- Communication is complicated
- Communication is likely to fail



## Communication complexity

- Channel or medium used
- Personal experiences / opinions
- Environmental factors
  - ◆ Physical space - too hot / too cold?
  - ◆ External distractions
  - ◆ Credibility of the communicator
  - ◆ Recipient's level of education / background knowledge
  - ◆ Message design



## Wiio's Laws

- Communication usually fails, except by accident
  - ◆ Language differences
  - ◆ Cultural differences
  - ◆ Personal differences
  - ◆ Lost information



## Wiio's Laws cont

- If a message can be interpreted, it will be interpreted in a manner that maximizes damage
- There is always someone who knows better than you what you meant with your message
- The more we communicate, the worse communication succeeds



## Wiio's Laws cont

- 5 In mass communication, the important thing is not how things are but how they seem
- 6 The importance of a news item is inversely proportional to the square of the distance
- 7 The more important the situation, the more likely we will forget the essential thing we knew just moments before



## We remember

- 10% of what we read
- 20% of what we hear
- 30% of what we see
- 50% of what we see and hear
- 80% of what we say
- 90% of what we say and do



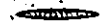
## Adult learning

= Hearing + Seeing x Doing



## Rules of communication

- 1 Know your purpose
- 2 Purpose guides the message
- 3 Know your audience
- 4 Anticipate problems
- 5 Ensure credibility
- 6 Use a mix of approaches
- 7 Communicate a little at a time
- 8 Assume little or no success (until proven otherwise)



## Awareness-raising defined

To raise public awareness of an issue is to inform a community's attitudes and behaviours with the intention of influencing them positively in the achievement of a defined purpose or goal - e.g., minimizing the harmful effects of a natural disaster



## Awareness-raising campaign

- Organised effort
- Inform and mobilise
- Broad scope and reach
- Single message / multiple messages with same theme
- One or many audiences
- Communications strategy = multiple approaches
- Defined period of time



## Phases of change

1. Advocacy
2. Action
3. Aim
4. Approval
5. Awareness



Phase determines message and communication strategy

## Critical to planning

- Message
- Audience
- Strategy
- Timing



## "Communication Mix"



An effective campaign strategy uses a variety of different communication approaches to ensure that the central message is received and understood by a diverse audience

## Common approaches

- Public meetings
- Leaflets and posters
- Train the trainer workshops
- Exhibitions and displays
- Radio broadcasts
- Celebrity spokespeople
- Stories and songs
- Local alliances (schools, libraries)
- Political advocacy

## Planning a campaign

1. Central message?
2. Campaign goal/s?
3. Authority or endorsement required?
4. Target audience?
5. Overall reach?
6. Means of communication?

## Planning a campaign cont.

7. Amount of information?
8. Level of public involvement?
9. Audience influence?
10. Campaign timeframe?
11. Assessing success?

## Case study: Bush fires

?

- Message
- Goal
- Audience
- Authority
- Reach
- Information



## Market research

- Community needs
- Demographics – e.g., population profile
- Specific challenges
- Potential obstacles
- Likely enablers
- Availability of resources



## Watch for ...

- **Obstacles** – will potentially delay or undermine a campaign but can be overcome with foresight and planning
- **Enablers** - localized forces and capabilities that help us to achieve our goals: e.g., a community leader



## Planning steps

- 1 Overview
- 2 Campaign message
- 3 Goal(s) and outcomes
- 4 Target audience(s)
- 5 Communication strategy
- 6 Budget and resources
- 7 Timeframe for delivery
- 8 Responsibility for delivery
- 9 Monitoring and assessment



Sample Planning Template

Name of campaign:	Campaign Coordinators:
1. Overview	
2. Message	
3. Goals	· · ·
4. Audience	
5. Communication Strategy	· · ·
6. Budget	
7. Timeframe	
8. Responsibility	
9. Monitoring	



## For each approach ...

- The action – e.g., writing a brochure
- Desired outcomes
- Group / individual with responsibility
- Target date for completion
- Resources



Sample Action Plan Template

Communication Strategy: Personal Communication	Name of Campaign: Cyclone Awareness in Tropical Australia
Action (describe in detail):	Facilitate awareness-raising free-charge forums, open-air, across tropical Australia concentrating with the outbreaks of cyclones in the provinces of Queensland - Fitzroy, Cairns, Mackay, Rockhampton and Townsville
Outcomes	.
Measurability	.
Target Date	.
Resources	.

## Defining the message

## Two types of messages

- Awareness messages
  - ◆ provide general information
  - ◆ used to reinforce the importance of knowing what to do
- Action messages
  - ◆ describe what people should do to prepare for a disaster

## The best messages are ...

- Short
- Simple
- Memorable
- Flexible
- Personal (us, our, me)

So we can communicate quickly, clearly and widely!

## Sample awareness messages

- What are landslides?
- What causes them?
- How do landslides affect us?
- How can I protect myself?
- Best source of information?

Common theme = landslides

### How can I protect myself from landslide?

Landslides generally happen where they have occurred in the past, and in identifiable hazard locations. Areas that are prone to landslides include existing old landslides, the bases of steep slopes, the bases of drainage channels, and developed hillsides where leach-field septic systems are used.

Areas that are typically considered safe from landslides include areas that have not moved in the past, relatively flat areas away from sudden changes in slope, and areas at the top of or along ridges, but set back from the edge of slopes.


## ACTION MESSAGES

Be Prepared for a Landslide  
Protect Yourself

### CORE ACTION MESSAGES

- Determine your risk.
- Prepare members of your household.
- Consult an expert and correct potential problems.
- Be alert to changes and patterns in the land.

## Case study: Cultural context

1. Listen – "slip, slop, slap" 
2. Consider – can this song be translated into another language and still communicate the same message?

## Personal messages

Help the audience feel more connected to the campaign and understand its significance in relation to their life and work.



## Describing the audience

## Market research

- Community needs
- Demographics
- Social, cultural and political issues
- Obstacles and enablers
- Specialised needs – children, people with disabilities, the aged and infirm
- Availability of resources

## Communication strategies

### A strategy should ...

- Raise awareness
- Provide information
- Stimulate discussion
- Encourage sharing
- Inspire local innovations



### Choice of approaches

- Extent of reach required
- Simplicity / complexity of content
- Knowledge of the target audience
- Disaster history of the community
- Communication infrastructure
- Availability of resources

### Approaches – five categories

- 1 Personal communication
- 2 Mass communication
- 3 Education
- 4 Public Relations (PR)
- 5 Advocacy

### An effective strategy ...

Incorporates a mix of one or two approaches from at least three categories

In a village context – (1) personal communication reinforced by (2) educational programs and (3) political advocacy

### Personal communication

- Community / stakeholder meetings
- Public forums and presentations
- Social events – for example, a dance organized for young people
- Role plays, stories, songs, dances, plays and poems
- Word of mouth – person to person

### Mass communication

- Printed materials – e.g., posters
- Audiovisual resources – e.g., videos
- Websites, email, blogs and RSS
- Interviews and articles in newspapers, magazines and electronic publications
- Interviews and news items on local radio and television

## Education and training

- Train the trainer workshops
- Formal and informal education programs - local schools and libraries
- Information literacy skills - finding and using information
- Static and traveling displays
- Field libraries - e.g., the Disaster Reduction Library (DRL) project, [www.unisdr.org](http://www.unisdr.org)
- Presentation / media skills

## Public Relations

Activities designed to establish and maintain the reputation / credibility of the campaign

- Regular media briefings
- Stakeholder meetings
- Celebrity spokesperson: e.g., Desmond de Silva

## Advocacy

- Strategic alliances with government, non-government (NGO) and commercial organizations
- Political advocacy and lobbying

A practical example = a disaster plan with (1) community input that (2) ordinary citizens can understand

## Communicating with children

- Important target audience
- Influential and effective communicators
- Process traumatic information differently to adults



## Communicating with children

- Let children speak freely
- Answer questions honestly / clearly
- Provide detail = to their understanding
- Adapt instructions to skills
- Give examples of local disasters
- Help children recognize warning signs
- Explain 'help' - who, how, where
- Reinforce messages every six months

## Public influence

Every awareness-raising campaign requires public involvement

But, involvement can = influence (+/-)

Decision point - how much involvement and influence is acceptable?

## Credibility

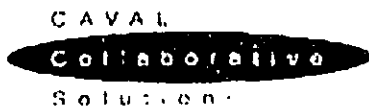
The key issue when planning an awareness-raising campaign is to ensure that the central message is not sidetracked, or worse still, compromised in the eyes of the audience at which it is targeted.

**Credibility is vital!**



## Questions and discussion





# Principles of Awareness-raising and Information Literacy for Disaster Management

**Richard Sayers**  
CAVAL Training

February 2006

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## 1. Introduction and context

"On the morning of Sunday 26 December a severe earthquake in the ocean off the coast of northern Sumatra caused tsunamis (tidal waves) that devastated communities in neighbouring countries and other countries in the Indian Ocean. The earthquake measured 9.0 on the Richter Scale, the world's most severe in 40 years. ... Those hardest hit were the people living in low-lying coastal areas. ... The lack of warning systems and emergency response plans reminds us that preparedness for natural disasters is a vital aspect for coping with them when they occur."<sup>1</sup>

AusAID, 2006

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"The goal of preventing loss of life and reducing property damage from tropical cyclones, however, cannot be achieved solely through improved meteorological services. Loss of life and property can only be minimized if officials and the general public are knowledgeable about the hazards faced, understand the warnings provided, and take the proper steps to protect life and property before, during, and after a tropical cyclone event. The process to achieve this state of readiness is accomplished with the help of an awareness program."<sup>2</sup>

Atlantic Oceanographic and Meteorological Laboratory (AOML)

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"Just as every individual, family, organization, business, and public service within a community will be affected by a disaster; each has a role to play in managing disaster. Looking at it practically, the multitude of actions that must be taken to implement an effective disaster management program requires the participation of the entire community.

Another reason for implementing community-based approaches is that communities are knowledgeable about the disasters happening in their environment and are able to anticipate them in some cases. They may not be scientific but the richness of experience and indigenous knowledge is a resource to be recognized."<sup>3</sup>

Suvit Yodmani, Asian Disaster Preparedness Centre, 2001

<sup>1</sup> <http://www.globaleducation.edna.edu.au/globaled/gp/pid/1619> (accessed 1 February 2006)

<sup>2</sup> [http://www.aoml.noaa.gov/hrd/project97/hf\\_proj1.htm](http://www.aoml.noaa.gov/hrd/project97/hf_proj1.htm) (accessed 1 February 2006)

<sup>3</sup> <http://www.adb.org/Poverty/Forum/pdf/Yodmani.pdf> (accessed 1 February 2006)



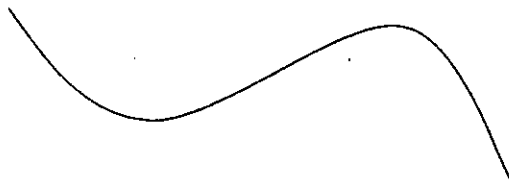
Source: AusAID, January 2005

## 2. Awareness-raising

### 2.1 Overview of Communication

Group exercise: "Pass it on"

1. Participants space themselves out so they can whisper to their immediate neighbours to the right, left, in front and behind but not hear anyone seated further away.
2. The facilitator writes a short message – no more than one sentence - on a small piece of paper and shows it to the first participant at the front of the room but keeps the paper.
3. The first person whispers the message to their neighbour and so on around the room until it reaches the last participant at the back. This person is invited to share the message, as they understand it, with the group.
4. Regardless of the outcome of the message (reasonably accurate or highly distorted), participants are invited to discuss their insights about the game. A common realization is just how easily information can become distorted by indirect communication: for example, gossip.



## Principles of Communication

Communication may be described as the two part process by which we (1) send and (2) receive information using one or more of a range of channels or media: for example, speaking to a workshop (one way communication) and providing the opportunity for questions and discussion (two-way communication).

As the "pass it on" game demonstrates, communication is not an easy process. What are some of the common challenges?

- Communication is omnipresent and inescapable – it's everywhere! The challenge is to separate quality from quantity.
- Communication is irreversible – once something is said or published it cannot be taken back or undone.
- Communication is complicated and the degree of complexity is most often determined by three crucial factors:
  1. The channel or medium used
  2. The personal experiences and opinions of the communicators (speaker and listener, writer and reader)
  3. Environmental factors that often have little or nothing to do with the message being communicated

Common environmental factors include:

- The physical space in which the communication is occurring – is the room too hot or too cold?
- External distractions that cause the message to be missed or worse still misunderstood
- The credibility of the communicator (can I believe this person?)
- The listener or reader's level of education and background knowledge of the topic
- The design of the message – is it appropriate to the audience?

## Wiio's Laws

Wiio's Laws are a good starting point for understanding the challenges of effective communication, and hence awareness-raising campaigns. Professor Osmo A. Wiio is a Finnish academic who has studied and researched human communication over many years. His laws, first published in Finnish in 1978, are both humorous and serious.<sup>4</sup>

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### 1. Communication usually fails, except by accident

Why does human communication usually fail?

- Language differences  
The language of the Internet for example is English, often idiomatic English that is poorly written and heavily abbreviated.
- Cultural differences  
The bigger and more diverse your audience, the more likely it is that someone will misunderstand your message.
- Personal differences  
Even outwardly homogenous societies or communities are comprised of individuals with different life experiences and opinions.
- Lost information  
To err is human – at various times we have all missed critical information through inattention or the failure of a specific medium: for example, the radio breaks down in the middle of a news broadcast. In the worst cases we may not be aware that information is actually missing.

2. If a message can be interpreted in several ways, it will be interpreted in a manner that maximizes damages

3. There is always someone who knows better than you what you meant with your message

4. The more we communicate, the worse communication succeeds

It is worth remembering that the quality of a message is always preferable to its quantity. The more a message is propagated, the more likely it is to be distorted with each summation and re-telling. Related to this is the problem of reinforcement when an incorrect message is repeated over and over until it is accepted as being correct.

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<sup>4</sup> <http://www.cs.tut.fi/~jkorpela/wiio.html> (accessed 1 February 2006)

Propagandists know that if you tell a lie often enough it will eventually become the 'truth'.

5. In mass communication, the important thing is not how things are but how they seem to be.

6. The importance of a news item is inversely proportional to the square of the distance

In short, the further we are located physically, intellectually and emotionally from a message, the less interested we are likely to be in its content.

And finally,

7. The more important the situation is, the more probably you forget an essential thing that you remembered a moment ago

-----

Since the 'early 1990s', Wiio's Laws have found renewed relevance in relation to communication via the Internet – especially email which is most often responsible for misunderstandings when the wrong tone or 'voice' used and body language cannot be seen to verify intent. So called "netiquette" is now used by many people to help overcome problems of misunderstanding caused by email.<sup>5</sup>

<sup>5</sup> <http://www.library.yale.edu/training/netiquette/> (accessed 1 February 2006)

## Hearing, Seeing and Doing

According to learning theorists, our effectiveness as communicators relies on two key senses (sight and hearing), coupled with an understanding that adults learn best when what they see and hear is reinforced with action.

We learn	1% through taste 1.5% through touch 3.5% through smell 11% through hearing 83% through sight
We remember	10% of what we read 20% of what we hear 30% of what we see 50% of what we see and hear 80% of what we say 90% of what we say and do

Therefore, in approaching an awareness-raising campaign for the first time it is essential that the following points are understood:

1. Know your purpose – in this case, awareness-raising about information literacy
2. Let your purpose guide and inform your message
3. Know your audience – communicate with the right people in the first instance and be mindful of their social, cultural and educational backgrounds
4. Anticipate problems and find solutions or manage the risk
5. Ensure credibility with your audience – trust is vital
6. Present information using a variety of approaches and techniques but ensure each is appropriate to your purpose, message and audience
7. Communicate a little at a time – quality over quantity
8. Assume that any communication has been unsuccessful until you have evidence to the contrary - look for practical ways to get useful feedback from your audience

## 2.2 Introduction to Awareness-raising

"A fully aware, well informed and properly trained population is the best guarantee of safety and of successful response to any disaster. This is especially true for tsunami hazards."<sup>6</sup>

Awareness-raising is a broad and somewhat vague term, yet one that is almost intuitively understood in most societies and cultures.

**To raise public awareness of a topic or issue is to inform a community's attitudes and behaviours with the intention of influencing them positively in the achievement of a defined purpose or goal: for example, minimizing the harmful effects of a natural disaster or promoting public health.**

Campaigning is a broad organised effort to change practices, policies or behaviours. It is based on the ability to communicate the same message to a variety of audiences. A campaign can involve:

- Researching an issue
- Mobilising supporters
- Informing the public
- Lobbying decision-makers<sup>7</sup>

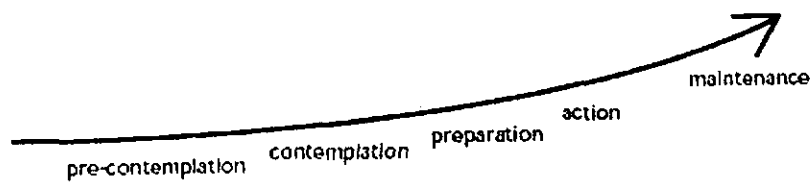
A well planned and thoughtfully presented **awareness-raising campaign** is arguably one of the most efficient and effective means of communicating general information about a particular topic or issue to a large and geographically dispersed body of people: for example, the public of a country or a specific community within that country.

Providing information and creating awareness about an issue does not however automatically lead to behavioural change; if that is the intention of the campaign. A document on awareness-raising and behavioural change prepared for the Oxfam International Youth Parliament in 2005 draws in part on research into HIV programs undertaken by the Burnet Institute in Australia. This work identifies five phases of behavioural change.<sup>8</sup>

<sup>6</sup> [http://www.unep.org/tsunami/apc/ll\\_tsunamis.pdf](http://www.unep.org/tsunami/apc/ll_tsunamis.pdf) (accessed 1 February 2006)

<sup>7</sup> <http://iyp.oxfam.org/documents/OIYP%20Case%20Study%20Collection.pdf> (accessed 1 February 2006)

<sup>8</sup> [http://www.burnet.internationalhealth.edu.au/freestylar/gui/files/fsb\\_change.pdf](http://www.burnet.internationalhealth.edu.au/freestylar/gui/files/fsb_change.pdf) (accessed 1 February 2006)



### The first stages of behaviour change

The Oxfam authors paraphrase these stages as:

Knowledge (awareness) - Approval – Intention (aim) – Practice (action) – Advocacy (encouraging others)

To achieve lasting behavioural change, people must be encouraged to move through each phase to the point where new behaviours can be maintained and others are encouraged to adopt them. To ensure a successful awareness-raising campaign, it is necessary therefore to know which phase the majority of the target population is in, and thus develop an appropriate message and communication strategy.

### Communication Strategy

An awareness-raising campaign will typically communicate either (a) one central message or (b) a suite of closely related subsidiary messages – usually no more than five – that are linked by a common theme: for example, disaster management.

The central message or themed messages of a campaign are communicated to their target audience using different approaches and techniques described in a communication strategy. This communication process usually takes place within a strictly defined – finite – period of time: for example, a school term, or in the case of cyclones in the southwest Pacific Ocean, the lead up to the wet or rainy season.

There are therefore four key components of an effective awareness-raising campaign:

Message

Audience

Strategy

Timing

These four elements may be remembered and explained by thinking of the MAST on a sailing ship as it gathers and focuses the wind that pushes the vessel towards its goal – in this case, greater public awareness and understanding.



**An effective awareness-raising campaign strategy will employ a variety of different communication approaches and techniques to ensure that the central message is received and understood by a diverse audience.**

Individuals – particularly adults – differ in their preferred learning styles. A **communication mix** is necessary therefore to ensure that everyone in the target audience receives and understands the campaign message through at least one approach. Given the diversity evident in most communities, any awareness-raising campaign that relies too heavily on just one or two approaches is unlikely to achieve its goals.

Common **approaches** and techniques for awareness-raising include:

- Personal communication with community members through public meetings, presentations, workshops and informal social events
- Structured education and training programs in schools, colleges, universities, adult learning centres and libraries
- Enhanced information literacy in communities
- Static and traveling exhibitions and displays
- Printed materials – for example, posters, brochures, pamphlets, resource books and billboards
- Audiovisual resources – for example, pre-recorded cassettes, videos, CDs and DVDs

- Websites, email discussion lists and Web Logs (blogs)
- Interviews and articles in newspapers, magazines and electronic publications accessible via the Internet
- Interviews and news items on local radio and television
- Celebrity spokespeople – for example, Desmond de Silva in support of the Autism Awareness Campaign in Sri Lanka<sup>9</sup>
- Where oral traditions dominate, performances of specially composed stories, songs, dances, plays and poems
- Strategic alliances with other organizations – for example, local libraries and schools
- Public Relations (PR)
- Political advocacy and lobbying

**Activity: Community Approaches to Awareness-raising**

List three approaches to awareness-raising that you think should be included in a communication mix focussed on your community. Why are they significant?

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_

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<sup>9</sup> <http://autism.srilanka.tripod.com/> (accessed 1 February 2006)

### 3. Awareness-raising Campaigns

#### 3.1 Planning an Awareness-raising Campaign

To be successful, an awareness-raising campaign requires careful and considered planning.

The planning process should usually begin with a **brainstorming** session structured around a series of questions. Think back to MAST (message, audience, strategy and timing) and consider the following the points in relation to your campaign:

1. What is the **central message** of the campaign?
2. What is the **goal** of the campaign – i.e., what will a successful campaign have achieved when it is complete?
3. Is government, NGO or community **authority** or endorsement required to run the campaign nationally and locally?
4. Who will comprise the target **audience** for this campaign?
5. What will be the overall **reach** of the campaign – i.e., realistically, how many people in the target audience will be exposed to the central message of the campaign?
6. What means of **communication** will be most effective for reaching the target audience – to increase the reach of the message and enhance audience understanding?
7. How much **information** should be provided in support of the message? Our aim should be to inform and educate our audience not overwhelm them with facts and figures.
8. What level of **public involvement** will be necessary to ensure success?
9. What **influence** over the campaign is the target audience likely to want or need?
10. What **timeframe** is involved – when will the campaign begin and end?
11. How will those responsible for the campaign know that it has been a **success**?

## Group exercise: Analysing an Awareness-raising Campaign

1. Consider the following pamphlet (below)
2. What do you think is the central message of the campaign?  
\_\_\_\_\_
3. What do you understand to be the goal of the campaign – what are the campaigners trying to achieve?  
\_\_\_\_\_
4. Who is the audience? \_\_\_\_\_
5. Has anyone authorized or endorsed the campaign?  
\_\_\_\_\_
6. What sort of audience reach is likely in this campaign?  
\_\_\_\_\_
7. How much information is provided and is it appropriate?  
\_\_\_\_\_

### WHAT ABOUT LIGHTING CAMP FIRES?

Camp fires vary only in size.

- a few square metres around the fire has been checked and is a reasonable hazard,
- the fire is unwatched at all times,
- the fire is lit during the night or in the presence of children, and
- they are lit in a bushland area surrounded with trees or tall grass.

Camp fires can cause bushfires, and burning can be dangerous when:


- it is windy,
- the fire changes location or spreads to other areas,
- it is lit in a bushland area.

The use of gas appliances for cooking is safer than camp fires because the flame is controlled and there is little risk of sparks escaping. Gas appliances can also be used on days of very high fire danger ratings.

### FIRE DANGER RATINGS

Fire danger ratings are a guide to appropriate fire use during the day. Always be sure to get an understanding of the weather forecast as it is important.

- LOW: High humidity, rain and the bush is wet.
- MODERATE: High humidity, rain and the bush is wet.
- HIGH: Windy conditions with some sun. The bush is dry.
- VERY HIGH: Hot, windy conditions. The bush is dry and the risk of sparks is high.
- EXTREME: Very hot and windy, the bush is very dry and the risk of sparks is high.



### HOW DO I CONTACT?


To report fires to authorities:


- To Western Australia and Queensland contact the Fire Services 0000
- To the Northern Territory contact the Northern Territory Fire and Bushfire Council on 1300 090 633

To find out more about fires in the north:

- Contact the Tropical Tourism Centre on 1300 090 633 or 1377 4761 967
- Visit the Tropical Tourism Centre website on [www.tropicaltourism.com.au](http://www.tropicaltourism.com.au) and go to the 'Tourism Information' section
- Contact the Northern Territory Department of Tourism on 08 949 9441
- Contact the Fire and Emergency Services Authority of Western Australia on 1800 952 19 933

This brochure has been produced with funding from the Australian International Centre for Natural Disaster Reduction (ICNDR) program in cooperation with relevant fire authorities, emergency and research organisations.





In considering your audience, it is also advisable to do some initial **market research** on the groups and communities that have been targeted.

The National Disaster Education Coalition advises campaigners to consider the following in relation to their audience:

- Age
- Gender
- Social, cultural and political context
- Economic standing
- Education
- Language

It is also important to consider what obstacles and enablers might be present in the community or group under consideration.

- **Obstacles** will potentially delay or undermine the campaign but can be overcome with foresight and planning
- **Enablers** are localized forces or capabilities that can help us to achieve our goals – for example, an influential community leader who publicly endorses the campaign

Market research need not be arduous but should at a minimum address the following points:

- The needs of the target community or group
- Specific challenges or issues that will need to be addressed – for example, cultural or political issues
- Potential obstacles to success – for example, geographical remoteness or limited infrastructure
- Likely enablers
- Availability of resources – i.e., what is present in the community and what will need to be provided to ensure success

In summary, having considered what your awareness-raising campaign aims to do and achieve, a simple **planning process** might involve documenting the following steps:

1. Overview – situation analysis and market research, including obstacles and enablers
2. Campaign message
3. Desired goal(s) and outcomes
4. Target audience(s) – primary, secondary and fringe
5. Communication strategy – approaches and techniques for communicating the message effectively, including language, tone, style and content level
6. Budget and resources
7. Timeframe for delivery
8. Responsibility for delivery
9. Monitoring and assessment – how will we determine success?

# Sample Planning Template

Name of campaign:	Campaign Coordinator/s:
1. Overview	
2. Message	
3. Goals	<ul style="list-style-type: none"> <li>-</li> <li>-</li> <li>-</li> <li>-</li> </ul>
4. Audience	
5. Communication Strategy	<ul style="list-style-type: none"> <li>-</li> <li>-</li> <li>-</li> <li>-</li> </ul>
6. Budget	
7. Timeframe	
8. Responsibility	
9. Monitoring	

In addition, for each approach used in the communication strategy is it also advisable to develop a short accompanying **action plan** that documents in greater detail:

- The action (for example, writing and circulating a brochure on surviving tsunamis)
- Desired outcomes
- The group or individual with responsibility for that action
- The target date for completion or implementation
- Resources

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**Sample Action Plan Template**

<b>Communication Strategy: Personal Communication</b>	<b>Name of Campaign: Cyclone Awareness in Tropical Australia</b>
Action (describe in detail)	Facilitate awareness-raising meetings with tourist operators across tropical Australia, commencing with the chambers of commerce in the provincial cities of Queensland – Bundaberg, Cairns, Mackay, Rockhampton and Townsville
Outcomes	- - - -
Responsibility	
Target Date	
Resources	- - - -

### 3.2 Defining the Campaign Message

Communicating the correct message about a topic or issue is critical to the success of any awareness-raising campaign.

In Australia, the public health message about skin cancer focuses on prevention through "slip, slop and slap" – slip on a t-shirt, slop on some sunscreen and slap on a hat. For over two decades, a dancing cartoon seagull called Sam and his short "slip slop, slap" song have reinforced the prevention message to Australians at the start of every summer (timing). Sam is now a national icon and just about every Australian over the age of three can sing his song from memory.



Sam the Seagull

#### Activity: Cultural and Linguistic Context

1. Listen to the audio file of "slip slop slap" -  
<http://www.qldcancer.com.au/Media/01-Slip%20Slop%20Slap.MP3>

#### Slip Slop Slap

Slip, Slop, Slap!  
It sounds like a breeze when you say it like that  
Slip, Slop, Slap!  
In the sun we always say "Slip Slop Slap!"  
"

Slip, Slop, Slap!  
Slip on a shirt, slop on sunscreen and slap on a hat,  
Slip, Slop, Slap!  
You can stop skin cancer say "Slip, Slop, Slap!"

2. Consider – can this short song (jingle) be translated into another language in our region (Asia) and still communicate the same message?

Quite often, specific awareness-raising messages and approaches only work effectively in the context of a particular community or culture – their reach is thus limited. Our campaign message therefore must be defined so that it can be communicated quickly, clearly and widely. It should also have some personalisation (us, our, me) and minimal scope for misunderstanding – thinking of Wiio's first and second laws of communication fails.

**The success of Sam the Seagull and his “slip slop slap” skin cancer prevention campaign in Australia also illustrates how the most effective awareness-raising messages are typically short, simple, memorable and flexible.**

Why flexible? This simply means that the same message can be used over and over again in different communication strategies and approaches: for example, in posters, brochures, newspaper advertisements and radio advertising jingles. The overall effect is to keep reinforcing the message with the target audience.

Recently, the Queensland Cancer Fund has identified a new target audience and adjusted the 'slip slop slap' message to focus on men under the age of 40.

“Queensland has the highest rate of skin cancer in the world with over 2500 Queenslanders diagnosed with melanoma each year, of which almost 200 die from the disease.

Recently during National Skin Cancer Action Week, the Queensland Cancer Fund launched a new education campaign targeted at the group at greatest risk – men under 40.

Research from the Queensland Cancer Risk Study indicated that 72 per cent of Queensland men under 40 have been sunburnt at least twice in the past 12 months.

Two new resources, a brochure and poster with the tagline “Because grown up skin needs protection too...” have been produced to assist in improving knowledge, attitudes and sun protective behaviours amongst men under 40.”<sup>10</sup>

The central message here is clear: men under the age of 40 should slip, slop and slap too!

<sup>10</sup> <http://www.qldcancer.com.au/default.asp> (accessed 1 February 2006)

## Awareness and Action Messages

In its 2004 publication *Talking About Disaster*, the National Disaster Education Coalition identifies two main types of campaign messages:

1. **Awareness messages** – these provide general (background) information about the threats presented by each type of disaster and can be used to reinforce the importance of knowing what to do (informed action) in the event of an emergency
2. **Action messages** – these describe in detail what people should do to prepare for and get safely through a disaster

Awareness-raising in disaster management will generally require a mix of awareness and action messages. Effective awareness messages about landslides for example can be built around simple questions such as:

- Why talk about landslides?
- What are landslides and what causes them?
- How do landslides affect us?
- How can I protect myself from landslide?
- What is the best source of information in a landslide situation?

In the event of a landslide somewhere in the United States, members of the public are told that "the best source of information ... is a local radio or television station."<sup>11</sup>



<sup>11</sup> <http://www.disastereducation.org/guide.html> (accessed 1 February 2006)

Accompanying action messages may be more technical and require checklists to facilitate understanding and assist recall. Another example from the National Disaster Education Coalition promotes the action message: "be prepared for a landslide".

## **ACTION MESSAGES**

### **Be Prepared for a Landslide**

#### **Protect Yourself**

##### **CORE ACTION MESSAGES**

- Determine your risk.
- Prepare members of your household.
- Consult an expert and correct potential problems.
- Be alert to changes and patterns in the land.

For general preparedness, every household should create and practice a Family Disaster Plan and assemble and maintain a Disaster Supplies Kit. In addition, every household at risk from landslides should take landslide-specific precautions and plan for and practice what to do if a landslide occurs.

If you are at risk from landslides, you should:

- **Develop an evacuation plan.** If your home could be damaged in a landslide, you should know where to go if you have to leave. Making plans at the last minute can be upsetting, create confusion, and waste precious time. Contact local authorities to learn about the emergency response and evacuation plans for your area and develop your own emergency plans for your family and business.
- **Familiarize yourself with the land around you.** Knowing the land can help you assess your risk.
- **Watch the patterns of storm water drainage on slopes near your home** and especially the places where runoff water converges, increasing flow over soil-covered slopes. Watch the hillsides around your home for any signs of land movement, such as small landslides or debris flows, or progressively tilting trees. Noticing small changes could alert you to an increased threat of a landslide.
- **Discuss landslides and debris flows with members of your household.** Everyone should know what to do to stay safe if one occurs.

To reinforce the credibility and importance of each message, the National Disaster Education Coalition also provides statistics and other supporting information. One useful technique is to compare facts with fiction:

Tsunamis  
July 2004

### Facts and Fiction

**Fiction:** Tsunamis are giant walls of water.

**Facts:** Tsunamis normally have the appearance of a fast-rising and fast-receding flood. They can be similar to a tide cycle occurring over 10 to 60 minutes instead of 12 hours. Occasionally, tsunamis can form walls of water, known as tsunami bores, when the waves are high enough and the shoreline configuration is appropriate.

**Fiction:** A tsunami is a single wave.

**Facts:** A tsunami is a series of waves. Often the initial wave is not the largest. The largest wave may occur several hours after the initial activity starts at a coastal location. There may also be more than one series of tsunami waves if a very large earthquake triggers local landslides. In 1964, the town of Seward, Alaska, was devastated first by local tsunamis caused by submarine landslides resulting from the earthquake and then by the earthquake's main tsunami. The local tsunamis began even as people were still experiencing the shaking. The main tsunami, triggered at the site of the earthquake, did not arrive for several hours.

**Fiction:** Boats should move to the protection of a bay or harbor during a tsunami.

**Facts:** Tsunamis are often most destructive in bays and harbors, not just because of the waves but because of the violent currents they generate in local waterways. Tsunamis are least destructive in deep, open ocean waters.

In many western countries where the population is prone to **information overload**, awareness-raising messages are often overlooked or ignored. To make the message stand out and become more immediate, many awareness-raising campaigns now incorporate case studies, stories and testimonials from people; written or presented in their own words.

**Personal communication helps to make the audience feel more connected with the message of the campaign and understand the significance of that message in relation to their life and work.**



### 3.3 Describing the Target Audience

After defining the central message, the next critical step in any awareness-raising campaign is to get to know the intended audience in detail.

As we have already noted, **market research** need not be an arduous process, particularly if the campaign has limited resources available. It should however involve consideration of the following:

- Identifiable community needs in relation to the campaign
- Demographics – for example, how is the community composed in terms of gender, age, family status and level of education?
- Social, cultural, religious and political issues, including local languages and informal community leadership
- Availability of resources in the community – who, what, when and how?
- Potential obstacles and possible solutions

The National Disaster Education Coalition urges sensitivity in awareness-raising, particularly if the central message requires a community to contribute resources. Where a message relates to disaster management, it is also advisable to research the disaster history of the area, noting in particular any specific hazards that may have relevance to the campaign and their impacts on the target audience.

Communicating to children about disaster management requires particular sensitivity and this issue is discussed in detail in Section 3.5.

Other groups with specialized needs include people with disabilities, the aged and the infirm. In describing our audience, we must take account these groups and ensure our communication strategy includes approaches appropriate to their special needs.

### 3.4 Communication Strategies for Awareness-raising

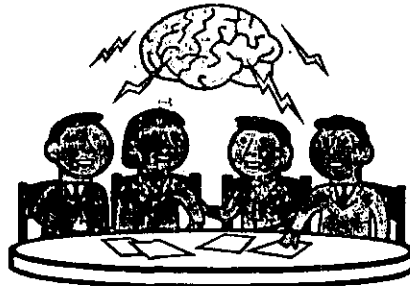
"If we could reach out to communities before disasters and inform them of what to do 'just in case', impacts could be reduced dramatically."<sup>12</sup>

In Section 2, we noted that effective awareness-raising campaigns use a mix of communication approaches and techniques (strategies) to ensure their central messages are received and understood by diverse target audiences.

It is widely accepted that "mitigation of hazard impact and vulnerability through education and awareness-raising has had to treat communities and population groups as separate targets for information."<sup>13</sup>

In addition to promoting awareness and understanding of disaster management, the mix of strategies employed should also:

- **Provide information** (content) that reinforces the credibility of the campaign message
- **Stimulate discussion** and information sharing at the community level
- **Inspire local innovations** in disaster prevention and recovery



<sup>12</sup> [http://www.unep.org/tsunami/apell\\_tsunamis.pdf](http://www.unep.org/tsunami/apell_tsunamis.pdf) (accessed 1 February 2006)

<sup>13</sup> [http://www.ema.gov.au/aqd/ema/rwpattach.nsf/viewasattachmentPersonal/4A2515985EBB9878CA256EB6001BB717/\\$file/AJEM%2025-29%20May04web-6.pdf](http://www.ema.gov.au/aqd/ema/rwpattach.nsf/viewasattachmentPersonal/4A2515985EBB9878CA256EB6001BB717/$file/AJEM%2025-29%20May04web-6.pdf) (accessed 1 February 2006)

The choice of specific strategies comprising our communication mix will be guided by a number of considerations:

- Extent of reach required in the campaign
- Relative simplicity or complexity of the content to be presented
- Knowledge of the target audience, particularly their demographic, socioeconomic and cultural characteristics
- The disaster history of the community or region
- Availability of communication infrastructure and community preferences – for example, radio over television
- Availability of resources – financial, material and human

Those planning an awareness-raising campaign for the first time may be surprised by the variety of potential approaches and techniques available to them. There is certainly no lack of choice when it comes to preparing a communications strategy. The more commonly used approaches may be grouped into five broad categories, with each describing its primary approach or emphasis:

1. Personal communication
2. Mass communication
3. Education
4. Public Relations (PR)
5. Advocacy

**Depending on the circumstances of the campaign, an effective communications strategy should ideally incorporate a mix of one or two approaches from at least three categories.**

Many approaches benefit from the use of physical props to reinforce the campaign message. The National Disaster Education Coalition recommends the use of "photos or drawings for print materials, soundtracks for radio presentations, videos for television, and aids like videos, posters, Disaster Supplies Kit items, and mock-ups to make presentations interactive."<sup>14</sup>

<sup>14</sup> <http://www.disastereducation.org/guide.html> (accessed 1 February 2006)

## **Case Study: Raising awareness of cyclones among backpackers in northern Australia**

Backpackers and other independent travelers contribute significantly to the tourism economy of northern Australia, both as consumers and casual workers. As a rule, backpacker numbers are greatest during the summer months, or wet season, when young Europeans and North Americans complete their studies and head 'down under' to escape the northern hemisphere winter. During summer however, this region of Australia is particularly prone to a variety of natural disasters, including cyclones, tropical storms, flash-flooding and bushfires.

Now considerable research is being undertaken to inform awareness-raising campaigns targeted at backpackers and other independent travelers. Early findings suggest that the majority of backpackers source their information about Australia before they leave their country of origin. Their preferred sources of information are guidebooks such as the Lonely Planet series and the Internet. Once in Australia, they turn to word of mouth (usually other backpackers), local television and tour agents for more detailed information.

Studies by researchers at James Cook University in 2000 and 2003 concluded that overall awareness of critical threats such as cyclones was very low among backpackers. Their findings showed that "even though most of the backpackers were aware that Australia is affected by tropical cyclones, only 30% of the backpackers got information about cyclones during their trip through Australia."<sup>15</sup> Furthermore, nearly all of the backpackers interviewed said that cyclone safety information was either not available at their accommodation or they had not been informed of its existence.

Work is now underway in northern Australia to develop an awareness-raising campaign about cyclones that is targeted at backpackers. Prior work on campaigns aimed at communities in the region has already indicated that:

1. Public meetings are not effective for educating the general public but can be used with great success to raise awareness within specific industry or community sectors – for example, tourism industry representatives
2. Spoken cyclone warning messages on radio and television require more detail about the threatened area than was originally thought necessary – for example, popular landmarks

<sup>15</sup> [http://www.ema.gov.au/agd/ema/rwpattach.nsf/viewasattachmentPersonal/4A2515985EBB9878CA256EB6001BB717/\\$file/AJEM%2025-29%20May04web-6.pdf](http://www.ema.gov.au/agd/ema/rwpattach.nsf/viewasattachmentPersonal/4A2515985EBB9878CA256EB6001BB717/$file/AJEM%2025-29%20May04web-6.pdf) (accessed 1 February 2006)

## Personal Communication

- Community and stakeholder meetings
- Public forums, presentations and workshops
- Social events – for example, a dance organized for young people
- In societies and cultures where oral traditions dominate, role plays, performances of specially composed stories, songs, dances, plays and poems
- Word of mouth – person to person

## Mass Communication

- Printed materials – for example, posters, brochures, pamphlets, resource books and billboards
- Audiovisual resources – for example, pre-recorded cassettes, videos, CDs and DVDs
- Websites, email discussion lists, Web Logs (blogs) and RSS news feeds
- Interviews, articles and announcements in newspapers, magazines and electronic publications accessible via the Internet
- Interviews and news items on local radio and television

Web Logs and RSS news feeds are relatively recent innovations but have the potential to greatly assist awareness-raising campaigns in areas where the Internet is available in local schools and libraries, *if not homes*.

RSS is a method of summarizing the latest news and information from a website in a lightweight form that can be easily read by news reader or news aggregator software. The idea is to give users the ability to quickly obtain the latest news and updates from a site in a headline or news digest format. The National Hurricane Center in the United States currently provides news feeds in both English and Spanish.<sup>16</sup>

<http://www.nhc.noaa.gov/aboutrss.shtml>

## Education

- Train the trainer workshops and programs
- Formal and informal educational programs about disaster management presented in local schools, colleges, adult learning centres and libraries
- Enhanced information literacy skills, thereby enabling more effective information finding and use within communities
- Static and traveling exhibitions and displays
- Field libraries – for example, the Disaster Reduction Library (DRL) project, [www.unisdr.org](http://www.unisdr.org)

<sup>16</sup> <http://www.nhc.noaa.gov/aboutrss.shtml> (accessed 1 February 2006)

- Training in presentation and media skills

As UNESCO's Memory of the World Program reminds us in relation to our documentary heritage, "education plays a crucial role in raising awareness".<sup>17</sup> The same may be said of disaster management where education clearly "accelerates the progress of societies toward disaster resilience."<sup>18</sup> This occurs for two simple reasons: children eventually grow into adults, with the capacity to apply the knowledge they have learned at school, and the process of education itself tends to continue long after the initial awareness-raising campaign has concluded.

Two types of education are relevant to awareness-raising in disaster management:

1. Formal education – content relating to disaster preparedness and response that is included in the school curriculum and taught in the context of local hazards and issues
2. Informal education – workshops and presentations designed to teach primarily adults about key aspects of disaster preparedness and response, including how to act in a disaster and how to develop emergency plans

An increasingly important educational approach involves promoting and teaching information literacy skills within communities, starting with children in schools.

When planning an awareness-raising campaign, we need to know how communities within our target audience typically find, use and communicate information. Once this is known, it is possible to prepare and present awareness-raising information that is better suited to these preferences. Ideas for promoting information literacy in communities are provided in Section 4 of this handbook.

## Public Relations (PR)

Public Relations or 'PR' deals broadly with activities designed to establish and maintain the reputation or credibility of the campaign. The Chartered Institute of Public Relations in Britain describes PR as "the planned and sustained effort to establish and maintain goodwill and mutual understanding between an organisation [awareness-raising campaign] and its publics [audience and stakeholders]."<sup>19</sup>

Examples of useful PR might include regular briefings for the media on the progress of the campaign and stakeholder meetings for government agencies and other organisations involved with facilitating and supporting the campaign. Celebrity spokespeople will often provide very effective PR opportunities. An

<sup>17</sup> [http://www.unesco.org/webworld/mdm/administ/en/MOW\\_fin9.html](http://www.unesco.org/webworld/mdm/administ/en/MOW_fin9.html) (accessed 1 February 2006)

<sup>18</sup> [http://www.unesco.org/science/earth/disaster/apell\\_schools.pdf](http://www.unesco.org/science/earth/disaster/apell_schools.pdf) (accessed 1 February 2006)

<sup>19</sup> <http://www.ipr.org.uk/> (accessed 1 February 2006)

excellent example in Sri Lanka is the support provided to the Autism Awareness Campaign by local entertainer Desmond de Silva.<sup>20</sup>

Ultimately, PR is about ensuring that the campaign is perceived positively and that its message – however this may be communicated – is received by its target audience with an open mind.

### **Advocacy**

- Strategic alliances with government, non-government (NGO) and commercial organizations
- Political advocacy and lobbying

A practical example of disaster management in action would be the development of "an emergency plan to which the community has provided substantial input and which ordinary citizens can understand"<sup>21</sup>. Although not likely to need substantial resources, this sort of initiative might still require political will or endorsement at a local, regional and possibly national level. Achieving this commitment from local and central governments may necessitate the addition of political advocacy and lobbying to our communication strategy.

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<sup>20</sup> <http://autism.srilanka.tripod.com/> (accessed 1 February 2006)

<sup>21</sup> [http://www.unep.org/tsunami/apell\\_tsunamis.pdf](http://www.unep.org/tsunami/apell_tsunamis.pdf) (accessed 1 February 2006)

### 3.5 Communicating to Children

Children often form an important target audience for awareness-raising campaigns because they are recognized to be "influential and effective communicators".<sup>22</sup> In all societies and cultures, what is learned by children at school tends to be later communicated to those at home and even their extended family networks.



Communicating to children is also significant in that they process traumatic information and experiences differently to adults and are more likely to suffer long term psychological upset if the correct approaches and techniques are not used.

The following advice is reprinted with thanks to the National Disaster Education Coalition.

#### **Talking to Children About Disasters**

You should not worry that talking about disasters will make children fearful. On the contrary, children are usually more frightened by what is whispered or not mentioned aloud than by matter-of-fact discussion. Let children speak freely about what scares or puzzles them—for example, "What will happen to my puppy if we have to evacuate?" "If there's a flood and I'm at school, I won't be able to find you." Try to answer questions and address concerns with concrete, easy-to-follow information.

When helping children learn how to prepare for, respond safely during, and recover from a disaster, it is important to adapt your discussions, instructions, and practice drills to their skills and abilities. Be aware that young children can easily confuse messages such as "drop, cover, and hold on" (response during an earthquake) and "stop, drop, and roll" (response if your clothes catch on fire).

Tell children that a disaster is something that happens that could hurt people, cause damage, or cut off utilities, such as water, telephones, or electricity. Explain to them that nature sometimes provides "too much of a

<sup>22</sup> [http://www.unesco.org/science/earth/disaster/apell\\_schools.pdf](http://www.unesco.org/science/earth/disaster/apell_schools.pdf) (accessed 1 February 2006)

good thing"—fire, rain, wind, snow. Talk about typical effects of disasters that children can relate to, such as loss of electricity, water, and telephone service.

Give examples of several disasters that could happen in your community. Help children recognize the warning signs for each. Discussing disaster ahead of time reduces fear and anxiety and lets everyone know how to respond.

Be prepared to answer children's questions about scary things that they have heard about or seen on television, such as terrorist attacks. Give constructive information about how they can be prepared to protect themselves.

Tell children that in a disaster there are many people who can help them. Talk about ways that an emergency manager, American Red Cross volunteer, police officer, firefighter, teacher, neighbor, doctor, or utility worker might help after a disaster.

Teach children to call your out-of-town contact in case they are separated from the family and cannot reach family members in an emergency. Tell them, "If no one answers, leave a voice message if possible and then call the alternative contact." Help them memorize the telephone numbers, and write them down on a card that they can keep with them.

Quiz your children every six months so they will remember where to meet, what phone numbers to call, and safety rules.

Explain that when people know what to do and practice in advance, everyone is able to take care of themselves better in emergencies.

By including all members of your household—regardless of age—in disaster preparedness discussions, you will emphasize each person's importance as a member of the safety team.<sup>23</sup>

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<sup>23</sup> [http://www.disastereducation.org/Talking\\_to\\_Children.html](http://www.disastereducation.org/Talking_to_Children.html) (accessed 1 February 2006)

### 3.6 Public Influence and Involvement

Every awareness-raising campaign requires some measure of public involvement to be effective, and may in turn be subject to public influence. Deciding how much of each – involvement and influence - is desirable or acceptable is a critical decision point for campaign planners.

For example, the cooperation of an influential community leader may be necessary to ensure the successful communication of our message to a specific target audience. This leader in turn however may seek to bargain their cooperation into a stake in the message itself in order to advance their own political agenda or that of a third party.

The possibility that an awareness-raising campaign could be turned to propaganda is real and should be guarded against. That said, it may be argued that every campaign contains an element of propaganda anyway.

Propaganda in its purest form is simply "information that is spread for the purpose of promoting some cause"<sup>24</sup>

**The key issue when planning an awareness-raising campaign is to ensure that the central message is not sidetracked, or worse still, compromised in the eyes of the audience at which it is targeted. Credibility is vital.**

#### Credibility

There is acknowledged to be a direct correlation between the level of credibility of information (and those that communicate it) and the degree of positive influence that it exerts on a community. The higher the level of credibility, the greater the degree of positive influence; and behavioural change, if that is the desired outcome.

In his 2004 report on Disruptive weather warnings and weather knowledge in remote Australian Indigenous communities, Douglas Goudie notes that:

"People tend to respond to perceived fairness as much or more than they respond to apparent objectivity. ... If the goals of the communicator are seen to serve a common interest with high social values people are more likely to trust the embedded messages. In the end the sources don't necessarily have to be liked. It's the actual

<sup>24</sup> <http://wordnet.princeton.edu/perl/webwn> (accessed 1 February 2006)

positive and understood outcomes of the communication message which matter the most."<sup>25</sup>

## Propaganda

The following observations on propaganda in the age of the Internet have been extracted from the website [propagandacritic.com](http://propagandacritic.com) and are the work of Aaron Delwiche, an academic in the Department of Communication at Trinity University.

### Why think about propaganda?

As Anthony Pratkanis and Elliot Aronson point out, "every day we are bombarded with one persuasive communication after another. These appeals persuade not through the give-and-take of argument and debate, but through the manipulation of symbols and of our most basic human emotions. For better or worse, ours is an age of propaganda." (Pratkanis and Aronson, 1991)

With the growth of communication tools like the Internet, the flow of persuasive messages has been dramatically accelerated. For the first time ever, citizens around the world are participating in uncensored conversations about their collective future. This is a wonderful development, but there is a cost.

The information revolution has led to information overload, and people are confronted with hundreds of messages each day. Although few studies have looked at this topic, it seems fair to suggest that many people respond to this pressure by processing messages more quickly and, when possible, by taking mental short-cuts.

Propagandists love short-cuts -- particularly those which short-circuit rational thought. They encourage this by agitating emotions, by exploiting insecurities, by capitalizing on the ambiguity of language, and by bending the rules of logic. As history shows, they can be quite successful.<sup>26</sup>

<sup>25</sup> [http://www.iesag.jcu.edu.au/CDS/reports/Gou\\_IWWRpt/03%20overview%20a.pdf](http://www.iesag.jcu.edu.au/CDS/reports/Gou_IWWRpt/03%20overview%20a.pdf) (accessed 1 February 2006)

<sup>26</sup> [http://www.propagandacritic.com/articles/intro\\_why.html](http://www.propagandacritic.com/articles/intro_why.html) (accessed 1 February 2006)

## 4. Information Literacy

### 4.1 Introduction to Information Literacy

"The uncertain quality and expanding quantity of information also pose large challenges for society. Sheer abundance of information and technology will not in itself create more informed citizens without a complementary understanding and capacity to use information effectively."<sup>27</sup>

In Section 3.4 we explored the five broad types of communication strategies: personal communication, mass communication, education, public relations and advocacy. An increasingly important educational approach involves promoting and teaching information literacy skills within communities, starting with children in schools.

#### What is Information Literacy?

**Information literacy may be simply defined as the set of skills required to identify, find, retrieve, evaluate, use and communicate information from a variety of sources.**<sup>28</sup>

An information literate person has the ability to (a) recognize when they need information, and (b) identify, locate, evaluate, organise and make effective use of that information to resolve issues and problems.

Importantly, information literacy provides the basis for lifelong learning.

"Lifelong learning is important because continuous learning is essential for survival in a changing world. According to the formula  $L > C$  where  $L$  is the rate of learning and  $C$  is the rate of change, individuals who are not learning individuals will be excluded, disadvantaged and will become disaffected."<sup>29</sup>

A practical goal for information literacy in developing nations is suggested in a 2002 paper, *Towards a Functional Infoliteracy Campaign in African States*:

"Helping to inculcate a lifelong habit of identifying an information need and efficiently searching for, and using, indigenous oral, print, electronic and other sources of information to satisfy that need and

<sup>27</sup> <http://www.anu.edu.au/caul/info-literacy/InfoLiteracyFramework.pdf> (accessed 1 February 2006)

<sup>28</sup> Adapted from the American Library Association, <http://www.ala.org/> (accessed 1 February 2006)

<sup>29</sup> Pradeepa Wijetunge (2000) "The role of public libraries in the expansion of literacy and lifelong learning in Sri Lanka", *New Library World*, 101(1155), p. 105.

thereby enhance personal, community, and national socio-economic interests."<sup>30</sup>

## Fourth Dimension to Literacy

The term information literacy has been used by librarians and educators since the early 1990s when the rapid growth of the Internet suggested the need for a fourth dimension to literacy. In her 2002 UNESCO white paper on information literacy for citizenship, Ana Maria Ramalho Correia quotes Linda Langford (1999) on the need for new skills:

Reading, writing and arithmetic (the 3R's) are still the basics of Literacy but additional skills are now required to gain the advantages of information delivered in different media through Information and Communication Technologies (ICT) and the Internet.<sup>31</sup>

UNESCO refers to information literacy in terms of capacity building: that is, "everybody should have the opportunity to acquire the skills in order to understand, participate actively in, and benefit fully from the emerging knowledge societies."<sup>32</sup>

## Community Tool

The 2003 Information Literacy Meeting of Experts in Prague identified information literacy as "a powerful community tool that facilitates access to information and has real impact on its health, wealth, and well-being."<sup>33</sup> Furthermore, "information literacy efforts will work best if they are applied at the existing community unit level where needs are best identified".<sup>34</sup>

**Health and natural disasters are considered useful catalysts for information literacy as both are compelling motivators for families and communities to seek and apply information.**

In practical terms, the Prague experts suggested that "the starting point should be to find out what the basic unit of a community is in each country, and then address its information literacy needs."<sup>35</sup>

<sup>30</sup> <http://www.nclis.gov/libinter/infolitconf&meet/papers/aiyepeku-fullpaper.pdf> (accessed 1 February 2006)

<sup>31</sup> <http://www.nclis.gov/libinter/infolitconf&meet/papers/correia-fullpaper.pdf> (accessed 1 February 2006)

<sup>32</sup> <http://portal.unesco.org/ci/en/ev.php>

URL ID=15886&URL DO=DO TOPIC&URL SECTION=201.html

<sup>33</sup> <http://www.nclis.gov/libinter/infolitconf&meet/post-infolitconf&meet/FinalReportPrague.pdf> (accessed 1 February 2006), p. 4.

<sup>34</sup> Ibid

<sup>35</sup> Ibid, p. 12.

## Why is Information Literacy important?

"A ten-year old girl on holiday saved over 100 lives in Phuket, Thailand, when the tsunami hit in December 2004 because she was information literate. ... Tilly Smith of Oxshott, England, having researched tsunamis two weeks prior to her holiday in geography class, recognized the early warning signs of an imminent tsunami, and took action. Because of her ability to use and apply the knowledge she had learned, the beach was cleared and no lives were lost."<sup>36</sup>

**Information in the early 21<sup>st</sup> century is characterized by overabundance (information overload), unequal distribution, a strong tendency to triviality, and increasing concerns about credibility.**

For people from non-English speaking cultures there is the added issue of language as the majority of Web content is authored in English. For those in less affluent societies there is also the growing "digital divide"<sup>37</sup> that separates the information rich from the information poor.

In its 2001 *Statement on Information Literacy for all Australians*, the Australian Library and Information Association emphasizes the importance of information literacy as a prerequisite for:

- Participative citizenship
- Social inclusion
- The creation of new knowledge
- Personal, vocational, corporate and organisational empowerment
- Lifelong learning

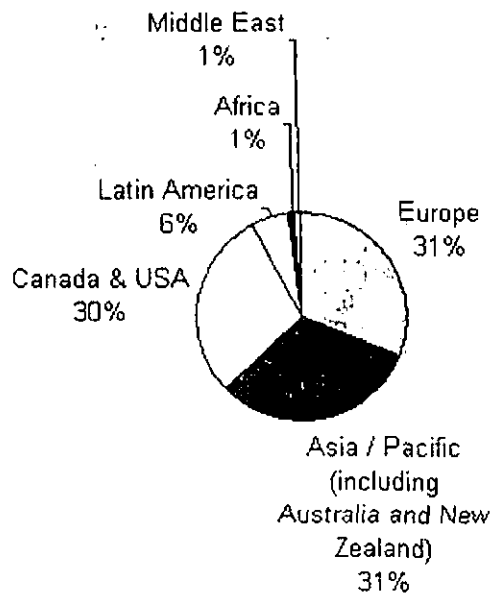
As Tilly Smith proved in December 2004, information literacy may also be a prerequisite for future survival of natural disasters in many parts of the world.

Internet access is a key indicator of the digital divide with the divergence between industrialized and developing nations becoming more acute each year. Although an imperfect measure, particularly in Asia where countries like Singapore and China skew the results, the worldwide distribution of Internet users serves to illustrate the global divide.

<sup>36</sup> [http://portal.unesco.org/ci/en/ev.php-URL\\_ID=20891&URL\\_DO=DO\\_TOPIC&URL\\_SECTION=201.html](http://portal.unesco.org/ci/en/ev.php-URL_ID=20891&URL_DO=DO_TOPIC&URL_SECTION=201.html) (accessed 1 February 2006)

<sup>37</sup> Pippa Norris (2001) *Digital Divide? Civic Engagement, Information Poverty and the Internet Worldwide*, Cambridge: Cambridge University Press.

## Internet Users - Worldwide Distribution



Source: Nielsen/NetRatings 2002

In 1997, David Shenk - an American writer - famously described the problem of information overload as "data smog".<sup>38</sup> The challenges identified by Shenk include:

- The amount of information we must assimilate and process
- The speed with which it comes to us from multiple sources
- The need to make quick decisions
- Feelings of general anxiety that we are making decisions without all of the available information

**Information literacy has been identified as a solution to both the digital divide and data smog by providing people with the skills to know when they need information and how to locate it effectively and efficiently.**

<sup>38</sup> <http://www.davidshenk.com/> (accessed 1 February 2006)

## Information Literacy and Awareness-raising

As a result of data smog, we all see and hear a multitude of messages each day. The difficulty is deciding which messages we should pay attention to and what accompanying information is to be believed.

Awareness-raising campaigns therefore must work to overcome public cynicism while competing with a range of other messages in order to be noticed.

Part of the solution, as we have already seen, is to develop a well researched communication strategy that acknowledges our target audience and incorporates a mix of approaches and techniques.

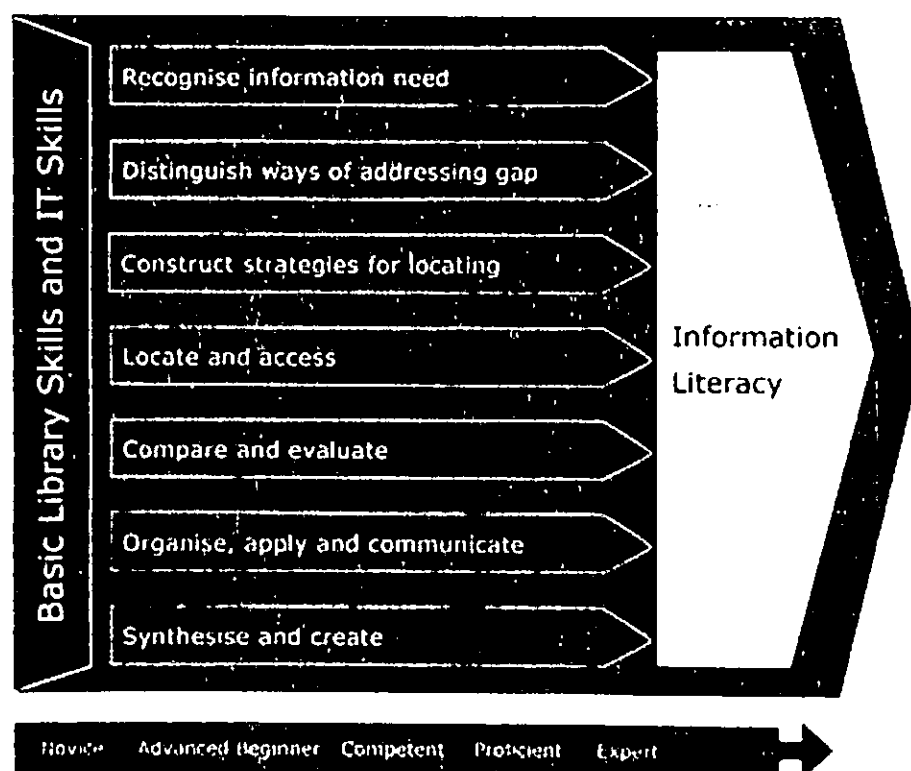
Communication though is a two way process and more can be achieved if individuals and communities are provided with the skills to assess and make more effective use of the information they receive.

## 4.2. Understanding and Promoting Information Literacy

### The Seven Pillars Model

A variety of useful models exist to help explain and understand information literacy. In 1999, the Information Skills Taskforce of the Standing Conference of National and University Libraries in the UK (SCONUL) developed a particularly effective conceptual model - the *Seven Pillars of Information Literacy*.<sup>39</sup>

SCONUL Seven Pillars Model for Information Literacy  
Society of College, National and University Libraries



Reprinted from [http://www.sconul.ac.uk/activities/inf\\_lit/sp/model.html](http://www.sconul.ac.uk/activities/inf_lit/sp/model.html)

<sup>39</sup> [http://www.sconul.ac.uk/activities/inf\\_lit/sp/model.html](http://www.sconul.ac.uk/activities/inf_lit/sp/model.html) (accessed 1 February 2006)

The Seven Pillars Model for Information Literacy should be viewed as a progression from basic information literacy skills through to more sophisticated ways of understanding and using information – the path from novice to expert. The model provides a practical framework with which we can identify and examine the skills an average person in any society requires to be an active and informed citizen.

The Seven Pillars Model can be divided into two core sets of skills:

- Knowing how to locate and access information
- Knowing how to understand and use information

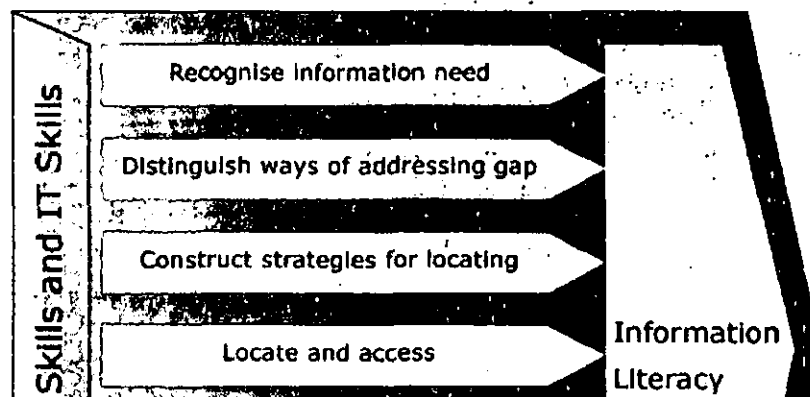
### **Knowing how to locate and access information**

(Pillar 1) Recognize our information need – knowing what is known, knowing what is not known and identifying the gap

(Pillar 2) Distinguish ways of addressing the gap – knowing which information sources are likely to satisfy the information need

(Pillar 3) Construct strategies for locating information – in the first instance, knowing how to develop and refine an effective search strategy

(Pillar 4) Locate and access information; – knowing how to access information sources and search tools to access and retrieve information

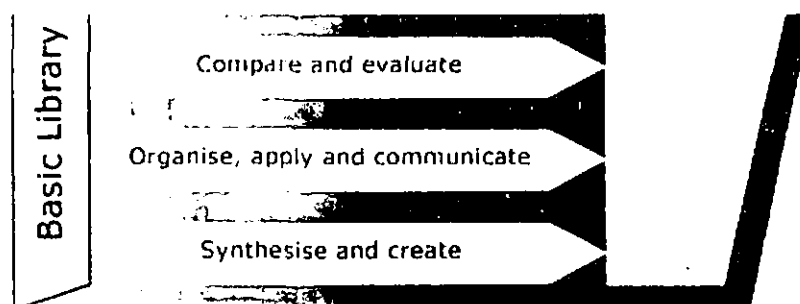


## Knowing how to understand and use information

(Pillar 5) Compare and evaluate – knowing how to assess the relevance and quality of the information retrieved

(Pillar 6) Organize, apply and communicate – knowing how to associate new information with old, to take actions or make decisions, and ultimately how to share the outcomes of these actions or decisions with others

(Pillar 7) Synthesize and create – knowing how to assimilate information from a variety of sources for the purpose of creating new knowledge



The basic skills of information literacy (pillars 1-4) are common to all issues and topics, and may be taught at all levels of education including informal programs targeted at adults. The skills are reinforced and enhanced by regular use and ongoing lifelong learning, most often through programs and resources provided to individuals and communities by libraries.

**Achieving pillars 1-4 is realistic in the majority of societies and cultures if the core skills are included in the curriculum at all levels of education and opportunities for lifelong learning are provided.**

Achieving pillars 5-7 is more challenging due to the same diversity that requires a communication mix in awareness-raising campaigns. For example, every occupation encompasses a highly specialized expertise or knowledge. If our information finding and use remains within this context - health science for nursing, or bridge construction for engineers - we should have no difficulty mastering pillars 5-7. Once outside this context, however, we may experience great difficulty understanding and applying information relating to the law or farming.

Possible solutions include:

- Ensuring there is sufficient general information about a topic or issue to enhance the understanding of the average person, regardless of their background, occupation or level of education
- Providing independent information intermediaries (advisers) to interpret, translate, and where appropriate, re-package information to better suit specific community needs

Ana Maria Ramalho Correia counsels that "realistic goals must be set for our information literacy programs and allowances made for those Information Intermediary activities that enable the average citizen to understand specialized information and convert it into knowledge."<sup>40</sup>

### **Essential Skills and Values for Information Literacy**

#### **1. Generic Skills**

- Problem solving
- Collaboration and teamwork
- Communication
- Critical thinking

#### **2. Information Skills**

- Information seeking
- Information use
- Fluency with information and communication technology (ICT)

#### **3. Values and Beliefs**

- Using information wisely and ethically
- Social responsibility and community participation

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<sup>40</sup> Ana Maria Ramalho Correia, "Information Literacy for an Active and Effective Citizenship," July 2002, White Paper prepared for UNESCO, the U.S. National Commission on Libraries and Information Science, and the National Forum on Information Literacy, for use at the Information Literacy Meeting of Experts, Prague, The Czech Republic.

## Promoting Information Literacy Skills

As with disaster management, a variety of approaches may be used to raise awareness about information literacy.

Promotional efforts to date have tended to focus on five broad strategies:

1. *International policy statements* – for example, UNESCO's Prague Declaration, "Towards an Information Literate Society"
2. Curriculum development, including learning outcomes, competencies and criteria for evaluation and assessment
3. Professional development and training for academics, teachers, librarians and others directly involved with teaching information literacy skills
4. Development of information literacy teaching materials, including online and distance learning formats
5. Ongoing international dialogues between information literacy researchers and practitioners through conferences, workshops and exchange programs

Overall, it is critical that progress in each area supports and reinforces development in the others.<sup>41</sup>

Not surprisingly perhaps, examples of information literacy promotion tend to revolve around the roles played by schools and libraries, specifically university, school and public libraries. The public library in particular is identified as the "local centre of information, making all kinds of knowledge and information readily available to its users."<sup>42</sup>

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<sup>41</sup> Abdelaziz Abib (2004) "Information literacy for lifelong learning", *World Library and Information Congress: 70<sup>th</sup> IFLA General Conference and Council*, p. 4.

<sup>42</sup> Pradeepa Wijetunge (2000) "The role of public libraries in the expansion of literacy and lifelong learning in Sri Lanka", *New Library World*, 101(1155), p. 107.

Examples of library activities for promoting information literacy and the skills that comprise SCOUNL's Seven Pillars Model include:

- Library orientation tours to make prospective information users feel welcome and promote general awareness of the information resources available to them in their community.
- Brochures and handouts explaining the key concepts of information literacy, particularly why it is important to the community as a whole.
- Short classes and tutorials for teaching the essential skills of information finding and evaluation (pillars 1-4), focusing on specific topics or issues of immediate relevance to the community.
- Function as an information intermediary by packaging and presenting information to make it more accessible to those who need it.
- Provide personalized assistance with the key processes of finding and accessing information – for example, constructing search strategies
- Libraries also have the advantage of being able to reinforce the teaching of information literacy skills through the delivery and cross promotion of other services such as the reference collection and online databases.
- As with mainstream literacy, libraries promote information literacy through “a variety of non-print media (posters, pictures, cartoons, banners, films and videos)” that “attract the non-literates to the library so that they will gradually overcome the fear of literary environments and want to learn more by improving their reading and writing skills.”<sup>43</sup>

Outside libraries, other activities include:

- Introductory guides to information literacy prepared by international and local experts for teachers, librarians and policy makers. Guides should always provide short and compelling answers to key questions such as why (rationales for information literacy), what (definitions), where (learning locations), and how (issues of pedagogy and practice).
- Development of a modular school curriculum for information literacy that is introduced first in teacher training programs and then mainstreamed into classrooms.
- Regional conferences and workshops in information literacy where national authorities share their expertise with colleagues and thus communities through a process of “cascade training”.<sup>44</sup>

<sup>43</sup> Ibid, p. 108.

<sup>44</sup> Abdelaziz Abib (2004) Information literacy for lifelong learning, “World Library and Information Congress: 70<sup>th</sup> IFLA General Conference and Council” p 4

- Information literacy pilot projects designed to empower communities and provide success stories and case studies for future programs.
- Development of Websites and other Internet resources in a range of languages for teachers, librarians and others critical to the teaching and promotion of information literacy skills.
- Development of a network of national and local information literacy resource collections for teachers, librarians and the communities they serve.
- Support for translations and adaptations of resources to meet specific social and cultural needs.

## **Case Study: Suggestions for the Promotion of Information Literacy In Nepal**

### **5.1. In the Formal Education Sector**

- a) Integrate information literacy in the curriculum.
- b) Integrate information literacy component in the library and information education program.
- c) Orient/train librarians and information professionals in information literacy to assist the information seekers.
- d) Develop a time-bound strategy to promote information literacy with machine readable formats (CD-ROM, Microforms, etc.).
- e) Develop/disseminate standards for promotion of information literacy and insure their effective implementation.
- f) Organize seminars/workshops to educate/inform the policy makers and planners to develop appropriate policy and programs for promotion of information literacy.

### **5.2. In the Information Education Sector/Community Level**

- a) Orient/train the representatives of local government about the importance of information literacy.
- b) Orient/train information users on how to increase their information search and utilization skills.
- c) Establish a link between the community library/information centres and the proposed community telecentres to assure continuity as the government develops support for information services.
- d) Develop specific courses for rural information and develop a time-bound action plan to orient/train them.
- e) Since computer literacy and user-friendly computer software packages are required to promote information literacy in the context of the globalization process, it is necessary to look into the existing constraints and opportunities to develop computer hardware and software strategies and policy decisions.
- f) Mobilize civil society organizations in the spread and development of information literacy to support poverty reduction, promotion of human rights, and good governance at all levels.<sup>45</sup>

<sup>45</sup> "Information Literacy for a Multipurpose Community Telecentre: Nepalese Perspectives," July 2002. White Paper prepared for UNESCO, the U.S. National Commission on Libraries and Information Science, and the National Forum on Information Literacy, for use at the Information Literacy Meeting of Experts, Prague, The Czech Republic.

## 4.3 Tips for Presenting Information

### Hints for Writing Effective Brochures and Handouts

Adapted from <http://www.u-write.com/hints-content.shtml>

Your challenge in writing any brochure or handout is to capture succinctly the relevant information on paper and make it appealing.

✓ Start with an outline

Take the time to outline your brochure before you begin writing. See if it makes sense as a whole before you begin putting too much effort into individual paragraphs.

✓ Consider writing using a question and answer format

It's often easier to recall questions that people have asked you about a topic, particularly if the answers have seemed simple to you. This FAQ approach has been used on Websites for many years and is now widely accepted. A very effective brochure or handout can be made once you've written the questions out, answered them, and then sorted the information into a logical order.

✓ Interview colleagues to get your creative juices flowing

If you team up with colleagues, the writing process will be quicker and less likely to overlook important information. Ask others what they think needs to be emphasized in each handout.

✓ Start with public domain content and edit it to make it your own

New licensing models (for example, creative commons) are quickly changing the way we gather and use information, particularly for non-commercial purposes. Governments in particular produce large amounts of information in the public domain. With proper acknowledgement of sources, much of this content can be adapted for non-commercial purposes.

✓ Limit the objective of each handout.

A key step to writing a good brochure is remembering your audience. As a professional, you may be fascinated by obscure and largely irrelevant aspects of the topic or issue at hand. Your audience, however, is unlikely to care. Work to limit your content to what is important for your audience. One writer recommends *writing for your mother or grandmother*. In short, keep the content simple and stay

focused on what the average reader cares about. Also look for opportunities to limit the objectives of your handouts so they are not too long or too general. Likewise, look for opportunities to segment your target audience into smaller, more homogeneous groups.

✓ Consider readability

What is the appropriate reading level for your document? Are you writing for adults or children, and what level of literacy is to be assumed? Text is generally made more readable by the use of short words, short sentences and short paragraphs. All three aid reading comprehension.

✓ Bring in a professional writer

Although it will cost more to produce your brochure or handout, sometimes the best solution is to hire a professional writer. Their objectivity and skills as communicators may be invaluable to the success of the project.

## Writing for the Web

Adapted from "Web Writing - Tips and Guidance" -  
[http://www.sdcn.org/webworks/writing/web\\_writing.htm](http://www.sdcn.org/webworks/writing/web_writing.htm)

**Deliver your information:** Good writing (and good editing) should never get in the way of telling your story. Your job is to present facts, persuade readers and motivate action. Your goal is to inform, educate and motivate, not win a Pulitzer Prize.

**Keep it short:** You probably already know that most Web users scan and skim as opposed to read, however, that doesn't mean that your text needs to sacrifice quality or depth. Keep your top level pages short and crisp, giving readers the option to read at greater depth at lower level pages. It may be that most people arrive at your pages because they are hunting for specific information, not fishing for something to read. Both types of readers should be rewarded at your site.

**Monitor sentence length:** Not every sentence needs to be nine words long. Given the lengthy, multi-word names of some of the world's sustainable development organizations and some of the complex science and policy in which they engage, keeping all sentences short is impossible and not necessarily the desirable course of action. Varying sentence length will engage the reader and allow the writer to communicate effectively. (The first sentence of this paragraph is nine words long; the second is 39 words long; and the third is 14 words long.)

**Keep your verbs active, not passive, whenever possible:** This tip has been heard by you before. You have heard this tip before. Nothing more needs to be said about this so we will say nothing else.

**Keep the language simple:** Get right to the point, minimize jargon and don't use three words where one will do. (Say "review," not "perform a review"; say "analyze," not "conduct an analysis.") An informed reader will feel alienated if they have to reach for a dictionary or if they are jarred or bored by a turn of phrase.

**Accept reading habits; don't try to change them:** Most readers scan first level pages. Accept this. Use headers and subheads that entice readers to proceed; bold a few strategic words in the copy; and create lists where relevant. Caution: If you bold, italicize or change the colour of too many words or phrases, nothing will seem important. Be discriminating.

**Avoid clichés:** Using clichés, colloquialisms and slang will alienate English-speakers who will see your serious work as having been delivered too casually. It will also alienate people for whom English is not a first language. Clichés, colloquialisms and slang are more effective in print where people are likely to spend more time with the text.

## Essential Presentation Skills

Reprinted from the "Basics of Presentation Skills" by Carter McNamara - available from the Free Management Library, <http://www.managementhelp.org>.

### Basic Guidelines For Designing Your Presentation

1. List and prioritize the top three goals that you want to accomplish with your audience. It's not enough just to talk at them. You may think you know what you want to accomplish in your presentation, but if you're not clear with yourself and others, it is very easy - too easy - for your audience to completely miss the point of your presentation. For example, your goals may be for them to appreciate the accomplishments of your organization, learn how to use your services, etc. Again, the goals should be in terms of what you want to accomplish with your audience.
2. Be really clear about who your audience is and about why is it important for them to be in the meeting. Members of your audience will want to know right away why they were the ones chosen to be in your presentation. Be sure that your presentation makes this clear to them right away. This will help you clarify your invitation list and design your invitation to them.
3. List the major points of information that you want to convey to your audience. When you're done making that list, then ask yourself, "If everyone in the audience understands all of those points, then will I have achieved the goal that I set for this meeting?"
4. Be clear about the tone that you want to set for your presentation, for example, hopefulness, celebration, warning, teamwork, etc. Consciously identifying the tone to yourself can help you cultivate that mood to your audience.
5. Design a brief opening (about 5-10% of your total presentation time) that:
  - a. Presents your goals for the presentation.
  - b. Clarifies the benefits of the presentation to the audience.
  - c. Explains the overall layout of your presentation.
6. Prepare the body of your presentation (about 70-80% of your presentation time).
7. Design a brief closing (about 5-10% of your presentation time) that summarizes the key points from your presentation.
8. Design time for questions and answers (about 10% of the time of your presentation).

## Basic Guidelines About Presentation Materials

You might be handing out supplemental materials, for example, articles, reports, etc. along with making your presentation. You might also be handing out copies of your presentation, for example, handing out copies of your slides that you will be referencing during your presentation. You might be using transparency slides or showing slides from a personal computer onto a project screen.

1. If you plan to project your slides from a computer onto a projection screen, then be sure to check out the computer system before people come into the meeting room, if at all possible.



2. Use a consistent layout, or organization of colors and images, on your materials.
3. If you use transparencies on an overhead projector, then allocate one slide for every 3-5 minutes of your presentation. Include 5-8 lines of bulleted phrases on each slide.
4. If you provide the supplemental information during your presentation, then your audience will very likely read that information during your presentation, rather than listening to you. Therefore, hand out this information after you have completed your presentation. Or, hand it out at the beginning of your presentation and ask them not to read it until you have completed your presentation.
5. If you hand out copies of your slides, be sure that the text on the slides is large enough that your audience can read the text on the table in front of them without having to hold the handouts up to their faces. Be sure to leave space on the handouts for the audience to make notes on them.

## Basic Guidelines About Your Delivery

1. If you're speaking to a small group (for example, 2-15 people), then try to accomplish eye contact with each person for a few seconds throughout your delivery.
2. Look up from your materials, or notes, every 5-10 seconds, to look into the audience.
3. Speak a little bit louder and a little bit slower than you normally would do with a friend. A good way to practice these guidelines is to speak along with a news anchor when you're watching television.
4. Vary the volume and rate of your speech. A monotone voice is absolutely toxic to keeping the attention of an audience.
5. Stand with your feet at shoulder-length apart.
6. Keep your hands relatively still.



## 5. Further Reading

### Communication

King, D. (2000) Four Principles of Interpersonal Communication - <http://www.pstcc.edu/facstaff/dking/interpr.htm>

Korpela, J. (2003) How all human communication fails, except by accident, or a commentary of Wiio's laws - <http://www.cs.tut.fi/~jkorpela/wiio.html>

Yodmani, S. (2001) Disaster risk management and vulnerability reduction: Protecting the poor - <http://www.adb.org/Poverty/Forum/pdf/Yodmani.pdf>

### Awareness-raising

APELL and tsunamis: A community-based approach for disaster reduction (2005) - [http://www.unep.org/tsunami/apell\\_tsunamis.pdf](http://www.unep.org/tsunami/apell_tsunamis.pdf)

APELL for schools and educational buildings: A community-based approach for school safety and education for disaster reduction (2005) - [http://www.unesco.org/science/earth/disaster/apell\\_schools.pdf](http://www.unesco.org/science/earth/disaster/apell_schools.pdf)

Goudie, D. (2004) Disruptive weather warnings and weather knowledge in remote Australian indigenous communities, Townsville: James Cook University - [http://www.tesag.jcu.edu.au/CDS/reports/Gou\\_IWWRpt/03%20overview%20a.pdf](http://www.tesag.jcu.edu.au/CDS/reports/Gou_IWWRpt/03%20overview%20a.pdf)

Hoogenraad, W; Van Eden, R. and King, D. (2004) "Cyclone awareness amongst backpackers in northern Australia", *The Australian Journal of Emergency Management*, 19(2), pp 25-29 - [http://www.ema.gov.au/agd/ema/rwpattach.nsf/viewasattachmentPersonal/4A2515985EBB9878CA256EB6001BB717/\\$file/AJEM%2025-29%20May04web-6.pdf](http://www.ema.gov.au/agd/ema/rwpattach.nsf/viewasattachmentPersonal/4A2515985EBB9878CA256EB6001BB717/$file/AJEM%2025-29%20May04web-6.pdf)

National Disaster Education Coalition (2004) Talking about disaster: A guide for standard messages, Washington, D.C. - <http://www.disastereducation.org/guide.html>

### Information Literacy

Abid, A. (2004) "Information literacy for lifelong learning", World Library and Information Congress: 70<sup>th</sup> IFLA General Conference and Council - <http://www.ifla.org/IV/ifla70/papers/116e-Abid.pdf>

Aiyepoku, W.; Atinmo, M. and Aderinoye, R. (2002) "Towards a functional infoliteracy campaign in African states", White Paper prepared for UNESCO, the U.S. National Commission on Libraries and Information Science, and the National Forum on Information Literacy, for use at the Information Literacy Meeting of Experts, Prague, The Czech Republic - <http://www.nclis.gov/libinter/infolitconf&meet/papers/aiyepoku-fullpaper.pdf>

American Library Association (2006) Introduction to information literacy - <http://www.ala.org/ala/acrl/acrlissues/acrlinfolit/infolitoverview/introtoinfolit/introinfolit.htm>

Bruce, C. (1997) *The Seven Faces of Information Literacy*, Adelaide: Auslib Press.

Chagari, S. (2005) *Information capability building: Role of information literacy programmes – A study*, World Library and Information Congress: 71<sup>st</sup> IFLA General Conference and Council - <http://www.ifla.org/IV/ifla71/papers/043e-Chagari.pdf>

Correia, A. (2002) "Information Literacy for an Active and Effective Citizenship", White Paper prepared for UNESCO, the U.S. National Commission on Libraries and Information Science, and the National Forum on Information Literacy, for use at the Information Literacy Meeting of Experts, Prague, The Czech Republic. - <http://www.nclis.gov/libinter/infolitconf&meet/papers/correia-fullpaper.pdf>

Langford, L. (1999) "Information literacy? Seeking clarification", in Henri and Bonanno (Eds.) *The information literate school community: best practice*, Wagga wagga: CIS, Charles Sturt University, pp 43-54 - <http://athene.riv.csu.edu.au/~llangfor/papers/paper5.html>

Norris, P. (2001) *Digital Divide? Civic Engagement, Information Poverty and the Internet Worldwide*, Cambridge: Cambridge University Press.

Webber, S. and Johnston, W. (2000) "Conceptions of information literacy: new perspectives and implications", *Journal of Information Science*, 26 (6), pp 381-397.

Wijetunge, P. (2000) "The role of public libraries in the expansion of literacy and lifelong learning in Sri Lanka", *New Library World*, 101(1155), p. 107.

Workshop handbook written by Richard Sayers, CAVAL Training

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## Developing A Communication Campaign Plan

Richard Seyers  
T.R.Gopalakrishnan

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### Issue

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- What is the disaster management issue the campaign is addressing? (Mitigation, Preparedness)

### Focus

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- What is the Campaign focus? (Hazard Adjustment at Community, Household, Individual Level))

### Purpose

---

- What is the campaign purpose? (Reduce Risk associated with.....)

### Target Audience

---

Who are your target audience?

- Primary Target Audience
- Secondary Target Audience
  
- Geography, Demographics, Risk Perception, Vulnerable Groups etc.

### Objectives

---

What is the campaign objective?

- What , very specifically, do you want to influence your *target audience to do* as a result of this campaign?
- Is there anything you need them to *know*, in order to act?
- Is there anything you need them to *believe*, in order to act?

## Setting Goals

What are the goals of your campaign?

- What quantifiable, measurable goals can you set? (Reaching 25% of the household in one year..?)
- What are some of the qualitative changes would you like to see? (improving self-efficacy, locus of control)

## What Else?

Are your planning to include any tangible objects or services?

- Incentives
- Sanctions
- Technology
- Information Service
- Consultation-Counseling

## Benefits-Cost

- What is the benefit of adopting the recommended behavior?
- What are the cost of adopting the recommended behavior?

## Approach

What is the communication approach?

- Interpersonal-Group Communication
- Mass Communication
- PR
- Education
- Advocacy

## Message

What key messages do you want your campaign to communicate?

- What benefit will you promise?
- What will be said or featured?
- What communication style, tone, appeal will be used?

## Channels

What channels/media vehicle can be used?

- Mass Media
- Interpersonal-Group
- Print Material—Cartoons, etc.
- Audio-Visual
- Audio—Radio, Songs
- Traditional Media—Drama etc.

### **Project Management Issues**

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Will there be any phases for the campaign?  
What will be done at each phase?

### **Monitoring and Evaluation**

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How will you measure your performance?

## Communicating Natural Disaster Risk Using Mass Media

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## Backdrop

- South Asia's Proneness to Disaster
- Tsunami and its Aftermath
- Towards a Culture of Preparedness
- Media as significant stakeholder in Disaster Management
- How can mass media be used to educate general public on disaster preparedness and mitigation?
- Several issues needs to be addressed before we can identify and actualize the potential of mass media for disaster mitigation and preparedness

## Backdrop

- Our Initiatives
  - A Panel Discussion on Media and Tsunami
  - Research #1 Journalists Experience in Covering Tsunami
  - Research #2 Media use amongst victims of Tsunami and perceptions of Risks (Cuddalore)
  - Research #3 Content Analysis of Media Coverage
  - Development of Handbook and Resource Kit for Journalists on Disaster Reporting (In-progress)
  - Strategies for Localization of Disaster Preparedness Educational Resource Material (In progress)

## What Role for Media?

- Expectations
- Watchdog
  - Amplifier
  - Catalyst
  - Agenda Setters

## What Role for Media?

### Concerns and Criticisms

- Sensationalism -leading to public panic
- Inaccuracies and Bias
- Selectivity
- Media Focus on Events/Incidents Over Issues

## Stock taking: Is it that bad?

- Media's role during immediate relief operations
- Media's role in awareness creation, leading a second wave of sympathy, concern and global attention
- Mobilization of Resources—Indirectly and directly
- While the issue is kept alive in local newspapers and as local content, it seem to have left the agenda of national newspapers

## Understanding Media Context-I

- General un-preparedness
- Inconsistent messages (reporting on demand for basic supplies lead to wastage)
- Reliance on limited sources for information
- Limited staff in many newspapers lead to focus on limited issues, regions/communities (e.g. Fishing communities vs. Agriculture/tribal communities)

## Understanding Media Context-II

- Lack of Investigative reporting (e.g. CRZ, light roofing)
- Inadequate skills in covering victims (e.g. interviewing victims, TV-camera-as-intrusion)
- Journalists' approach is incident-oriented, ad hoc and not organized.
- Lack of interest in Disaster during the Continuing Hazard Phase due to stable and low probability of disaster incident

## Understanding Disaster Management within the Media Context

- Disaster management agencies are not well prepared to deal with the media.
- Resources allocated to public communication is limited
- Lack of preparation—where are trained crisis communication teams or spokespersons?
- Lack of media relation competence on the part of the public administrators and disaster managers

## Root Cause?

Why is there so much difference in what disaster managers want and what media gives?

Professional rules and norms of journalists and that of disaster managers differ according to different goals, tasks, and constraints.

## Expectations Vs Reality

What Experts Expect from the Media?	What Experts often get from the Media?
Media as partner and allies	Media as a hostile observer and critique
Media to be an powerful amplifiers of their messages	Media as being biased, selective and distorting their messages
Media to reflect their perceived reality	Media constructing their own media reality
Media disseminating uniform message of risk and recommendations for action based on reliable sources	Media disseminating contradictory information on risk estimates, recommendations of action based on less reliable sources

## Understanding Media Potential in Disaster Mitigation-I

- Disaster warning is essentially a form of risk communication—Public Perception of Risk is critical in adoption of hazard adjustment
- Mass media gives easy access to larger public(affected, vulnerable, not-affected audiences)
- Mass media can contribute proactively at every stage—(before, on-set and after disaster)
- But sources who want to use media know that they can be difficult to deal with.
- Journalists are not information channels, but act as interpreters and gatekeepers

## Understanding Media Potential In Disaster Mitigation--II

- To understand the importance of mass media for disaster control and mitigation, it is useful to distinguish mass communication situations along three dimensions
  - Stage (disaster prevention, acute disaster situation, disaster coping).
  - Audience (directly affected vs. unaffected population) and
  - Level of effects (individual vs. collective).

[Source: State of Disaster and the Media, Hans Peter Peters, Research Centre Juelich, Program Group Human, Environmental Technology, 52425 Juelich, Germany]

Disaster Phase	Audience Affected By the Disaster		Non-Affected Audience
	Individual		
Continuing Hazard Phase	Realistic Risk Perception		
	Knowledge of How to Respond		
	Knowledge of How to Recover		
	Collective		
Escalating Hazard Phase	Political priority of Disaster Prevention		
	Involvement of Citizens in Disaster Management		
	Individual		
	Dissemination of Warning and Reassuring Messages	Willingness to donate	
Disaster Relief and Rehabilitation	Dissemination of Recommendations as how to act		Personal Help Initiatives
	Information About Coping Methods		
	Collective		
	Attribution of Responsibilities and Faults	Acceptance/Support using Tax money for Campaign	
	Learning from Disaster	Priority of Disaster Reduction in Policy	

## Points to Ponder--I

- Rather than challenge the professional norms of media, we need to work with and through them to achieve our educational goal of informing the general public
- During crisis, we need to encourage media co-operation rather than competition (pooling ideas, coordinating with inside decision makers like editors)
- Sensitizing Media—what would be stressful for disaster managers might be interesting for media—also Journalists are under pressure too

## Points to Ponder--II

- One voice principle: Get the media to have an image of trustworthiness and as a credible source of information through consistent message like acceptable risk estimates, particularly at the time of crisis!
- Regular rather than sporadic coverage should be encouraged (not just during cyclones, but interesting feature stories during off-season!)
- Direct media attention to the appropriate issues and inform them with reliable information in a timely manner
- Monitor news media regularly and Plan for message distortion—formulate corrections and transmit to media immediately

## Points to Ponder--III

- Describe local environmental hazards, long term hazard adjustments and protective actions (through Press Releases, Interviews etc.)
- Share Community Disaster Management Plans, Results of Hazard and Vulnerability Analysis
- Create plausible scenarios about different types of emergencies that might confront communities and determine the kind of information that audience might want
- Arrange to include "Hazard Information Inserts"—directly constructed by disaster experts on a regular basis or before the onset of seasonal events (like cyclones, floods, droughts)

## Points to Ponder--IV

- Establish contacts with local media and seek coverage of local disaster management activities like training—this could help diversify channels of risk information as well as increase visibility
- Use media ability to reach out for specialized audiences directly—media provides opportunities to target messages to specific audience segments defined by age, gender, language and socio-economic status
- Work with reporters to develop background materials that media need in an escalating crisis, an emergency response or a disaster recovery situations
- Develop fact sheets, briefings and other background materials that media can use no matter what specific conditions occur during emergencies (maps, historical data etc.)

## An Exercise

Image there is No Disaster!

## An Exercise

Image there is No Disaster!

Break into small groups and prepare a list of topics related to disaster mitigation and preparedness that you would like to see the media cover—It could be a news item, a feature or a regular column...anything that fits a news hole

## Towards a Culture of Preparedness

- Remember! Overall purpose of public awareness campaign, be it through mass media or any other channel, is to reduce risk due to natural hazards through adoption of hazard adjustment at various levels (National/State, Community, Household, Individual)

Three broad categories or approaches of stories can be identified

- Disaster Mitigation gives passive protection to people and property at the time of disaster—E.g. land use, Construction norms
- Disaster Response Preparedness supports active response at the time of disaster impact—Family Disaster Plan, First Aid
- Disaster Recovery Preparedness presumes that damage and casualties will occur and provides guideline and resources for communities return to normalcy—insurance, relief efforts

## Thank You

- Discussions.....

## Reaching out to special audiences

### Designing effective communication modules for disaster preparedness for children and young people

It isn't really common for a population of earthquake-affected people to be caught soon, by drought, a cyclone or another earthquake. Not usually.

None of us has probably experienced a serious disaster recently. Yet there's an earthquake, a flash flood, a storm in the news every other day. It's not that disasters are far from common; in fact climate control experts predict that storms like the Katrina may become more common as the earth undergoes changes in temperatures. But the unpredictable ness of disasters is probably what makes us wish, and believe that it won't hurt us, and definitely not our children.

Yet children and youth are the most vulnerable to disasters of any kind natural or otherwise.

Therefore communication campaigns designed to help children know and hence cope with disaster in an educated manner is today as important as creating awareness about the effects of drugs, alcohol and aids.

### *Why must we make a special effort to get across to them?*

At the very outset we must realise that children are more vulnerable than adults.

Children are not little adults. Their developing minds and bodies place them at disproportionate risk in a number of specific ways.

Physically, children are particularly vulnerable to biological or chemical agents because they breathe more times per minute than adults, meaning they would get relatively larger doses of the substance in the same period of time.

Children are more vulnerable to agents that act on or through the skin because their skin is thinner and they have a larger surface-to-mass ratio than adults.

Children have significant developmental vulnerabilities not shared by adults. Young children may not have the cognitive ability to figure out how to flee from danger or to follow directions from others.

An educated and trained child will deal with disaster and emergency of any kind far better than an untrained child.

*(Source: [www.aap.org/terrorism](http://www.aap.org/terrorism))*

**Any communication campaign designed to educate children and create awareness among them must be made keeping certain parameters in mind.**

To meet the unique needs of all infants, children, adolescents, and young adults, it is critical that our area preparedness efforts involve paediatric health care experts, as well as key facilities, institutions, and agencies that care for children.

Audience identification is of paramount importance here. It is important that disaster preparedness facilitators adapt discussions, instructions, and practice drills to children's skills and abilities. Young children can easily confuse messages such as "drop, cover, and hold on" (response during an earthquake) and "stop, drop, and roll" (response if clothes catch on fire).

■ Wording is very important. When "what to do" action messages are delivered, they must be worded in a positive manner that helps those hearing or reading the messages know how to act. For example, in fire education, instead of saying, "Do not panic," you might say, "Remain calm. Get out as quickly and safely as possible." This allows a better focus on what they can and should do in case of fire.

■ Children are most concerned with the events of their own lives and their personal world—messages will therefore have to be implied into their daily routine. Adults can make use of playtime to get ideas of disaster preparedness across. Common games like the usual "lock and key", hide and seek and "I spy with my little eye" make for great modifications that can be effectively used. A school in Kolkata India has devised a play way method of discussing such issues. Whenever a natural disaster strikes, they improvise on these games and explain what happened and what can be done in such a situation to escape. Talking about the typical effects of disasters that children can relate to, such as loss of electricity, water, and telephone service help them understand better the situations that disasters can cause.

At this juncture it is also necessary for us adults to reconsider certain notions that we harbour about children that might be detrimental to preparing them to handle disasters. At very simplistic level ideas like "Children should be seen and not heard" must be discarded. A difference in situations must be explained. For example –disrupting a party is bad manners but raising alarm and shouting for help in a situation where a child is feeling uncomfortable or fearful is correct behaviour.

■ Facilitators mustn't worry that talking about disasters will make children fearful. On the contrary, children are usually more frightened by what is whispered or not mentioned aloud than by matter-of-fact discussion. Let children speak freely about what scares or puzzles them-for example, "What will happen to my puppy if we have to evacuate?" "If there's a flood and I'm at school, I won't be able to find you." Try to answer questions and address concerns with concrete, easy-to-follow information. Children are highly influenced by the emotional state of their caretakers. When the parents or other caretakers of a child are psychologically harmed by the events around them, it is likely to affect the psychological well being of the child.

■ Children's reactions to situations such as a terrorist attack or other disaster will vary greatly depending on the child's cognitive, physical, educational, and social development level and experience. Considering the ages and socio-economic, ethnic, and educational backgrounds of the audience members is a must.

In various developing countries this is the greatest challenge in designing any communication programme. Here a systematic development of a universal set of symbols will help getting across preparedness messages across better.

### ***Experts suggest using visuals.***

Visual literacy being the demand of the day and we can see the way advertising is using it to advantage-why not harness its potential to get messages across to those unable to read and youth? Visuals are often more compelling than reading matter because it's easier to cognitively process a visual than writing.

***Visuals also help tackle problems of short attention spans.*** As Lynell Burmark, author of the book *Visual Literacy: Learn to See, See to Learn*, and associate in the Thornburg Center for Professional Development, says, "Traditional instruction practices--the old

way of teaching--simply won't work. It's time for teachers to take advantage of the way kids entertain themselves today, to employ those same media and the thinking habits they foster for the betterment of student learning."

If adolescent and young adults want their training in managing disaster MTV style then facilitators must cater using popular song lyrics and using youth icons to propagate safety ideas.

Yet exposure to disaster coverage especially by the visual medium of television has to be monitored as this can lead to secondary traumatization.

Traditional media of stories and puppets can serve to communicate to very young children. Various stories that depict bravery and use of intelligent methods to save people or individuals from danger can be culled from cultures all the world and short skits and plays based on them can be shown to children. Songs are another effective method that children can memorise and learn ways to protect themselves while having fun. Music is an effective communicator for young children as the rhythm before the words generally appeal first and the child can take his/her on time to understand the import of the words. Action songs mean movements that keep children entertained and help convey the disaster messages concretely through action.

(Source: [www.aap.org/terrorism](http://www.aap.org/terrorism))

■ The ultimate purpose of any communication is to enable children to help themselves and so any communication programmed to be truly effective must involve teaching how and when to call for help. At home, emergency telephone numbers must be posted by all phones and young people explained to clearly when to call each number. Include the work numbers and cell phone numbers of household members. Even very young children can be taught how and when to call for emergency assistance. If a child cannot read, make an emergency phone number chart with pictures or icons for 911, "daddy," and "mommy" that may help the child identify the correct number to call.

■ A reiteration of messages is a must at least every six months. Young children have mush to occupy their minds and therefore to increase retention Consider the ages and socio-economic, ethnic, and educational backgrounds of the audience members.

- Consider how children can help. Children are better able to regain their sense of power and security if they feel they can help in some way.

Source: National Association of School Psychologists

### *Role of the school and classroom*

*Source: The School Crisis Response Initiative of the National Center for Children Exposed to Violence Yale Child Study Center*

David J. Schonfeld, MD

Scott Newgass, MSW

Revised August 31, 2001

Schools were and even today an integral part of the larger community. Even for crises that do not occur on school property, schools can serve as a contact point for children and adolescents who are victims or might be affected, either directly or indirectly, by and of a crisis event. Schools can also reach out to parents and other adults within the community at the time of a crisis.

As such, school-based crisis intervention can address the needs of many primary, secondary, and tertiary victims of a crisis that would otherwise not be addressed well through conventional public health and traditional medical services, especially if these efforts are coordinated with those of outside agencies and supplemented by resources extrinsic to the school system. The Sri Lankan disaster education modules are a good example whereby children are taught about disasters and their management in schools. School staff and all those engaged in dealing with children must be equipped with the requisite knowledge and skills to initiate and keep going an effective crisis response team.

Given appropriate training, support, and adequate resources, school staff is in an excellent position to provide supportive services, short-term counselling because the teacher is always a trusted figure with parents and children. Often children spend a greater part of their waking hours with them and therefore might be more open to receiving such serious messages from them rather than parents.

Teachers are not only trained to teach and get ideas across but they also know the individual quirks of their students that might help them tailor and make messages more personal and suited better individually for best reception.

For parents teachers are adults that parents can immediately relate to as the person who probably knows their wards as well as they do.

Thanks to their pre-existing relationship with the students, their parents, and the community, a school-based crisis response team can respond promptly to a crisis event in a manner that is more likely to be personal and individualized than can outside consultants who are not familiar with the school and the community.

Besides individuals who work for the school, school crisis teams should also include professionals from within the community like psychiatrists and paediatricians who work with the schools in a collaborative fashion. Plans that disempower the staff by displacing them instead with "experts" from outside the community who approach the schools only in the aftermath of a crisis suffer from several vulnerabilities.

### Media And Schools

The media especially the supplements that many newspapers devote to children and young people can modify and use its existing content to help children get ideas of disaster preparedness. An excellent way the media can directly reach to its young reading audience is through the Newspaper in Education (NIE) programmes that many newspapers have. Various newspapers in India like the daily news and analysis (DNA), The Hindu and the telegraph with their Telegraph in schools activities can serve as active nodal training points.

Newspaper in Education is a worldwide partnership between schools and the newspaper industry, to promote the use of newspapers in the classroom. Newspapers are used as a teaching tool and as an educational resource, to promote basic literacy and to inculcate the reading habit in children. (WAN, NAA, 2003)

Under the NIE banner, newspaper organizations typically deliver copies of the publication to schools at a subsidized rate, to enable teachers and educators to have access to current affairs and information. They in turn, use the newspaper in the classroom as a teaching tool, while at the same time introducing children to the

newspaper to inculcate the reading habit and help them develop critical communication skills.

The Times of India has launched its 'Newspapers in Education' (NiE). Sanjeev Vohra, Director, The Times of India has been quoted as saying: "The Times of India will create and deliver a special edition to students to use as a learning tool. Research has shown that NiE programme positively impact student motivation, attitude, academic skills and classroom communication. A newspaper, being current and relevant, also keeps students informed and helps to mould them into responsible and socially aware citizens".

*(Source: by Mandira Moddie This report is a copy of the Dissertation completed and currently being assessed in partial fulfilment of the requirements for the MSc in Media and Communications, Department of Media and Communications, London School of Economics, August 2003)*

The Hindu National Newspaper has a unique NIE programme that can be well used to prepare young school going children to handle emergencies brought on by disasters. The paper devotes an 8 page supplement where 4 pages are devoted to carrying articles and paintings by children and also has counseling columns, pediatric health care features as well as reviews for books for school use. Titled Quest where individual letters respectively stand for Question, understand, educate, stimulate and transform, this supplement is reached to schools and most teachers use it to supplement classroom activities.

Done by the circulation department and supported by the editorial staff, as part of this programme many noteworthy artistes, painters and established people from different walks of life are taken to schools where they talk to the children and tell them about aspects of their profession. Much of the time the focus is on arts and cultural activities with various workshops.

Such activities can be altered a little and fire department personnel, the police and NGOs involved in rescue operations could be engaged to speak and explain ways to deal with hazards.

For newspapers the NIE serves well as a marketing and brand building exercise that ensures younger readers who will also stay with the paper as they grow so there is little fear that such activities are unsustainable after a while.

### Follow up articles

Most media devote space to children like The Hindu Young World Supplement meant for 6 to 14 year olds. Every disaster generally sees a wide coverage in most medias. Once again supplements devoted to young readers play an important role, whereby which follow up stories done exclusively on the young affected population helps put the disaster in a clearer perspective for children.

A good example of this is the Tsunami cover story done in the Young World supplement dated 23/12/2005

(<http://www.thehindu.com/thehindu/yw/2005/12/23/stories/2005122301220100.htm>)

where the reporter Nimi Kurien has effectively addressed the fears and hopes of some children for whom the sea beach was home and playground and recorded their reactions to the tragedy.

Such stories prove very reassuring to children and help young readers realise that life goes on after any tragedy. The people are very like themselves and through the questions they raise, the reader's questions are answered, fears alleviated and more hopeful attitudes are created towards dealing with disaster of any magnitude.

## Awareness Raising in Disaster Management *Sri Lankan Experience*



Professor M T M Jiffry  
Chairman

Special Committee for Popularisation of Science  
National Science Foundation

Presented at the  
Workshop sponsored by the UNESCO and NSF  
Held from 21<sup>st</sup> to 24<sup>th</sup> February, 2006  
At the  
Ceylon Intercontinental Hotel

## A Disaster.....

*An aberration in the course of nature, which are presumed to be beyond the domain of human control or caused by human intervention itself, impacting on a vulnerable population*

## What are the disasters encountered in Sri Lanka?

- ^ Floods
- ^ Cyclones
- ^ Landslides
- ^ Lightening
- ^ Drought
- ^ Epidemics
- ^ Coastal erosion
- ^ Tsunamis
- ^ Earth quake (?)

## Historical Note...

In the past, the issue of Disaster Management and Mitigation was addressed at various occasions on a piece meal approach.

In isolation, several organisations have made interventions to minimise the hazards and also educate the people on mitigation at various occasions.

However, there has neither been a concerted effort nor focussed and coordinated attention paid until the encounter of the TSUNAMI in December 2004.

## The events that followed the Tsunami encounter

- ^ An interim Committee on disaster management was established
- ^ Thereafter, the Disaster Management Center was created
- ^ A Parliamentary Select Committee on Disaster Management was set up
- ^ Recently, a separate Ministry for Disaster Management was also created

## What Ministries are involved in awareness raising?

- ^ Disaster Management
- ^ Disaster Rehabilitation
- ^ Science and Technology
- ^ Health
- ^ Education
- ^ Environment
- ^ Defence

**Agencies or Institutions involved in awareness raising in disaster management**

- ▲ Disaster Management Centre
- ▲ National Disaster Management Centre
- ▲ National Science Foundation
- ▲ National Buildings Research Organisation
- ▲ Department of Meteorology
- ▲ Mines Bureau
- ▲ National Aquatic Research Agency
- ▲ Coast Conservation Bureau
- ▲ Other NGOs

**What actions were taken to raise awareness on natural disasters amongst the general public?**

- ▲ Conducting awareness campaigns amongst the people living in vulnerable areas
- ▲ Preparation of leaflets, posters, and booklets to educate the public, especially children
- ▲ Publishing articles in the newspapers
- ▲ Organising small group meetings in the Grama seva units and on regional basis
- ▲ Conducting awareness programs for youth groups and journalists

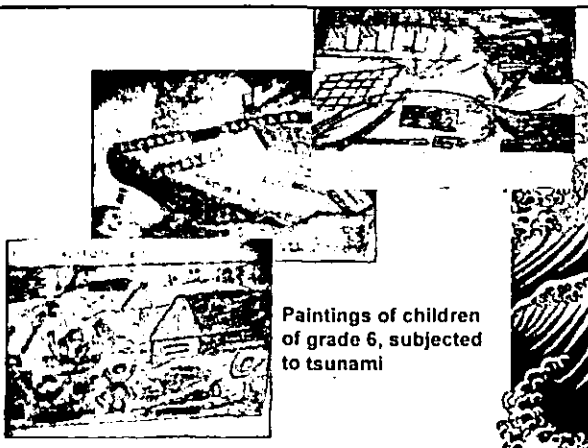
**What actions were taken to raise awareness on natural disasters amongst the general public?.... (Contd)**

- ▲ Organising poster, drama and art competitions
- ▲ Conducting discussions in the electronic media
- ▲ Organising debates and essay competitions
- ▲ Preparing videos on issues related to disaster awareness and preparedness
- ▲ Conducting disaster preparedness drills
- ▲ Inclusion of disaster preparedness and awareness into the formal school curriculum

**World Science Day**

*In 2005, the theme of the World Science Day organised by the Ministry of Science and Technology in collaboration with the National Science Foundation was 'Disaster Preparedness and Mitigation'*

Several satellite programs were organised at schools in the Southern, Eastern, Sabaragamuwa and Uva provinces.



Drama performed by School Children in the satellite program



NSF officials looking at a poster in the satellite program



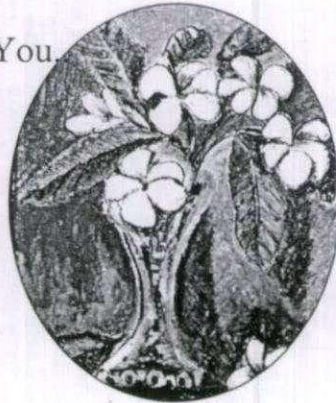
A child participating on a debate in the satellite program



### Future strategies

- ^ Streamlining the activities of all agencies involved in disaster mitigation and creating awareness
- ^ Inclusion of disaster awareness into the formal school curriculum and also utilising nonformal and informal methods to reinforce such knowledge
- ^ Training of teachers and other community workers on disaster awareness education

Thank You

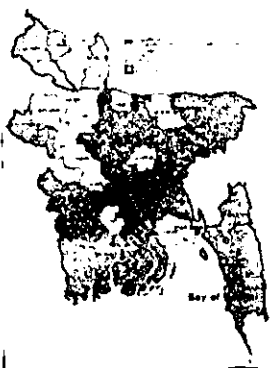


## Workshop on Awareness Raising in Disaster Management

Hosne Ara Begum  
and  
K.M. Moklesur Rahman

Deputy Secretary  
Ministry of Food and Disaster Management  
Government of the People's Republic of Bangladesh

## LOCATION OF BANGLADESH



## BASIC STATISTICS

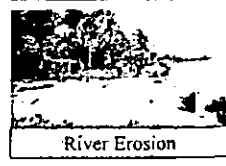
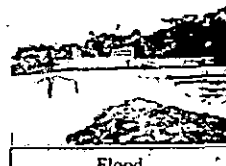
- AREA : 145,000 SQ. KM
- POPULATION : 140 MILLIONS
- DENSITY OF POPULATION : 1000/SQ KM
- MAINSTAY ECONOMY : AGRICULTURE
- (80% LIVE ON AGRICULTURE)
- LANDLESSNESS : 62%
- RIVERS AND RIVULETS : 232
- PER-CAPITA INCOME JAPAN : US \$ 37000
- BANGLADESH : US \$ 410 1%

## DISASTER and Bangladesh

- ◆ Flood
- ◆ Tropical Cyclone
- ◆ Storm Surge
- ◆ Tornado
- ◆ River Bank Erosion
- ◆ Drought
- ◆ Earthquake
- ◆ Arsenic

Year	Disaster	Death
1988	Flood	2373
1988	Cyclone	5704
1989	Drought	800
1991	Cyclone	138,868
1996	Tornado	545
1997	Cyclone	550
1998	Flood	1050
2004	Flood	747

## Disaster Photo Gallery



## Bangladesh Vulnerable to Natural Disasters

- Suffers from devastating natural calamities on regular basis.
- Magnitude of poverty and high population density accentuates the rising level of vulnerability affecting life and livelihood.
- Traditional disaster management model focusing relief and recovery has done little to redress rising levels of risk.

7

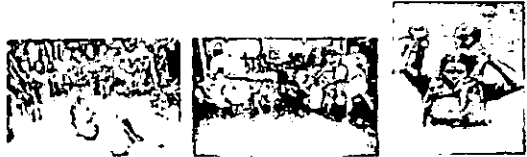
## Bangladesh (contd....)

- Following the devastating floods of 1988 and the Cyclone of 1991, Government of Bangladesh decided to adopt a holistic approach in line with the paradigm shift from relief and response to comprehensive disaster management.

8

### DAMAGE DONE BY 2004 FLOODS


AREA AFFECTED	: 68% OF THE COUNTRY
PEOPLE AFFECTED	: 32 MILLION
HOUSE DAMAGED	: 980,000
CROP DAMAGED	: 3.23 MILLION ACRE
LOSS OF CATTLE & POULTRY	: 324,000



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### DAMAGE DONE BY 1991 CYCLONE

HUMAN LIVES LOST	138,882
HOUSE DAMAGED	1 MILLION
CROP DAMAGED	.9 MILLION ACRE
LOSS OF CATTLE & POULTRY	OVER 1 MILLION



10

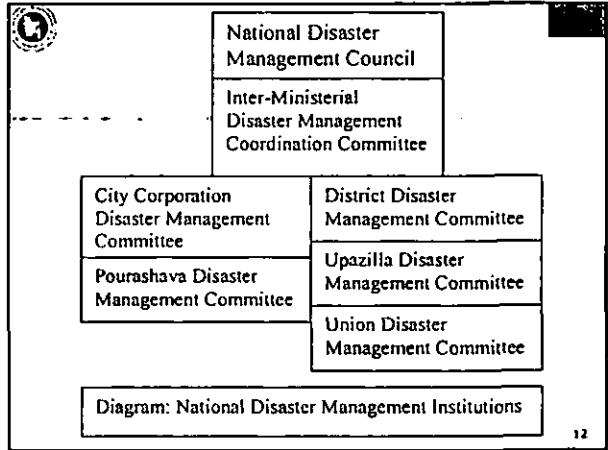
## Bangladesh (contd....)

**GoB Vision on Disaster Management:**  
to reduce the vulnerability of people, especially the poor, to the effects of natural, environmental and human induced hazards to a manageable and acceptable humanitarian level.

**MoFDM Mission:**  
to bring a paradigm shift in disaster management from conventional response and relief to a more comprehensive risk reduction culture and to promote food security as an important factor in ensuring the resilience of the communities to hazards.

**Overall Objective:**  
to strengthen the capacity of the Bangladesh Disaster Management System to reduce unacceptable risk and improve response and recovery management at all levels and to effectively integrate and manage Bangladesh's food security system.

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**As part of the Paradigm Shift:**

- Disaster Management Bureau (DMB) was created in 1992 under the Ministry of Disaster Management and Relief.
- DMB is responsible to create public awareness on the severity and risks and to formulate programmes and projects maintaining effective liaison with government agencies, donors and NGOs to ensure cooperation and coordination in all aspects of disaster management.

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**Comprehensive Disaster Management Programme (CDMP)**

- Long-term, multi-agency involvement programme of the MoFDM of the Government of Bangladesh.
- Funded jointly by the UNDP and DFID.
- Five year programme comprising five broad programme components.

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**Major Activities**

- Strengthening disaster management and risk reduction capacity of MoFDM and key agencies to effectively drive the transition from relief to a comprehensive risk reduction programming strategy.
- Integrating risk management within the core business of government.
- Ensuring knowledge management (acquiring, storing, sharing and applying) on disaster risk reduction.

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**Major Activities (contd....)**

- Mainstreaming disaster management and risk reduction into national policies, institutions and development processes through:
  - Incorporation of disaster risk reduction approaches in all development plans, programs, and policies; and
  - Inclusion of disaster risk management within the development project validation process through Disaster Impact and Risk Assessment (DIRA) in addition to EIA and
  - Projection of future activities and growth targets incorporating risk scenario and reduction options

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**Major Activities (contd....)**

- Enhancing capacity at community level for disaster risk reduction (preparedness, response, recovery and rehabilitation) through:
  - Identification and dissemination of indigenous knowledge and best practices;
  - Establishment of a Disaster Management Information Centre (DMIC) and strong local, Regional and international networks among disaster management stakeholders and
  - Establish an Institute of Disaster Risk Management Training & Research (IDRMTR)

17

**Formation of Advocacy Advisory Group**

- The Ministry of Food and Disaster Management has formed an Advocacy Advisory Group under CDMP headed by the Honorable Minister, MoFDM.
- The group is represented by 21 eminent personalities having strong background in communication and advocacy activities. The group meets quarterly to design and review the implementation status of advocacy activities including the awareness raising initiatives.

18

## Advocacy Strategy

- The Advocacy Advisory Group has approved the Advocacy Strategy Ministry of Food and Disaster Management has formed an Advocacy Advisory Group under CDMP headed by the Honorable Minister, MoFDM.
- The group is represented by 21 eminent personalities having strong background in communication and advocacy activities. The group meets quarterly to design and review the implementation status of advocacy activities including the awareness raising initiatives.

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## Advocacy Strategy

- The Advocacy Advisory Group has approved the Advocacy Strategy.
- Key Milestone of Advocacy Strategy
  1. Inclusion of Disaster Risk Reduction in Development Planning by the GOB Ministries/ Divisions/ Departments.
  2. Inclusion of Disaster Risk Reduction in NGO Project Planning
  3. Inclusion of Disaster Risk Management in Urban Planning.
  4. Positive Role of Media in Promoting Disaster Risk Reduction .

20

## Implementation Status of Advocacy Strategy

For Mainstreaming Disaster Risk Reduction in Development Planning

1. Development Mainstreaming Mechanism.
2. Consultation with Senior GOB Officials including Planning Commission and Economic Relation Department.

21

## Implementation Mechanism of Advocacy Strategy

3. Advocacy Workshop with Policy Planners
4. Briefing Session and dialogue with key relevant stakeholders.
5. Revision on Development Project Planning (DPP) Format
6. Formation of GO-NGO Working Committee for Mainstreaming Risk Reduction in NGO Project Planning .

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## Inclusion of Risk Reduction in Urban Planning

- Selection of Stakeholders such as: Dhaka City Corporation, Public Works Department, Rajdhani Unnayan Katripakkha, WASA, DESCO etc.
- Advocacy for legal framework of Building Code
- Advocacy for finalisation of Disaster Management Act

23

## Inclusion of Risk Reduction in Urban Planning

- Awareness Program for the Commissioners of Dhaka City Corporation and formation of volunteers Group in every ward.
- Mock Exercise on Earthquake Rescue Operation with the participation of all response team including Arms Force Division, Police, City Corporation, Department of Health Service

24

## Positive Role of Media

- Training Programs for Journalist in Dhaka and other disaster prone areas.
- Production of Television Program on Disaster Risk Reduction Issues
- Production of Documentary on different emerging issues on disaster management
- Media Award for journalists working in both print and electronic media.

25

## Awareness Raising Program for University and College Students

- Essay Competition for School, College and University Students
- Television Debate Competition for College and University Students
- Involvement of University Students as Intern in Community Risk Reduction activities rural areas.
- Training Program for University Students

26

## Achievements to-date: Education for natural disaster preparedness

- Institutional linkages exist between the academic and research community with the Ministry of Food and Disaster Management (MFDM) and other relevant government ministries addressing risk reduction.
- Local scientific and academic institutions such as the Institute of Water Modeling, the Center for Environmental and Geographic Information Services, Bangladesh Public Administration Training Center, Disaster Management Training and Research Center (DMTRC) and the Department of Geography and Environment at Dhaka University, BRAC University, BUET, BMD, and SPARRSO are engaged in capacity building and awareness raising through education and training.

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## Achievements to-date: Education for natural disaster preparedness

- Introduced disaster management messages and awareness programmes into the curriculum of primary and secondary schools from grade 5 to grade 12

28

## Achievements to-date: Education for natural disaster preparedness

- All public service training institutes have included a 2-hour session on Disaster Management in all of their foundational courses. Process underway to increase the duration of the session.
- BRAC University is offering Graduate Certificate, Graduate Diploma and Masters Programs in Disaster Management
- Institute of Social Welfare, DU, has included a credit bearing course on Disaster Management in their undergraduate curriculum. Jahangirnagar University has introduced a paper on disaster management in its curriculum in graduation level. A Institute on Disaster Management training has been established in Dhaka University.

29

## Awareness Raising Programme at Community Level

- Training Programme for Fishermen, Primary, Secondary Schools & College teachers, Imam of Mashjid, other Religious leaders, Union Parishad members, women groups, Members of Anser & VDP, Members of girl guide & BNCC, Public representatives etc.
- Awareness Raising Message in the Bill Boards
- Providing Assistance in telecasting community based program in radio centers located in coastal areas.

30

## Cont....

- Capacity building training for the volunteers under Cyclone Preparedness Program (CPP).
- Make public awareness about cyclone signals with the help of disaster Management Bureau (DMB) popularize preparedness plans, through discussion meetings, posters, pamphlets, films and drama etc.
- Currently CDMP has been providing training on tsunami for the CPP Volunteers.

31

## Cont....

- The Government of Bangladesh promote NGO initiatives including Awareness Raising in Disaster Management. NGO Affairs Bureau under Prime Minister's office has provision for emergency approval of disaster management projects

32

## AWRENESS RAISING PROGRAMME.

- Booklets containing public information about Cyclone, Flood, Earthquake, etc. calendar, poster depicting disaster points are regularly published and distributed up to grass root levels by DMB.
- Every year last working day of March has been declared as National disaster preparedness day (NDPD) as part of public awareness.

33

## Cont....

- DMB at the guidance of MFDM has also published both in Bengali and English a guidebook entitled standing orders on disaster. Responsibilities have been defined from national to Union level

34

## Plan of action for Tsunami preparedness and Raising awareness

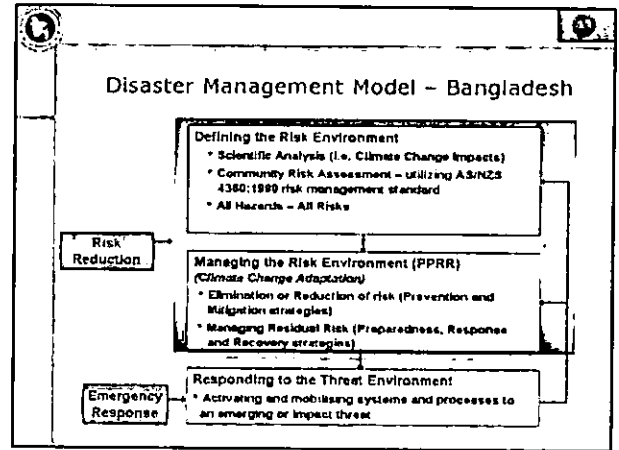
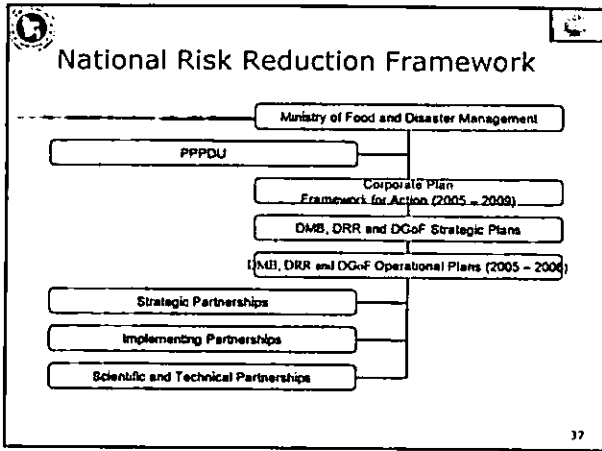
- MOFDM has submitted a proposal titled Bangladesh Natural Comprehensive Tsunami and Cyclone early warning system for Bay of Bengal to UNESCO.
- Under take mass awareness Programme in mass media .
- Prepare and awareness video on Tsunami and Cyclone and disseminate the video to the hotels at coastal belt are for regular broadcasting in satellite channel .

35

## Cont...

- Train teachers and aware students on tsunami issues.
- Mass awareness among people at risk, civil society, journalists, Volunteers, NGOs, youth clubs, mosques, madrasas, temples, churches, pagodas and professionals.

36



# Thank You for your patience

39

## Increasing Community Awareness of Tsunami Disaster in Indonesia

presented on

**Workshop on Awareness Raising in Disaster Management**  
**National Science Foundation – Sri Lanka and UNESCO**  
 Colombo, 21-24 February, 2006

by

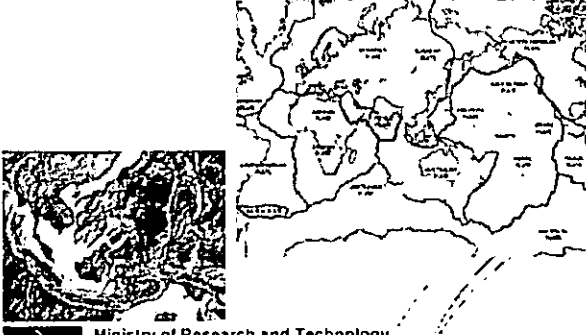
**Dr. Lukito Hasta Pratopo**  
 Division Head of Capacity Enhancement for Research, Science and Technology

**Dr. Parlatmono**  
 Head of PIRBA (Pusat Informasi Riset Bencana Alam  
 or Information Center for Researches on Natural Disasters)

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## Tectonic Setting and Seismicity of Indonesia



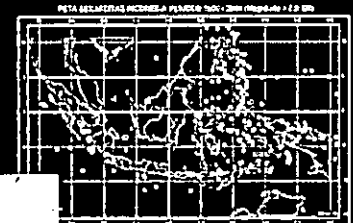
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## Earthquake and Tsunami History

**EARTHQUAKE WITH M ≥ 7,0 RS IN INDONESIA, 1900 - 2004**

A. TOTAL : 212  
 B. IN THE SEA : 162 ( 76 % )  
 C. SHALLOW IN THE SEA : 53 ( 72 % )  
 D. GENERATED TSUNAMI (AFTER GUSIAKOV): 66 ( 40 % )



Intensity of Tsunami	Number of Tsunamis	% of total
1	1	0.5%
2	1	0.5%
3	1	0.5%
4	1	0.5%
5	1	0.5%
6	1	0.5%
7	1	0.5%
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98	1	0.5%
99	1	0.5%
100	1	0.5%

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## The Disaster : a brief reminder

- 152,000 confirmed dead
- 37,000 missing
- 572,000 displaced
- 1.3 million homes and buildings destroyed
- 8 ports and 4 fuel depots damaged
- 65% of the water and 52% of the sanitation system broke down
- 120 km of roads and 18 main bridges demolished
- total losses amount to US\$ 4.5 billion, which represents 2.2% of National GDP and 97% of Aceh's GDP

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## The Causes

**Catastrophic earthquake**

- Scale 9 with shallow epicenter offshore
- Very strong ground shaking for 4 minutes felt in many areas
- People moved out of their houses out of fear

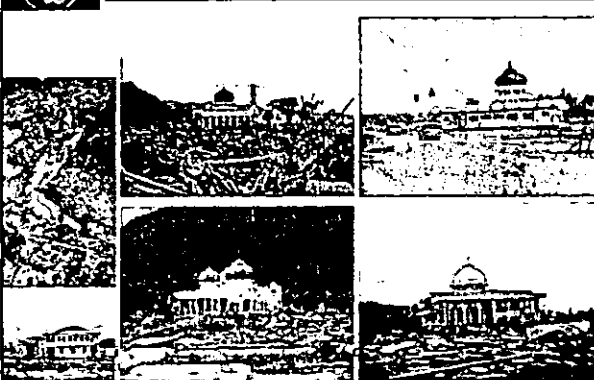
**Followed by a tsunami**

- Wave height ranging from 4 – 35 m
- Most people have never seen such calamity in their lives
- Did not know what to do – chaotic
- No warning was issued

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## What remains



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... in response

- Government formed the Reconstruction and Rehabilitation Agency (BRR)
- Ministry of Research and Technology responsible in coordinating various agencies in the Development of Tsunami Warning Systems throughout Indonesia

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Schematic Diagram of Basic Design

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System Elements

- Seismic Monitoring
  - Seismograph
  - Accelerograph
- Database of Tsunami Modeling
- Sea level monitoring
  - DART - BUOY
  - Tide Gauge
- Information and Communication Technology
  - Crustal Deformation Monitoring
  - GPS
- Geospatial Information
  - Satellite Imagery
  - Topographic and Bathymetric map
- Community Preparedness
- Capacity Building

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Seismic Monitoring

NO	DEVICE	PLANNED	EXISTING
1	SEISMOGRAPH	<ul style="list-style-type: none"> <li>180 units scattered in 10 Regional Offices</li> <li>Issue warning within 5 minutes</li> </ul>	<ul style="list-style-type: none"> <li>30 units scattered in 3 Regional Offices</li> <li>Issue warning within 20-30 minutes</li> </ul>
2	ACCELEROGRAPH	800 Units	0 Units

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Sea-level Monitoring

DEVICE	EXISTING	PLAN
TIDE GAUGE	80 units (35 analog graphical chart and 25 digital tidal recording)	120 units of digital tidal recording

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Oceanographic Monitoring

DEVICE	EXISTING	PLANNED
DART-BUOY	12 Units to only monitor sea environment	22 Units of Ocean Bottom Pressure Sensors

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### Crustal Deformation Monitoring

Plan to install Continuous GPS ( 27 GPS near tide gauges and 10 GPS near Buoys)

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### Tsunami Database

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### Community Preparedness

Tsunami in Indonesia are local type

- Generated very close to coastal communities
- Insufficient time to accurately assess the risk
- Less time to disseminate warnings and carry out orderly evacuation

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### Seismological Summary of Sumatera

Several big earthquake have been recorded in the West Coast of Sumatra (e.g. 1913, 1935 and 2004) and instated tsunami disaster. Based on paleo-tsunami research, the next big earthquake with tsunami is forecasted to occur at Padang

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### AERIAL VIEW OF PADANG

Statistics of Padang City

- Area : 694.96 km<sup>2</sup>
- Altitude : 0 - 10m (60%)
- Population : +800,000
- Surrounded by 5 rivers

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### Tsunami Model for Padang City

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## Demonstration of END to END Simulation of Indonesian Tsunami Warning Systems (INA TEWS)

26 December 2005



Tsunami warning was issued at National Tsunami Warning Center at BMG, Jakarta

On December 26, 2005, an early warning simulation was carried out. Tsunami warning was issued at the BMG office in Jakarta and transmitted via sms to the Mayor of Padang City and distributed to people of affected area using siren. The community was then exercised themselves for evacuation to higher places.



Community response at Padang

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## Real-time Earthquake Monitoring

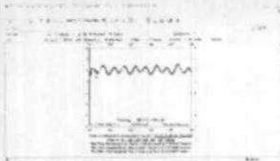
Indonesia, with the aids from several other countries, have established additional 11 seismometer stations (Nias, Yogyakarta, Banda Aceh, Jambi, Padang Panjang, Bengkulu, Bandung, Palu, Waingapu, Denpasar, Tangerang) as a part of INA-TWS. Utilizing the global network, INA-TWS has capacity to distribute earthquake information in less than 10 minutes after earthquake occurs. This has been demonstrated by an end-to-end simulation on December 2005 to commemorate one-year of the Aceh-tsunami



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## Real-time Sea-level Monitoring



System for sea level monitoring in Padang has been established and directly connected with BMG on real time basis for tsunami warning confirmation.

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## Distributed Materials and Previous Exercise

Hazard Map



Evacuation Routes



Learning media



Earthquake and tsunami drill



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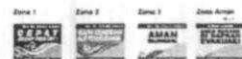
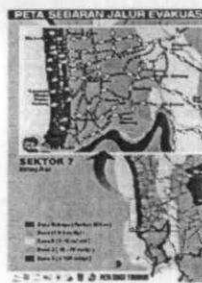
## Public Education Materials



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## Evacuation Map and Sign Boards



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**National Media Campaign**

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**Local Media Campaign**

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**Increasing Awareness for Government Officers**

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**Workshop for Developing Evacuation Map**

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**TOT for Local Officers, Students, NGO and Public**

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**TOT for Local Officers, Students, NGO and Public**


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**Commemoration of One-year Tsunami Disaster**




Sending warning from National Center (BMG) to Major of Padang City (Authorized person) by Pushing Red Button



People went to the designed evacuation place (Pangihun Mountain)




Activities at the Evacuation Place



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**Tsunami Warning**



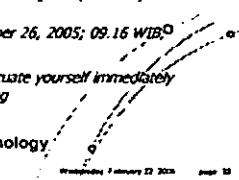
Message Content via SMS :

Terjadi gempa kuat 26 Desember 2005; 09.16 WIB; 125 km barat daya Kota Padang.

Potensi timbulkan tsunami, segera tinggalkan pantai Kota Padang dan sekitarnya. (BMG)

*A strong earthquake has occurred on December 26, 2005; 09.16 WIB; 125 km South-West of Padang City*


*It potentially can trigger tsunami, please evacuate yourself immediately from coasts of Padang City and its surrounding*



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**Dissemination of Warning Information**




From National Center (BMG-Jakarta) to Major of Padang via SMS

From Major of Padang to Critical Posts by Siren, HT, Local Communication. The Critical Posts include:

- The Center of Operational Control
- Fire Brigade
- Police
- Indonesian Red Cross
- Mosques
- Churches




Video



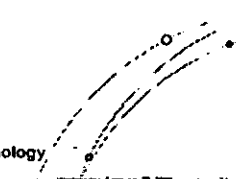
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**Closure**



Thank You



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**NATURAL DISASTERS IN INDIA :  
A COUNTRY REPORT**

by

*Sujata Chakranobis, Scientist 'D'  
K.V.S.P.Rao, Scientist 'F'*

*Department of Scientific & Industrial Research,  
Technology Bhavan, New Mehrauli Road,  
New Delhi - 110 016, India*

1

**VULNERABILITY TO NATURAL  
DISASTERS**

- India traditionally vulnerable to natural disasters due to unique geo-climatic conditions.
- Floods, droughts, cyclones, earthquakes and landslides a recurrent phenomena.

2

**VULNERABILITY TO NATURAL  
DISASTERS contd...**

- About 60% of the landmass prone to earthquakes of various intensities.
- Over 40 million hectares prone to floods;
- About 8% of the total area prone to cyclones
- 68% of the area susceptible to drought
- An average of 4344 people lost their lives and 30 million people affected by disasters every year during the decade 1990-2000

3

**COMMON FORMS OF NATURAL  
DISASTERS**

- Earth quakes
- Cyclones
- Floods
- Droughts
- Land-slides
- Avalanche
- Tsunami

4

**Major Earthquakes in India, 1988-2001**

Date	Location	Magnitude
August 21, 1988	Bihar-Nepal Border	6.4
October 20, 1991	Uttarkashi, Uttaranchal	6.6
September 30, 1993	Latur-Osmanabad, Maharashtra	6.0
May 22, 1997	Jabalpur, Madhya Pradesh	6.9
January 26, 2001	Bhuj, Gujarat	7.7

5

**Annual Damage due to Heavy Rains,  
Landslide and Floods**

Year	Population affected (Lakh)	Crop Area affected (Lakh Ha.)	Human life loss (No.)
1999	328.12	8.45	1,375
2000	416.24	34.79	3,048
2001	210.71	18.72	834

6

**Damage due to super cyclone in Orissa in October, 1999**

Date of occurrence	Population affected (Lakh)	Crop Area affected (Lakh Ha.)	Houses Damaged (No.)	Human Loss (No.)
17-18.10.1999	37.47	1.58	331,580	199
29-30.10.1999	129.22	18.43	1,828,532	9,887

7

**Losses due to Droughts: 1991-2001**

Year	Population affected (Lakh)	Damage to crops area (Lakh Ha)	Estimated value of damaged crops (Rs. crores)	Cattle population affected (In lakh)
1999	369.88	134.22	6.44	345.60
2000	378.14	367.00	371.87	541.67
2001	88.19	67.44	NA	34.28
<b>Total</b>	<b>836.21</b>	<b>568.66</b>	<b>378.31</b>	<b>921.55</b>

8

**Tsunami that affected India**

Date	Remarks
26th June, 1941	Earthquake of the magnitude 8.1 in the Andaman Sea. Tsunamis on the east coast of India with amplitudes from 0.75 to 1.25 m.
27th Nov, 1945	Mekran earthquake of magnitude 8.1. 12 to 15 m wave height in Ormara.
26th Dec, 2004	Earthquake of magnitude 9.3 off north Sumatra coast. Generated Tsunami waves affecting in India. About 12400 people lost their lives and 700 injured.

9

**AWARENESS CREATION AND MITIGATION**

- A national level programme for capacity building for earthquake mitigation finalized for training of 10000 engineers in public and private sectors
- An accelerated urban earthquake vulnerability reduction programme taken up in 38 cities in seismic zones III, IV & V with population of half a million and above.
- Sensitization workshops for engineers/architects, government functionaries and voluntary organizations have already been held in 36 of the 38 cities.

10

**AWARENESS CREATION AND MITIGATION contd...**

- A National Core Group on Cyclone Monitoring & Mitigation constituted with experts from IMD, NCMRIWF, CWC, NRSA and ISRO besides administrators from the relevant Ministries/Departments and State Governments vulnerable to cyclones

11

**AWARENESS CREATION AND MITIGATION contd...**

- A Disaster Risk Management Programme taken up with assistance from UNDP, USAID and European Union in 169 most hazard prone districts in 17 states
- Project commenced from October, 2002 and expected to conclude by December 2007
- Programme includes awareness generation, public education, preparedness, planning & capacity building, developing appropriate policies, institutional, administrative, legal & techno-legal regime.

12

### **INITIATIVES BY THE GOVT. OF INDIA TO MITIGATE IMPACT OF DROUGHT**

- Drought Prone Area Programme (DPAP)
- Desert Development Programme (DDP)
- National Watershed Development Project for Rainfed Areas (NWDPA)
- Watershed Development Programme for Shifting Cultivation (WDPSC)
- Integrated Water Development Project (IWDP)
- Integrated Afforestation & Eco-Development Project Schemes (IAEPS)

11

### **Disaster Risk Management Programme**

- Plans prepared for 3500 villages, 250 Gram Panchayats, 60 blocks and 15 districts.
- Elected representatives of over 8000 Panchayati Raj Institutions already trained, besides members of voluntary organizations.
- Over 20000 Government functionaries trained in disaster mitigation and preparedness at different levels.
- About 600 engineers and 220 architects trained in vulnerability assessment of lifeline buildings.
- Training being imparted to master trainers under the programme.

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### **Disaster Risk Management Programme contd...**

- More than 600 master trainers and 1000 teachers already trained in different districts in disaster mitigation.
- Disaster Management teams constituted in villages and imparted training in basic functions of first aid, rescue, evacuation and related issues.
- Thrust of the programmes is to build up capabilities of the community since the community is invariably the first responder.

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### **Disaster Risk Management Programme contd...**

- Key points stressed under this programme -
  - > need to ensure sustainability of the programme,
  - > development of training modules, manuals and codes,
  - > up-scaling partnerships in excellence,
  - > focused attention to awareness generation campaigns;
  - > institutionalization of disaster management committees and disaster management teams, disaster management plans and mock drills and establishment of techno-legal regimes.

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### **Large Scale Awareness Generation**

- A Steering Committee on mass-media campaign constituted for large scale awareness generation.
- The Committee is developing profile for taking up
  - mass media campaign through audio, video and print media;
  - publicity through pamphlets, posters,
  - bus back panels at all levels.

17

### **Large Scale Awareness Generation contd...**

- Posters to be prominently displayed at Primary Health Centres, Community Centres, schools, other places where villagers normally congregate.
- Corporate Sector is also being associated with the dissemination of campaign.
- Disaster Management as a subject in Social Sciences introduced in school curriculum

18

### **PREPAREDNESS**

- Central Government in the process of training and equipping 96 specialist search and rescue teams, with each team consisting of 45 personnel including doctors, paramedics, structural engineers etc.
- Ten teams already trained.
- The teams will be located at various centres around the country for specialized response.
- The teams will have latest equipment including dog squads for locating survivors in the debris.

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### **PREPAREDNESS contd...**

- States also advised to set up their own specialist teams for responding to disasters.
- State Governments authorized to utilize 10% of the annual allocation made under the Contingency Relief Fund for purchase of equipment.
- Fourteen Regional Response Centres being set up in different parts of the country. These centres will have response teams and equipment and resources for being able to respond to any hazard/calamity in the neighbouring States.

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### **EARLY WARNING SYSTEM**

- Indian Meteorological Department (IMD) is mandated to monitor and give warnings regarding Tropical Cyclone (TC).
- Warning systems encompass three equally important elements namely, Detection and Warning; Communication; and Response.
- Early warning bulletin is issued by the IMD before the Cyclone-Alert Stage.

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### **EARLY WARNING SYSTEM CONTD...**

- The flood forecasting and warning system is used for altering the likely damage.
- Flood Forecasting Centre was set up at its Headquarters, at Delhi, for giving timely Forecasts and Warnings of the incoming floods to the villages located in the river areas around the National Capital, Delhi.

22

### ***Geneva-Natural Disaster Information System (NDIS)***

- A pilot project Geneva-NDIS, Natural Disaster Information System, has been launched.
- The project has been initiated by Geneva Software Technologies, Bangalore and is funded by Technology Development Board, Department of Science & Technology, Govt. of India.
- Geneva, with its patented technology has developed a solution for Alerting people of an area in their language through SMS, Voice and Wireless Public Address Systems.

23

### ***NODAL MINISTRIES/DEPARTMENTS FOR DISASTER MANAGEMENT***

- Min. of Home Affairs
- India Meteorological Department
- Central Water Commission
- Ministries of Defence, Finance, Rural Development, Urban Development, Health, Water Resources, Petroleum, Agriculture & Cooperation, Power etc.

24

### *MANAGEMENT MECHANISM*

- National Crisis Management Committee (NCMC)
- Crisis Management Group (CMG)
- Control Room (Emergency Operation Room)
- Contingency Action Plan (CAP)
- State Relief Manuals

25

### *FUNDING MECHANISM*

- Calamity Relief Fund (CRF)
- 75% Contribution of the corpus of CRF by Govt. of India & 25% by State Govt.
- National Calamity Contingency Fund (NCCF)

26

### *NEW INITIATIVES*

- Proposed to constitute National Emergency Management Authority (NEMA)
- NEMA will be headed by an officer of the rank of Secretary/Special Secretary to the Govt. in the Min. of Home Affairs.
- Special Secretaries/Addl Secretaries from various Ministries would be members
- Authority meets as often required.

27

### *RESPONSIBILITIES OF NEMA*

- Coordinating/mandating Government's policies for disaster reduction/mitigation.
- Ensuring adequate preparedness at all levels in order to meet disasters.
- Coordinating response to a disaster when it strikes
- Coordination of post disaster relief and rehabilitation.

28

### *CONCLUSION*

- Preparedness rather than crisis management
- Coordinated participatory approach rather than only State responsibility
- Technology upgradation and deployment
- Information - a tool for disaster management

29

SECTION 2

## Bird Flu has landed

8 SAMPLES FROM MAHARASHTRA FARM TEST POSITIVE | 8 LAKH BIRDS TO BE CULLED TODAY  
NO HUMAN CASES, SAMPLES OF 3 KIDS

40,000 CHICKENS HAVE DIED IN MAHARA

### FLU HITS

Bird flu comes  
Anti-virals  
next week

*Silver lining: Within hours, all cranked up, Govt had action plan ready since December*

W...

18 2009

## Alerts and warnings

1. National metrological center is entrusted with task of monitoring the recorded seismic activity Indian Ocean region and keep the concerned authorities informed as intimated in this plane

The Center collects information from such sources as United States Geological Survey, National Earthquake Information Center, Japan Meteorological Agency.

2. The national Metrological Center will have hotlines establish between itself and NDMC, NSS, TVM, VOM. Any available information that may be beneficial to the public to prepare themselves for the natural disaster must be provided to NDMC without any delay to be presented to the council. It is the Disaster Controller who, in consultation with the council, will proclaim appropriate level of emergency

The National Metrological Center can make announcement, without consultation from NDMC in case of:

- a. Tropical cyclones and flooded threats. (Level of Emergency – Lookout)
- b. Tropical cyclones, heavy rains and flood threats. (Level of Emergency – Alerts and warnings)
- c. Earthquakes of 7.0 or high on Richter scale.
- d. Undersea earthquake in the India Ocean Basin or Pacific Rim which may create a tsunami. (Level of Emergency – (Alerts and Warnings) )

These announcements should be aimed at informing the public and shall include precautionary measures such as restrictions on traveling.

3. The Information Ministry, under guidance from the NDMC should pass appropriate advisories through all available media on the activities that need to be carried out so as to prepare for an emergency. The initial advisory may proclaim Stage 1.
4. After through analysis of the situation of the situation, The Council will issue directive dictating actions that need to be taken and may revise the initial level of emergency.

## STAGE OF ACTIVITIES VARIOUS LEVELS OF EMERGENCY

This section will provide emergency phase and corresponding colors. Each phase will be announced by the Disaster Controller at the national, regional level and Atoll Chiefs at the Atoll level.

Maldives being a low lying, small island state, and given its geographic lay, more prone to disaster such as cyclone, flash floods, earthquake, tidal waves and tsunamis.

### **1. Stage 1- lookout (white)**

#### **1.1 Announcement**

1. If the national meteorological center announces occurrence of an earthquake in the Indian Ocean, including South East Asia and the Carlsberg ridge area but there is no immediate threat of consequence of the occurrence to Maldives, stage 1 could be proclaimed.

#### **1.2 Activities**

##### **1. Activities at the national level**

- a. In order to convey important information to the public the National Emergency Operation Center (NEOC) will be operating during 24 hours
- b. safety information will be disseminated to the whole nation especially vulnerable Atolls by the NEOC.
- c. Recognize the initial situation after an emergency committee meeting.
- d. All agencies will keep their core staff informed and alert.

##### **2. Activities at the regional level**

- a. In order to convey important information to the public the Regional Emergency Operation Center (Regional EOC) will be operating 24 hours.
- b. Safety information will be provided to communities in vulnerable atolls.
- c. All agencies will keep their core staff informed and alert.

##### **3. Activities at the atoll level**

- a. In order to convey important information to the public the Atoll Emergency Operation Centre (Atoll EOC) will be operating during official hours.
- b. Safety and other information will be provided to the people in vulnerable atolls.
- c. All agencies will keep their core staff informed and alert.

**3. Activities at the atoll level**

- a. In order to convey important information to the public the Atoll Emergency operation Center (Atoll EOC) will be operating during the official hours.
- b. Safety and other information will be provided to communities in vulnerable atolls
- c. All agencies will keep their core staff informed and alert

**4. Actions by the National Meteorological Centre**

- a. Immediately after the occurrence of an earthquake of magnitude 7.0 on Richter scale, the National Meteorological Centre will be on alert.
- b. The first information would be passed to National Security Service, National Disaster Management Centre, TVM and VOM by hotline. The same information must be disseminated via fax, after 15 minutes after the occurrence of the earthquake.
- c. National Meteorological Centre will disseminate updates on the situation at 15 minute intervals.

**5. Action by National Disaster Management Council**

- a. Ensure the warning system (hotlines and other communication links) to inform concerned officials, agencies and mass media is functional.
- b. Evaluate the precautionary / preparedness measures for a possible disaster at national, regional and atoll level.

**6. Action by National Disaster Management Center**

- a. Review own Action Plans on disaster management.
- b. Identify particularly vulnerable islands (atolls) and the population likely to be affected by the disaster.
- c. Update the list of foreign and private agencies willing to participate in the disaster preparedness, emergencies response and response and rehabilitation and programmes.
- d. Preserve information regarding food, relief materials, and transport usable at all levels during disasters.
- e. Ensure Regional, Atoll Emergency Center and the other agencies have Standing Orders and are aware of activities required from them at every stage.
- f. Assess the disaster preparedness of different ministries, agencies, departments, atolls and possible islands.
- g. Ensure communication between the office and all atolls.

## **2. STAGE 2 – ALERT AND WARNING (YELLOW)**

### **2.1 ISSUE ALERT WARNING**

- a. this stage is proclaimed by issuing an alert or public warning of an imminent natural disaster threat when technical experts at the national meteorological center deem that impact of a direct or indirect disaster will be felt in Maldives.
- b. When the national meteorological center issues an alert warning on any type of natural disaster, stage 2 could be proclaimed.

### **2.2 ACTIVITIES / RESPONSIBILITIES**

#### **1. Activities at the national level**

- a. In order to convey available information to the public and provide assistance, activities of the NEOC will be operating 24 hours.
- b. Safety information will be disseminated to the whole nation especially to vulnerable atolls, by NEOC.
- c. Each agency will execute its activities conforming to their individual plan and keep the staff on alert.

#### **2. Activities at regional level**

- a. In order to convey available information to the public and provide assistance, activities of the regional EOC will be operating 24 hours.
- b. Safety information will be disseminated to the whole nation especially to the vulnerable atolls, by the NEOC.
- c. Each agency will execute its activities according conforming to their own plan and alert the staff.

#### **3. Activities at atoll**

- a. In order to convey available information to the public and provide assistance, activities of the atoll ECC will be operating 24 hours.
- b. Safety information will be disseminated to the whole nation especially to vulnerable atolls, by NEOC
- c. Each agency will execute its activities conforming to their policies and conforming to their own plan and alert the staff.

#### **4. Action by the National Meteorological Center**

a. Immediately after the occurrence of an earthquake of 7.0 in Richter scale in the Indian Ocean, including South East Asia and the

Carlsberg ridge area of, the National Meteorological Center will be on alert.

b. The first information would be passed to the National Security Service, National Disaster Management Center, TVM and VOM by hotline. The same information will be disseminated via fax, within 15 minutes after the occurrence of the earthquake.

c. National Meteorological Center will disseminate updates on the situation at 15 minutes intervals.

d. If a tsunami is generated a warning containing its arrival time to Maldives will be disseminated immediately.

e. In such eventuality, the National Meteorological Center shall provide NDMC, NSS, TVM and VOM updates every 15 minutes.

f. If the tsunami is not going to affect Maldives, tsunami warning will be downgraded.

#### **5. Responsibilities of the National Disaster Management Council**

a. Ensure the warning reach all concerned officials, agencies and mass media.

b. Take necessary steps after evaluating the precautionary / preparedness measures immediately with the warning announcements regarding imminent disaster.

#### **6. Responsibilities of the National Disaster Management Center**

Issues order for dispatch of relief materials to required places and to keep the transport ready.

a. Ensure direct communication with the National Meteorological Center and issues order for collection of inputs (warning messages and Report updates) from the Center.

b. Ensure publicity of warning messages through VOM, TVM, Cable TV and all government websites.

c. call a meeting of the National Plan on Disaster Management and Mitigation (NPDMM) implementing agencies and in forth the decisions to all concerned.

d. Ensure meetings at regional and atoll level were convened to prepare themselves for the impending calamity.

e. Request Island Aviation / MAT / TMA to keep transport plans ready for reconnaissance of loss and for relief operations.

f. Request NSS Coast Guard, MTCC and transport companies to keep water vessels ready for rescue and relief operations.

g. In consultation with the Meteorological Center and National Disaster Management Council, issues instruction for evacuation of people.

h. Arrange advance necessary relief materials for the disaster prone atolls / islands.

#### **4. STAGE 3 – ACTION (RED)**

Stage 3 should be announced when the disaster has struck at any part of the country, Activities will begin once the risk of danger becomes lower.

#### **ACTIVITIES/RESPONSIBILITIES**

##### **1. Activities at the national level**

All facilities of the agencies, prepared to respond to an emergency status will be available under the directive of the Disaster Controller, who also has the right to request for personnel and equipment. Activities of the emergency situation will be coordinated after authorization is sought for executing plans of individual agencies that are under NEOC

Planning and conducting search and rescue operations will be a top priority at all levels

##### **2. Activities at Regional Level**

All tasks will be similarly conducted at the regional level. Personnel and equipment from the agencies must provide from the Regional EOCs at the request of the Controller

##### **3. Activities at Atoll level**

The Atoll Chief will oversee all activities at the Atoll level. At the directive of the Atoll Chief, personnel and equipment necessary to execute the agency plans must be provided. An Atoll Emergency Operation Centre may be established at the atoll level to coordinate all activities at the atoll level. This will be established at the direction of the Atoll Chief at any island.

Police Service will have a clear and a detailed SOP for managing dead bodies. It is the responsibility of Atoll Chief to manage dead bodies as per this SOP.

##### **4. Actions by the National Meteorological Centre**

The Centre will continue to send its updates at regular intervals of 15 minutes, until such time the Controller sees these updates are no longer crucial in planning a implementing the activities set in force due to the disaster.

##### **5. Responsibilities of National Disaster Management Council**

- a. Depute additional manpower to disaster affected areas in aid administration.
- b. Send NSS personnel with assigned duties for communication and essential service.
- c. Determine priority and issue instructions regarding relief materials. Funds and transport

## **6. Responsibilities of National Disaster Management Office**

- a. Request Island Aviation / MAT / TMA and NSS to keep transport plane(s) and vessels ready for assessments of loss and damage and rescue operations as soon as weather becomes favorable.
- b. Request civil authorities and private parties to assist NSS in respect of relief and rescue operations on the basis of need.
- c. Coordinate relief work with NGOs and volunteers.
- d. Collect information of loss and damage.
- e. Fix additional requirement of funds and materials for relief and rehabilitation work.
- f. Collect quickly funds and relief materials for gratuitous relief.

## **DOWN (GREEN)5. STAGE 4 – STEP**

Stage 4 will be announced once the Disaster Controller is convinced of the time when aid and rehabilitation works could begin. This will take 2 weeks or less. The period will be extended only the sole direction of the president.

### **4.1 RESPONSIBILITIES**

#### **Activities at the national level**

- a. Provision of shelters and relief housing for the homeless.
- b. Provision of food supplies to the displaced and needy.
- c. Identify and manage displaced population.
- d. Continue emergency rehabilitation work in affected areas until return to normalcy.
- e. Take necessary steps to address the psycho-social problems arising from the disaster.
- f. Coordinate rehabilitation programmes.

#### **Activities at regional level**

- a. Coordinate relief at regional level under the guidance of deputy controllers.
- b. Gather facts on the state of the region and direct this information to the controller.
- c. Monitor and audit the disbursement of relief items.
- d. Ensure relief and rehabilitation activities are carried out in accordance with the priorities laid out by the Council.

#### **Activities at atoll level**

- a. Send detailed report of loss and damage to the Deputy Controller and NDMO.
- b. Arrange quick disbursement of relief materials to the affected people.
- c. Send report of relief and rehabilitations activities to NEOC.

### **Responsibilities of National Disaster Management Council**

a. Recommend solution of problems identified by the Disaster Management Centre/ Controller.

b. Propose long rehabilitation plans.

c. Deliberate on any other issues that may be presented to its consideration.

### **Responsibilities of national disaster management office**

a. Coordinate relief and rehabilitation activities nationwide.

b. Arrange for the temporary shelters and relief housing and food supplies.

c. Manage internally displaced population.

d. Continue emergency rehabilitation work in affected areas until return to normalcy.

e. Coordinate rehabilitation programmes.

## **NATIONAL DISASTER MANAGEMENT COUNCIL (ADVISORY BOARD)**

### **MANDATE OF THE COUNCIL**

1. The national disaster management council will be permanently responsible for all the related tasks of a state of emergency. This takes into account, minimizing damage, Preparation, training, administrative tasks, awareness programmes and formulating policies.

2. Ensuring all operation to be conducted via EOCs is also the council's responsibility in addition to rehabilitation and providing relevant information on the state of emergency to the president.

3. It is also the duty of the council to provide suggestions and policies for the future planning.

4. The members of the council will comprise of the following:

i. Ministry of defence and national security.

National security services

ii. Department of meteorology

iii. Ministry of planning and national development

iv. Ministry of finance and treasury

v. Ministry of information and culture

Television Maldives

Voice of Maldives

vi. Police headquarters

vii. Ministry of atolls development

viii. Ministry of foreign affairs

ix. Ministry of environment and construction

x. Ministry of home affairs

xi. Ministry of tourism

xii. Ministry of transport and civil aviation

xiii. Ministry of communication, science and technology

xiv. Attorney general office

5. The council shall convene at the NDMC at the earliest after the occurrence of a natural disaster or earthquake of 7.0 Richter in the strength or any other occurrence any Disaster mentioned in any of the emergency states.

6. National security service is responsible for informing the members of the council on the occurrence of such disaster.

The meeting of the NDMC need not necessarily comprise all of the above for its deliberations. Rather, it is the prerogative of the chairperson of the council to call for members' attendance according to each disaster management needs. In addition, the chairman has the right to co-opt regional controllers and representatives from any other agencies and to invite those NGO's whom he considers will help to achieve disaster management objectives.

### **Responsibilities of the National Disaster Management Council**

1. Formulate policy regarding disaster management and issue guidelines this respects.
2. Examine the recommendations of the cabinet and committee and issue directives for their implementation.
3. Approve the standing orders on the disaster and national disaster management plans.
4. Ensure coordination amongst civil authorities, NSS and the NGO's in the planning process of the disaster management.
5. Arrange framing of law for prevention, mitigation, preparedness and disaster response.
6. Take necessary steps after evaluating the precautionary / preparedness measures immediately with the warning signals regarding imminent disaster.
7. Frame guidelines for the distribution of relief items and assign priority of steps during pre-disaster, disaster and post-disaster periods.
8. Consider other related issues and dispose of them.

All daily tasks will be performed by the disaster controller as appointed by the chairman of the council and all activities will be conducted by the national disaster management office. All agencies, whether members to the council or not, are subordinate to the disaster controller.

To facilitate its work, the council has formed three committees to execute specific tasks of the council. The overall responsibility remains with the council, but the committees are authorized by the council to take decisions within their specific fields of competence.

**The three NDMC committees are:**

1. Mitigation and prevention committee
2. Preparedness committee
3. Emergency committee

All members need not be present to carry out the tasks of the committees. In addition, the chairman has the right to co-opt regional controllers and representatives from any other agencies and invite those NGOs whom he considers will help to achieve the specific tasks of the committees.

**Mitigation and Prevention Committee**

The mitigation and prevention committee will be responsible for the studying possible damage from any disaster and planning safety procedures. The committee should coordinate

And conduct all activities to minimize damage

The committee will represent by the following:-

1. Ministry of defence and national security
2. Ministry of home affairs
3. Ministry of atolls administration
4. Ministry of environment and construction
5. Ministry of fisheries, agriculture and marine resource
6. Ministry of health
7. Ministry of finance and treasury
8. The president office (Public service division)

**Preparedness Committee**

The main responsibility of the committee is to create public awareness. The committee should also study the level of preparation undertaken to respond to a possible disaster and

Must coordinate and coordinate and conduct related activities

The committee will be represented by the following:-

1. Ministry of defence and national security
2. Ministry of home affairs
3. Ministry of atolls development
4. Ministry of environment and construction
5. Ministry of health
6. Ministry of tourism
7. Ministry of information and culture
8. Ministry of transport and civil aviation
9. Ministry of fisheries, agriculture and marine resources
10. Ministry of gender family development and social security
11. Ministry of Education
12. Ministry of finance and treasury

### **Emergency Committee**

During a state of emergency, all activities will be planned and conducted under the overall supervision of the emergency committee. The committee should meet at the earliest

Possible and its members must meet daily for revising and future planning of activities. All required information will be provided by the EOC. The committee will also provide

Guidance and suggestion for carrying out the tasks of the EOC.

The emergency committee will be represented by the following:-

1. Ministry of defence and national security
2. Ministry of home affairs
3. Ministry of atolls development
4. Ministry of finance and treasury
5. Ministry of fisheries, agriculture and marine resources
6. Ministry of environment and construction
7. Ministry of transport and civil aviation
8. Ministry of health
9. Ministry of trade and industries
10. The president office

### **National Disaster Management Centre**

#### **Mandated of National Disaster Management Office:**

1. Performing all necessary daily tasks of disaster management is the responsibility of the national disaster management centre where all staff will work under the disaster Controller

2. Its functions include:

- i. Preparing the country for a state of emergency
- ii. Placing safety measures for an imminent disaster
- iii. Conducting all necessary activities during an emergency
- iv. Providing assistance to those in need after a disaster has struck, and
- v. Paving way for rehabilitation through organized programs.

#### **Main responsibilities of the national disaster management centre**

1. Endorsing the decisions of the government and the council or the facilitating the process for the endorsement.

2. Providing guidelines and advice to all related agencies on the state of emergency.

3. Formulate policies and procedures and list activities related to the situation.

4. Manage the administrative work of the council and the committees.

5. Find solution to problems related to the disaster at the national level.

6. Coordinated of the rehabilitation process.

7. Revising the level of preparedness and future planning of related activities.

## **Responsibilities of the National Disaster Management Centre**

### **1. Mitigation and preparedness**

- a. Establish links with international agencies and keep in touch with disaster related projects
- b. Establish links with the government agencies through coordinators.
- c. Coordination of all administrative procedures related to an emergency status.
- d. Manage information circulating at the nation levels
- e. Provide guidance and advice in the management of information being circulated at regional and atolls level.
- f. Provide assistance to atoll and regional emergency plans.
- g. Keep the national EOC prepared all times
- h. Provide assistance in preparing the national and atoll EOC's.
- i. Research and complete the national disaster plan and contribute to finalizing plans of other agencies.
- j. Plan and conduct awareness programs.
- k. Conduct a state of emergency awareness activity once a year.
- l. Establish and manage a state of emergency data base
- m. Plan and implementation a national training activity.
- n. Seek funds required for training.
- o. Research for various international emergency related projects and maintain links.
- p. Submit a annual report to the council from all concerned agencies.

### **2. Emergency Operation and Rehabilitation**

- a. Manage and oversee all administrative tasks of the national EOC during a state of emergency.
- b. Dissemination of information related of state of emergency.
- c. Provide administrative assistance to the committees required.
- d. Convey practical information and advice to the disaster controller.
- e. Submit a report to the council at the end of each period of emergency status.
- f. Submit a report to the council within six months of the state of emergency and informing concerned agencies on the necessary revision.
- g. Submit a rehabilitation report to the council as required.

## NATIONAL EMERGENCY OPERATION CENTRE (NEOC)

During a state of emergency a national operations centre will be established with the objective of conducting all related tasks. The centre will be operating 24 hours by the personnel assigned by the government as decided by the public services division of the president's office. The work of the NEOC will continue until rehabilitation begins after the state of emergency.

The NEOC will generally begin operating soon after a disaster and will be undertaking the responsibility of gathering information and research required for agencies responsible, to issue public warning.

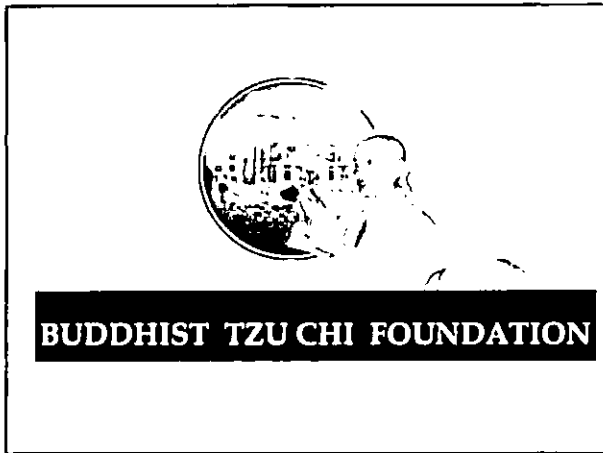
The NEOC will be headed by the disaster controller who is tasked with the responsibility of employing required personnel and materials and designating team leaders for the activities. The team leaders will report to the controller and the council.

The NEOC will be operating according to the "standard operating procedures" (SOP) and the required information will be provided by the disaster management centre or the atoll offices. All communication and coordination during a state of emergency will also be done by the NEOC. All such communication procedures should be planned before hand.

All professional assistance to the NEOC will be provided by the ministry of planning and national development, ministry of information and culture, ministry of science and technology, and the ministry of defence and national security. The ministries should collaborate in information gathering and coordinating communication and transport needs of the NEOC.

The NEOC is divided under three main section:-

1. Information and communication unit: Responsible for gathering and passing information to the public, government agencies and the emergency committee.
2. Operation Unit: Providing all management and administrative assistance. All national level activities will be initiated by this unit.
3. Assessment unit: Its main task is assessing the damage and identifying required assistance.



- Malaysia  
- Disaster Mgmt
  - Tzu-Chi Foundation  
- Brief Introduction
  - Tzu-Chi Disaster Relief  
- Tsunami
- Buddhist Tzu Chi Foundation**

**Disaster in Malaysia**

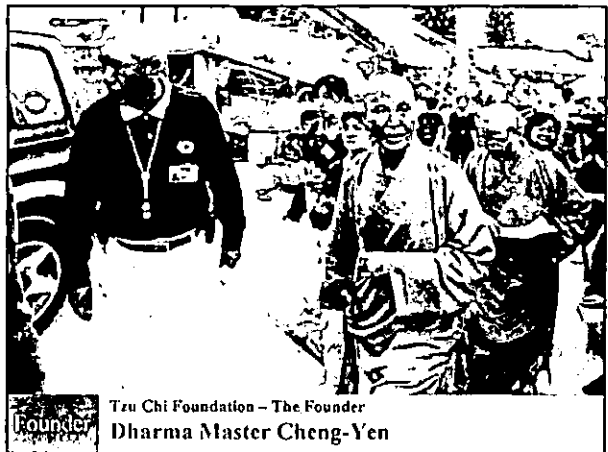
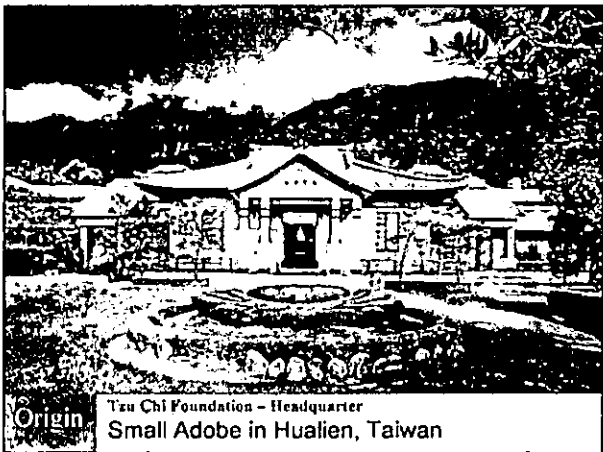
- Landslide
  - > very seldom
  - > minor
  - > Strict law on hillside construction
- Earthquake
- Cyclone
- Drought
- Flood
  - > Monsoon period
  - > TV & radio announcements - 68 people died
  - > Relief centers
  - > No casualties
- Tsunami

**Buddhist Tzu Chi Foundation**

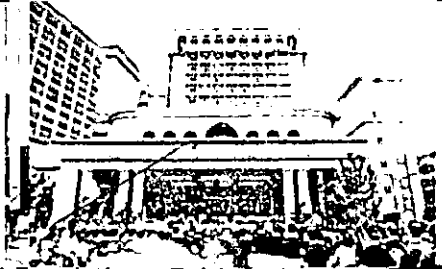
**TZU 慈** *Giving joys*

**CHI 濟** *Relieving sufferings*

**Buddhist Tzu Chi Foundation**

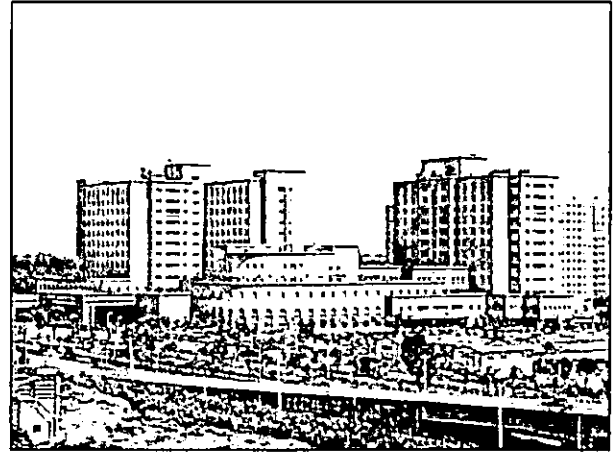


- Operating in 36 countries
- Over 150+ branches
- Over 5million members worldwide



Tzu-Chi Foundation - Quick facts

Buddhist Tzu Chi Foundation



- 1.CHARITY
- 2.MEDICINE
- 3.EDUCATION
- 4.CULTURE

Tzu-Chi's Missions

Buddhist Tzu Chi Foundation

1. PERLIS ( 玻璃市 )	8. MELAKA ( 馬六甲 )
2. KEDAH ( 吉打 )	9. KELANTAN ( 吉蘭丹 )
3. PULAU PINANG ( 檳城 )	10. PAHANG ( 彭亨 )
4. PERAK ( 霹靂 )	11. JOHOR ( 柔佛 )
5. SELANGOR ( 雪蘭莪 )	12. TERENGGANU ( 丁加奴 )
6. WILAYAH PERSEKUTUAN ( 聯邦直轄區 )	13. SARAWAK ( 砂勞越 )
7. NEGERI SEMBILAN ( 森美蘭 )	14. SABAH ( 沙巴 )

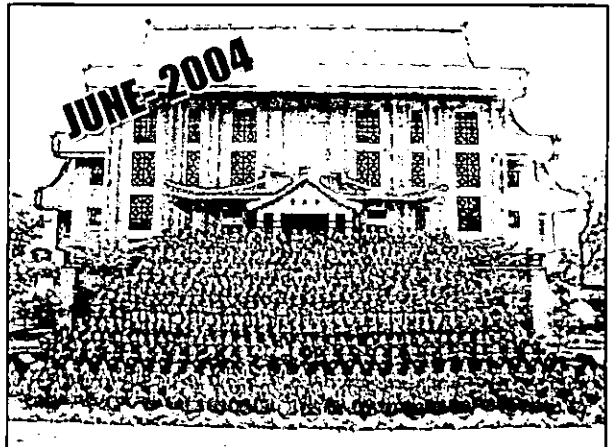
Tzu-Chi Malaysia - Offices

Buddhist Tzu Chi Foundation

- Registered in Malaysia as an NGO since 1993
- Over 100,000 regular donors in Malaysia
- 2,500+ committed volunteers
- Monthly relief funding :  
RMI.5mil+ (US\$350k+)
- Sources of funds :  
Public donation, charity drives,  
recycling projects, etc.

Tzu-Chi Malaysia - Quick Facts

Buddhist Tzu Chi Foundation



To willingly undergo hardship for the sake of others is COMPASSION  
 ~ Master Cheng Yen

# Tsunami Relief ~ Malaysia

Buddhist Tzu Chi Foundation

Giving will reap the greatest harvest  
 ~ Master Cheng Yen

戶數 Total Family	1,941
熱食 Hot Food	2,964 packs
應急金 Cash Relief	RM382,000
發放物品 Goods Relief	RM147,407

Tsunami Relief Data \_ Malaysia

Buddhist Tzu Chi Foundation

26/Dec	Within 5 days	安心 Console	✓ Care at Hospital ✓ Care at victims' homes
		急難發放 Distribution	✓ Goods relief ✓ Cash relief ✓ Street donation
01/Jan	01-Jan till date	義診 Medicine	✓ Free clinic
		安身 Shelter	✓ Disaster area cleaning ✓ House repairing
		養生 Living	✓ Praying/Blessing ✓ Long term care

South Asia Tsunami : 5 Relief Channels



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THANK YOU.....



Giving will reap the greatest harvest  
 ~ Master Cheng Yen

Buddhist Tzu Chi Foundation

**Role of Media  
when  
“ no disasters ”**

**Presented by Group (1)**

- |                              |            |
|------------------------------|------------|
| 1. Mrs Sujata Chaklanobis    | India      |
| 2. Mrs Hosne Ara Begum       | Bangladesh |
| 3. Mrs Rohini Wijayarathne   | Sri Lanka  |
| 4. Mr K.V.S.P. Rao           | India      |
| 5. Mr Khendoker Rahman       | Bangladesh |
| 6. Mr Jayantha Wettavidanage | Sri Lanka  |
| 7. Mr Janaka Mudalige        | Sri Lanka  |

**Media may create awareness /  
preparedness / continuous learning  
related to all disasters in a at all levels**

1. Educate areas (locations) of danger & what disasters are possible, make preparedness
2. Remember past damage of disasters
3. Safer places, when disasters
4. Evacuation maps of the area
5. Evacuation sign boards placed over the roads and closest and safer paths for safer places
6. Top priority essentials to be kept in a house
7. Keep alerting, listening and remembering to early warning systems
8. Keep identification marks on lands houses for rescue teams. Like (Number of people live, etc) on walls, if possible on roof top.

**Open up the floor for every one to look at  
the level of Resources available within  
the country / individuals / to be taken  
outside the country**

1. Educating what resources available within the country / district level / grass root level
2. What resources expect from other countries and the down time
3. Food / Medicine / ...

**Communication Methods / Styles to be  
adopted when disasters by media**

1. Educate sample messages at different disasters / hazards.
2. Mode of communication Radio / TV / Police communication / digital SMS, etc
3. Frequent dialog with all stake holders and keep communication going on with government / Non government / community – all stake holders
4. Enhance the existing systems / develop new technologies, have more attention for expansion

**Ethics / Norms should be maintained by  
all Media Organizations**

1. Have a common mandate / policy to act when disasters.
2. Especially in dissemination information to the grass root level.
3. Should not announce warnings which will make people make panic situations.

**Have voice on success stories in managing  
disasters / reward – appreciate government /  
NGO / Resource persons / individuals / media /  
all stake holders**

1. Have a common mandate / policy to act when disasters.
2. Especially in dissemination information to the grass root level.
3. Should not announce warnings which will make people make panic situations.

Points from other groups....

- What they can do when they have disasters.
- How to deal with the situation
- Emergency numbers frequently
- Nature conservation stories / protective measures
- Take small negative stories from news papers & write bug story for that.
- Similar themes / short messages people can remember
- Media can watch / people who damage the environment
- Long term / short term plans keep on watching
- Disaster has human intervention, keep on watch
- Giving technology to people to mitigate disasters
- How to safe your life when disasters
- Vulnerability
- Mitigation procedures
- Capacity building
- Technology improvement

Thanks

## Recommendations

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### Recommendations #1

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- Regional Co-operation for Information Exchange through Networking of Institutions

**Purpose**

- Sharing of information on Risk Estimates through analysis of real-time data from research institutions
- Sharing lessons, best practices and educational/communication material on public awareness

**Operationalization:** On-line Clearinghouse/Portal

**Partners:** UN-Organization/UNDP/UNESCO

### Recommendations #2

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- Development of Culturally Adaptive Communication Program/Plan

**Purpose**

- Develop a generic tool for development of communication campaign
- Plan for inclusion of cultural factors and adaptation to local culture

**Operationalization:** Tool Kit or Manual

**Partners:** UNESCO

### Recommendations #3

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- Incorporate awareness raising into school curriculum

**Purpose**

- Increase knowledge of disaster management and mitigation
- Ensure sustainability through life-skill training methodology

**Operationalization:** Training Modules for Teachers, Train the Trainers workshops, Information Modules about specific disasters

**Partners:** UNESCO

## Recommendations #4

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- Work with local media to mainstream coverage of disaster related issues during continuous hazard phase

### Purpose

- Increase coverage of disaster related news during continuous hazard phase
- Develop a culture of preparedness through media partnership
- Share knowledge of hazard and vulnerability analysis with media

Operationalization: Development of guidelines and background/briefing for media

Partners: Media Organizations, UNESCO

## Recommendations #5

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- Deepen our understanding of audience

### Purpose

- To improve the reach of our messages/campaigns
- To jointly develop feasible hazard adjustment plans/programs
- To improve our understanding of natural disaster risk and factors contributing to adoption of hazard adjustment recommendations amongst target audience

Operationalization: Methodology/Research Design, Report on Public Perception of Risk

Partners: Academic/Research Institutions, UNESCO

## Recommendation #6

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- Formation of a listserv within the region

### Purpose

- Information sharing

## Recommendation #7

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- Form core group with representation from within the region to progress the recommendations (1-6)

**Workshop on Awareness-raising in Disaster Management**

**21st – 24th February 2006**

**Field visit to Ratnapura a landslide prone area  
On 24<sup>th</sup> February 2006**

Prepared by : National Building and Research Organization (NBRO)

## **Landslide at Abeyapura, within Palawela at Elapatha Divisional Secretariat area**

### **Introduction**

This report is prepared according to the data collected during the investigation carried out by the scientists of National Building Research Organisation on 22<sup>nd</sup> May 2003.

### **Location**

This site is located in Abeyapura village within the Palawela Grama Niladari Division and Elapatha Divisional Secretariat area in Rathnapura District. We can reach Abeyapura village by proceeding along Rathnapura – Elapatha main road and turn at the Elapatha junction towards Dambulu Wana and further turn left along Laulukeye road.

### **Findings**

This area is located in an Escarpment (40SW) which consists of Garnet Biotite Gneiss metaporphic rock. It trends toward 340<sup>o</sup> direction with a 40<sup>o</sup> dip toward South West. Well developed two joint systems were identified with the filling of secondary clay. These two joints are trend towards 240/90 (7m<sup>-1</sup>) and 180/40EW (5m<sup>-1</sup>)

More than 4m thick lateritic soil overburden can be seen in this area. Medium to large size boulders interspersed with this soil layer can be identified as a loose colluvium layer. Tension cracks and subsidence along tension cracks are visible in several locations of the upper slope. Rubber plantation can be seen on the lower slope.

### **Information gathered from the villagers**

The landslide occurred on 17<sup>th</sup> May 2003 at 2 o'clock in the evening. More than 75 lives were lost. Among them, more than 45 bodies were buried in the debris. More than 35 houses were completely destroyed.

Tension cracks and hot water springs had been observed by the villagers before the landslide some minor landslides had occurred.

## Conclusion

Considering the tension crack development in the area, steepness of the slope, and the thickness of the colluvium deposit, it can be concluded that the area is prone to further incidence of landslides with heavy rain.

## Recommendation

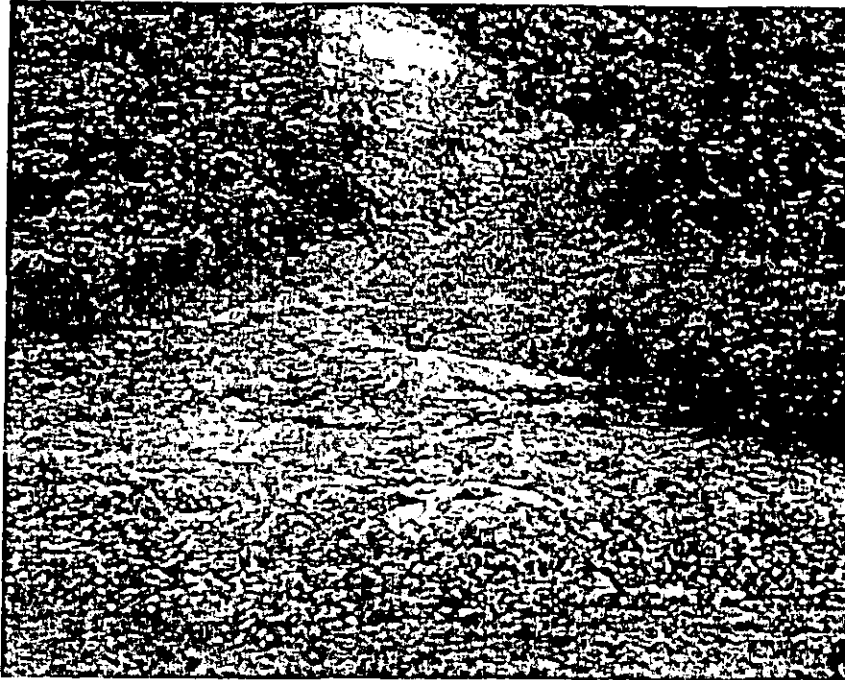
- a) All the survivors of the landslide should be safer place evacuated to No constructions or development should be allowed with in the landslide area. This area can be reserved for forest by the government.
- b) The following is a list of persons living in the high hazard zone in partly damaged houses who should be evacuated to a safer location.
  - i. Mr. M. Gunasinhe
  - ii. Mr. Somapala (Soma)
  - iii. Mr. Elâpatha (Siripala)
  - iv. Mr. Luis
  - v. Mr. Siripala
  - vi. Mr. Podde
  - vii. Mr. Mr. Dhanapala
  - viii. Mr. Karune
  - ix. Mr. Gunasekara
  - x. Mr. Mahinda
- d) The following is a list of person living in medium hazard area who should be evacuated during heavy rain periods.
  - i. Mr. Piyasena
  - ii. Mr. Sunil
  - iii. Mr. Bandara
  - iv. Mr. Muththusami
  - v. Mr. Upali
  - vi. Mr. Gamini
- e) A good surface drainage system should be put in place in the cultivated zones in the vulnerable area. Water following towards the high hazard zone should be

diverted away to a safer area while direct water flow during heavy rains to the landslide area should be controlled by introducing a good surface drainage systems in side the slide.

- f) Houses constructed with high vertical cuts close to its perimeter are vulnerable to further cutting failures in this area. These cuts should be reshaped by lowering the heights of the cuttings to form gentler slopes. These cuts can also be reshaped by introducing a terraced system or by reducing the angle of the cut.



Areal View of Palawela – Abepurawatta Landslide that occurred on May 17, 2003

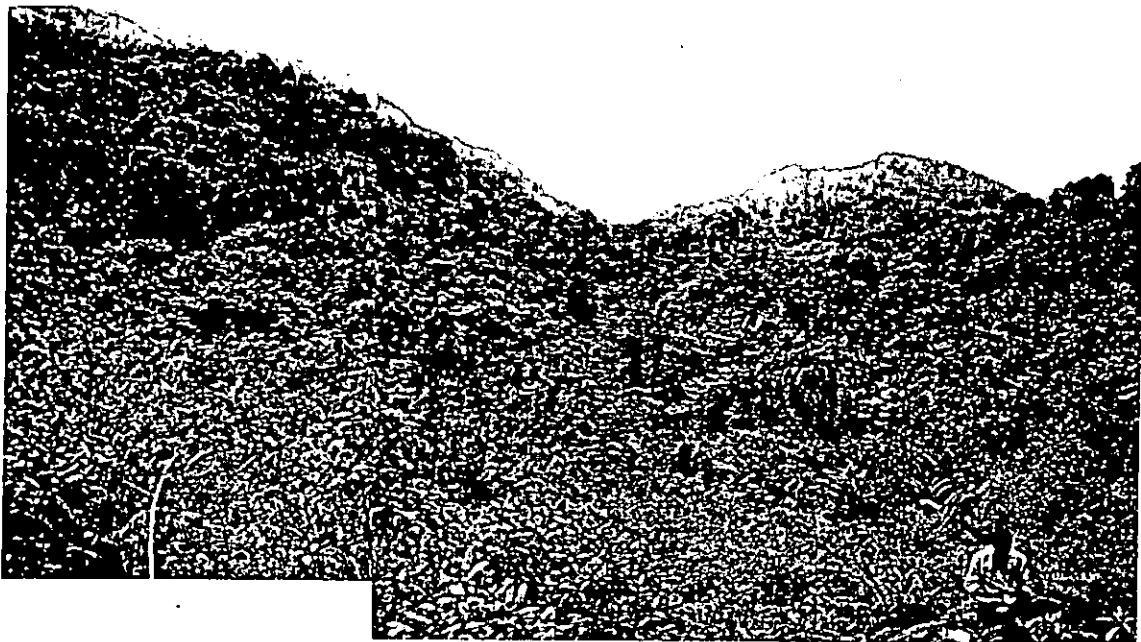
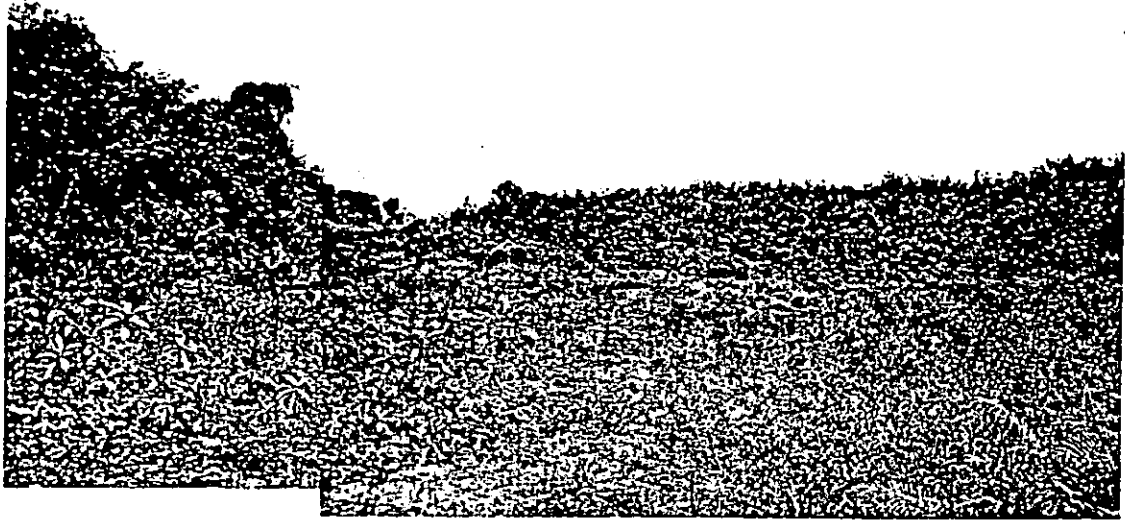


*Source: Channel Eye, Sri Lanka Rupavahini Corporation*

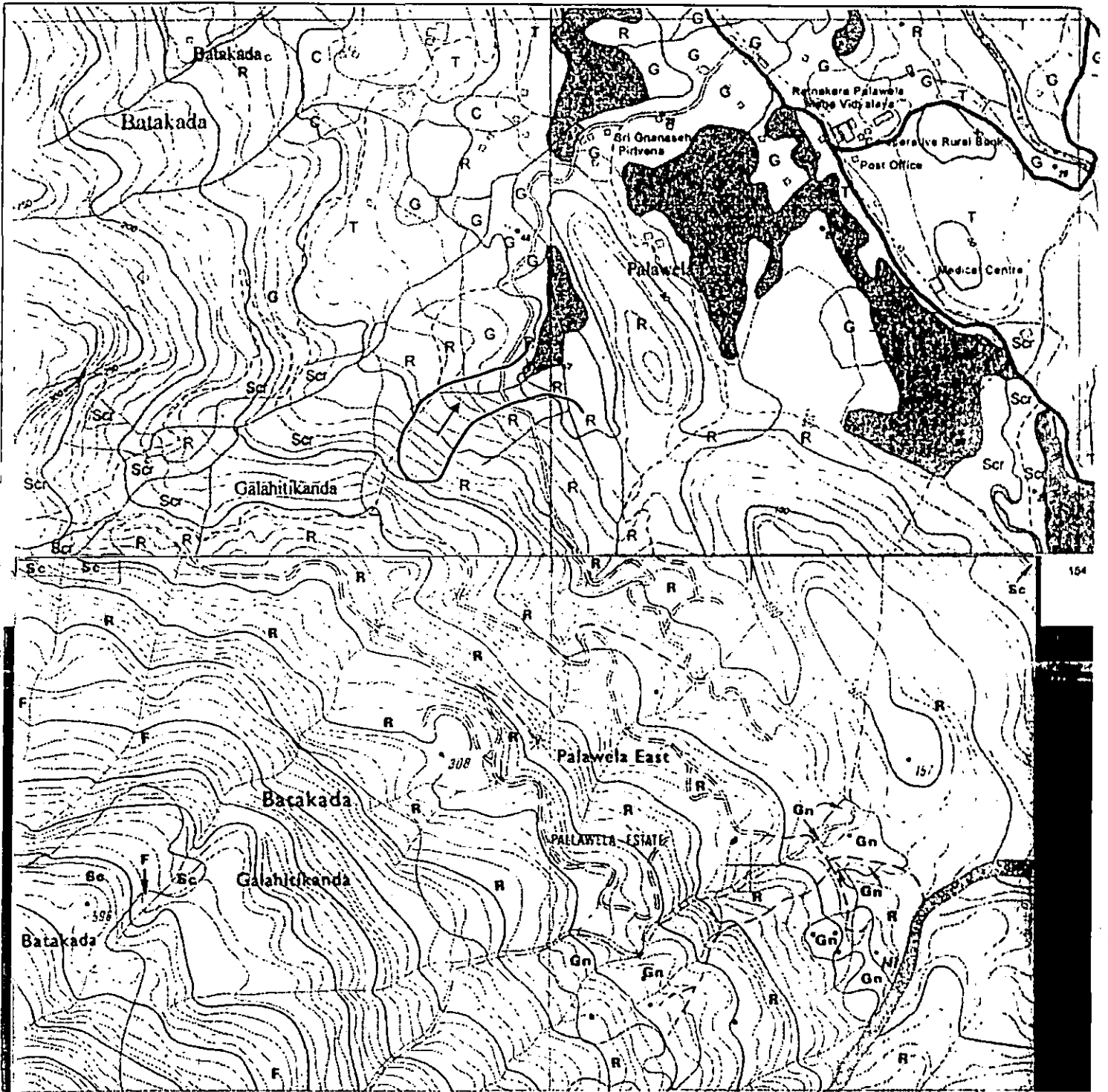
Left bank of Palawela – Abepurawatta Landslide as at February 9, 2006



The Scar of Palawela – Abepurawatta Landslide as at February 9, 2006



Topographic Map of Abepura, Palawela Area



Location of landslide

Questionnaire on the evaluation of the given disaster management case study

Abeyapura, Palawela, Elapatha, Ratnapura

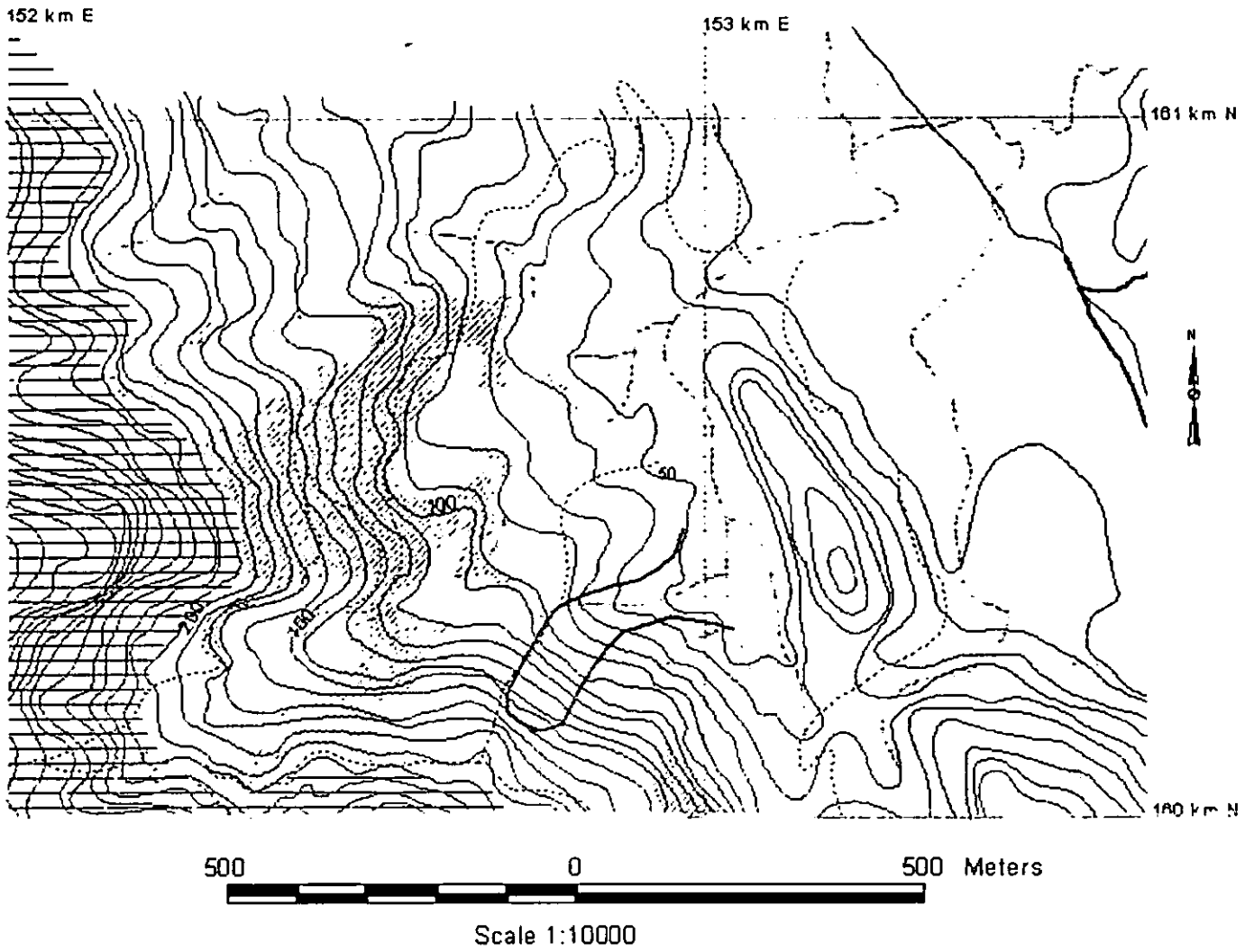
1. What is the nature of the disaster? Has the magnitude/severity of the disaster been already identified in the documents\* supplied to you [\*Topographic (location) map, Disaster Map, Field Investigation information, Community-related information]
2. Was the community aware of the above disaster situation? (Discuss with the community and relevant government officers) If so, had there been pre-incident preparation?
3. What is the extent of impact of geological, geomorphological, and socio economic factors on this disaster event that had occurred on 17<sup>th</sup> May 2003 (use relevant information available in NBRO, field observations, handouts, video clips, presentations and information obtained from the community)
4. According to the above information, why do you think that the disaster could not have been managed? Give the reason briefly. How, in your opinion, could such a situation be better managed? Give your suggestions.

**Questionnaire on the evaluation of the given disaster management case study**

**Abeyapura, Palawela, Elapatha, Ratnapura**

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# Landslide Hazard Zonation Map of Abepura, Palawela Area



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# LEGEND

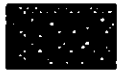
## LANDSLIDE HAZARD POTENTIAL

## ZONAL SIGNIFICANCE



Landslides have  
been occurred  
in the Past

Known danger of landslides and therefore, perennial threat to life and property exists in the area. All new construction should be prohibited and the land use & management practices should be studied & improved to halt and reverse the process of slope degradation. Landslide remediation should be undertaken and early warning systems should be established at all problematic sites.

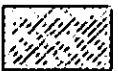


Subsidence  
& Rockfall



Landslides  
are to be  
Expected

Danger and potential threat to life and property exists. No new construction should therefore be permitted. Essential additions in the existing structures may be allowed only after thorough site investigation and adequate precautions to be certified by specialist(s). Early warning systems should be established if symptoms of landslides are clear and risk levels are high.



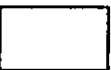
Modest level  
of landslide  
hazard exists

Moderate levels of landslide danger exists. New construction should be discouraged and improved land use planning practices should be introduced to halt and reverse the process of slope degradation. All essential construction and remediation, and new projects be subjected to landslide hazard assessment.



Landslides  
not likely  
to occur

Slight danger of landslides exists. Engineered and regulated new construction and well planned cultivation are permitted. Plans for construction should be technically vetted and certified.



Safe Slopes

No visible signs of slope instability or danger exist based on present state of knowledge. No blanket limitations need to be imposed particularly on well managed lands and engineered construction. Location specific limitations may become necessary, particularly for areas prone to flooding and erosion.