Preparing for the future:

Incorporating Disaster Management Education into

Sri Lankan Schools

A thesis submitted in partial fulfillment of the University’s requirements for the Degree of Master of Science

JANUARY 2007

Coventry University

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EXECUTIVE SUMMARY

For many people, Sri Lanka has been placed on the map because of the December 2004 Tsunami Disaster. As a result, numerous articles have been written about what happened on that day. Besides the tsunami, the country has continually experienced a multitude of weather-related hazards both before and after 26th December, 2004. This has resulted in seasonal floods, land slides, cyclones and droughts (ADB 2005: Annex XV). After the Tsunami Sri Lanka and the international community revisited disaster management protocols. The National Disaster Management Centre recognized that the country was within a disaster prone area. Because of the tsunami, the Ministry of Education (MoE) felt there was a ‘... dire need for educational course offers especially tailored to deal with the catastrophe for war and tsunami traumatized children and youth’ (Deutsche Gesellschaft für Technische Zusammenarbeit 2005) (GTZ).

Mandela has stated that ‘education is the most powerful weapon which you can use to change the world’ (Personal quote). For that reason, and the fact that the country suffers from numerous disasters, the question of whether Disaster Management Education (DME) could be incorporated into the school curriculum evolved. Such education includes, but is not limited to, the learning of First Aid/CPR, evacuation measures and disaster definitions. As more material was reviewed it became apparent that, because Sri Lankan children were highly educated but continually at risk, such an education could and should be seen as a useful tool.

While visiting Sri Lankan schools, it was learned that teachers had not received information nor adequate training on DME subjects, even though these are activities that can be quickly learned and which save lives. Since there has been no prior knowledge of these skills there was never any thought about introducing them into the curriculum ~ that is, until 2005. From this time onward, special educational advisors have been commissioned to collect and review disaster preparedness subjects which will gradually be incorporated into different grades within the school curriculum over time. However, while some topics suggest that grades 8 and 9 students ‘should develop the capacity to cope with disasters and to respond quickly with relief and remedial measures',
these subjects do not include DME topics (MoE Curriculum Reform 2006). Until they do it will not be possible to introduce disaster response teams within school settings, which was one of the aims of this research.

As part of the research attention was paid to international non-government organizations (INGOs) since these organizations are usually the ones who offer both humanitarian and financial assistance after a disaster. While many do support a wide variety of programs, less than half were unprepared if a disaster were to occur. This has bought home the message that more training needs to be done in this area if sustainable development is to affect change.

Teaching children about the response and demands of a disaster at an early age may well help to influence their thinking and attitudes when they become adults. In any disaster, children can and will be affected in different ways (James 2006 cited in IDER 2006 Conference). Sri Lanka is an amazing country whose citizens are quick to learn and accept change. While they have undoubtedly experienced one of the worst disasters of the century they do continue to smile and move forward.
Following the 2004 Tsunami Sri Lanka became a focal point for research. When asked by the University of Connecticut (UConn) (USA) International Office to assist in disaster relief efforts for its international students, I began to develop a broad knowledge of the country while assisting students. My gratitude, then, is given to Mr. Mark Wentzel and Ms. Susanne Atrens for allowing me to be a part of the preliminary relief work. Working along side the UConn Sri Lankan students ~ in what appeared to be endless days and nights packing up medical and clothing supplies ~ gave me a sense of what Sri Lankan people were like. With each passing day a love for the country developed.

Moving to England to study Disaster Management presented yet another opportunity to become involved with Sri Lanka. Pursuing my post-graduate degree it was felt there was a need to include disaster management education into Sri Lankan schools. Therefore, such a topic was researched. Over the course of several months many different actors became involved. A huge thank-you goes to Claudia Kreussler of GTZ who unselfishly passed on her completed dissertation allowing me to move forward with mine. A thank-you also is extended to Dr. Bitter who gave me invaluable research information. Another huge thank-you goes to Molina Jayaratna who responded to every email and request, and invited me into her home even though she did not know me. Thanks also go to Champita and Pushpitha (her two sons) for helping me along the way, picking me up at the Sri Lankan airport, and for putting me up at hotels. Another thank-you is extended to Walter, their father, who without any complaints took me to school after school introducing me to principals. Without him, I could not conduct my research.

Of course, no acknowledgement would be complete without thanking my dissertation supervisor, Robin Tasker and Michael Broadbent who ‘stepped in’ when Robin was unavailable.

Thank you all for making this research possible.
LIST OF ACRONYMS

ADRC: Asian Disaster Reduction Centre (Kobe, Japan)
ADB: Asian Development Bank
Cl: Command Incident
CRED: Centre for Research on the Epidemiology of Disasters
CRIN: Child Rights Information Network
CWC: Ceylon Workers’ Congress
DFID: Department for International Development (UK)
DMC: Disaster Management Centre
DME: Disaster Management Education
DPRP: Disaster Preparedness and Response Plan
DRM: Disaster Risk Education
EFA: Education for All
EMA: Emergency Management Australia
ESDPF: Education Sector Development Programme and Framework
F & CO: Foreign & Commonwealth Office
FEMA: Federal Emergency Management
GOSL: Government of Sri Lanka
GTZ: Deutsche Gesellschaft für Technische Zusammenarbeit
ICS: Incident Command System
IDMC: Internal Displacement Monitoring Centre
INEE: Interagency Network for Education in Emergencies
INGOs: International Non-Governmental Organizations
JBIC: Japan Bank for International Cooperation
JVP: Janatha Vimukthi Peramuna (People’s Liberation Front)
LAs: Local Authorities
LTTE: Liberation Tigers of Tamil Eelam
MDG: Millennium Development Goals
MEHE: Ministry of Education and Higher Education
MoDRS: Ministry of Disaster Relief Services
MoE: Ministry of Education (Sri Lanka)
NDMC: National Disaster Management Centre (Sri Lanka)
NGOS: Non-Governmental Organizations
NIE: National Institute of Education
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<tr>
<th>Abbreviation</th>
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<tr>
<td>OFDA</td>
<td>Office of U.S. Foreign Disaster Assistance</td>
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<td>PA</td>
<td>People’s Alliance</td>
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<td>PCs</td>
<td>Provincial Councils</td>
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<td>PETS</td>
<td>Public Tracking System</td>
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<td>SLFP</td>
<td>Sri Lanka Freedom Party</td>
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<tr>
<td>SLUMDMP</td>
<td>Sri Lanka Urban Multi Hazard Disaster Mitigation Project</td>
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<tr>
<td>TEP</td>
<td>Tsunami Educational Project</td>
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<tr>
<td>TRO</td>
<td>Tamil Rehabilitation Organization</td>
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<tr>
<td>UCONN</td>
<td>University of Connecticut (USA)</td>
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<td>UDHR</td>
<td>Universal Declaration of Human Rights</td>
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<td>UK</td>
<td>United Kingdom</td>
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<td>UNDMTP</td>
<td>United Nations Disaster Management Training Program</td>
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<td>UNDP</td>
<td>United Nations Development Program</td>
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<td>UNDRO</td>
<td>United Nations Disaster Relief Organization</td>
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<tr>
<td>UNESCO</td>
<td>United Nations Educational, Scientific, and Cultural Organization</td>
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<td>UNICEF</td>
<td>United Nations Children’s Fund</td>
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<td>UNISDR</td>
<td>United Nations International Strategy for Disaster Reduction</td>
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<td>UNP</td>
<td>United National Party</td>
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<td>UPFA</td>
<td>United People’s Freedom Alliance</td>
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<td>WHO</td>
<td>World Health Organization</td>
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<td>WB</td>
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CHAPTER 1

1.1 INTRODUCTION TO DISASTER MANAGEMENT EDUCATION AND ITS RELEVANCE TO SRI LANKA

Education has always been important for Sri Lanka. Since its 1948 independence from Great Britain, the Sri Lanka government has continuously placed a high priority on educating its students. It currently has a literacy rate of approximately eighty-five percent within children (between the ages of six and ten) attending school (Jayasuriya: 2005). According to the World Bank (WB), the country has made advances in health and education on par with those of high-income countries and has maintained a healthy economic growth despite a devastating 20-year civil conflict (World Bank: 2005). While the country has had numerous other disasters, the 2004 Sri Lanka Tsunami proved to be the one event where thousands of individuals lost their lives because they did not know how to protect themselves. The event, therefore, became a major catalyst wherein the government and its partners were able to determine how its citizens could not only learn about what had transpired but also how they might be safeguarded from future disasters.

It has now been nearly two years since the 2004 Tsunami. Kreussler (2005:26) states that debates and workshops have been initiated to increase disaster preparedness. However, according to the conducted research there is still a paucity of disaster-related information in schools.

1.2 RESEARCH: AIMS AND OBJECTIVES

After surveying NGO disaster management skills, the Fritz Institute suggests that less than half of the Non-Governmental Organizations (NGOs) were prepared to respond to a natural disaster. Of the one hundred and fifty organizations interviewed only fifty-seven of them (thirty-eight percent) had an emergency plan in place prior to the Tsunami (Fritz Institute 2005:3). Consequently, since there was a lack of emergency plans ‘disaster management skills are low’ (Fritz Institute 2005:3). Therefore DME could be incorporated into a regular school curriculum in order to prepare students (and the community) how emergency plans and other disaster-related activities can
be devised and implemented within classroom and community settings.

When NGOs look at emergency situations such responses are typically carried out in the relief phase. While these activities usually include housing, water, sanitation and food, education is rarely looked upon as an area of immediate need. When education is considered it is usually carried out within the context of Emergency Education where tents are quickly erected and education packs hastily shipped to fulfill an educational requirement. DME, on the other hand, is a developmental issue. Since it is carried out prior to disasters (within the planning and preparedness stage) it can be incorporated into school curriculums and therefore remain a constant factor. While Emergency Education does adhere to the law, it is the belief here that once an NGO pulls out of the disaster zone so does its educational component.

1.2.1 AIMS

For Disaster Management education to be effective within Sri Lanka it needs to be seen as a consistent, ongoing endeavour. Children need to receive regular, dependable lessons on how to protect themselves and those around them. Therefore, a primary aim of this paper is to include disaster management education as a developmental activity, rather than a relief activity within Sri Lankan schools. Having already received a $60 million grant from the World Bank for education development programs DME could be included in this funding measure (The World Bank: 2005a) since it is seen as a developmental initiative.

A second aim is to incorporate disaster management education into the Sri Lankan school curriculum. Looking at the 2007 school curriculum there is an already-created space for disaster preparedness for certain grade levels. At the November 2005 Child and Youth Participation Forum and Fair, it was reported that all of the young people were directly affected by the tsunami and were involved in actions and activities both during and after the tsunami. Some had rescued others and delivered first aid to the injured (UNICEF 2005:3). By learning first aid from a qualified instructor students were able to assist other students, and members of the community.
A third aim is to integrate such activities within the schools with the purpose of establishing disaster response teams. While students already want to be a part of the relief process this aim would only serve to encourage capacity-building amongst students in general.

The fourth and final aim would be to increase disaster awareness within Sri Lanka, making its citizens become a more resilient society.

1.2.2 OBJECTIVE

To achieve such aims, it is imperative that a review of the Sri Lankan educational school curriculum be studied, as well as other related material. Additionally, since Sri Lanka has been involved with its own internal conflict, it is important to gain a political perspective in order to understand how Sri Lankan children have been educationally marginalized. Finally, even though the 2004 Tsunami happened nearly two years ago, not much information has been passed on to schools which is evidenced in the accompanying questionnaires.

1.3 RESEARCH METHODOLOGY

Kreussler (2005:53) states that little was undertaken prior to the tsunami with regard to disaster preparedness within the educational sector. While most DME activity has been provided by international non-governmental organizations (INGOs), there does not appear to be a dedicated list of these member organizations. This has resulted in developing a list of those INGOs involved in education. A starting point has been the NGO Directory available from the Reuters AlertNet website (AlertNet.org). Here, INGOs are grouped via country of need and area of concern (i.e. Sri Lanka and Education). After filtering the list into those INGOs who are only involved in education a questionnaire will be emailed to each INGO organization. A similar questionnaire will be emailed to the MoE. Finally, the same questionnaire will be provided to schools. However, because of the conflict only those schools within the southern district of Galle will be selected. The purpose of these questionnaires is to learn how government officials, INGOs, and educators view DME within Sri Lanka. Upon receipt of the completed questionnaires, they will be reviewed to see if DME could be used in the school system.
A Snowballing Sampling technique will also be used in order to reach the target audience. To achieve this, a list of contacts with key agency personnel will be developed with a view of building rapport between individuals and/or groups.

1.4 WHY ADDRESS DISASTER MANAGEMENT EDUCATION?

*There must be new thinking about how we do aid work... Focusing primarily on emergency responses like air drops of food and pulling people from the rubble is no longer enough. Disasters can be prevented and people can be equipped to save their own lives* (LaTrobe 2004: 2).

According to LaTrobe,

new thinking and action is urgently required by the international community. Thousands of lives could be saved each year in developing countries and millions of pounds made to go further, if more emphasis was placed by governments, local authorities and relief and development agencies on helping vulnerable communities reduce the risks of disaster (2004: 4).

While this can be accomplished by educating vulnerable communities it is imperative that the thinking of donor agencies [as well as NGOs] first be addressed to change this pattern of thinking so as to ‘prevent the injuries’ in the first place rather than ‘bandage the wounds’ (Tearfund 2004: 5).

To further substantiate both Tearfund and the Fritz Institute’s position Koichiro Matsuura, UNESCO’s Director-General has stated that

‘education and awareness raising provide the foundations for a culture of prevention. If people in places threatened by natural disasters were conscious of the risks, and knew how to protect themselves, there would be fewer deaths, fewer wounded and less destruction when such disasters strike’ (CRIN 2006).

An example of this is how Tilly Smith, a young English schoolgirl was able to save people’s lives during the 2004 Thailand tsunami because she had learned about tsunamis in school (Sheppard 2005). Therefore, by providing lessons on tsunamis and their affects will not only allow Sri Lankan students to also save lives, but will serve to empower them and the community.

At the request of the Government of Sri Lanka (GoSL) the Asian Development Bank (ADB), Japan Bank for International Cooperation (JBIC) and the World Bank were charged with initiating a joint assessment of the damaged caused by
the December tsunami (ADB:2005). Accordingly, the lessons and experiences of the tsunami relief and recovery coordination should be come from developing an appropriate disaster management mechanism. Additionally, ‘training and exercising of disaster management plans help to maintain a well functioning system to respond and should involve national, provincial and municipal staff, NGOs and the public’ (ADB 2005:28). Finally, it was recommended that ‘professional education, short training courses and primary and secondary school books should also raise awareness and knowledge of hazard risk reduction’ (ADB 2005: 28).

According to GTZ the Sri Lankan Ministry of Education ‘expressly requested [the Federal Republic of Germany] for support in disaster management and psychosocial counseling for schoolchildren, youth and teaching staff’ (GTZ 2005:1). Furthermore, the Sri Lankan [education] ministry stated that there was ‘a dire need for educational course offers especially tailored to deal with the catastrophe for war and tsunami traumatized children and youth’ (GTZ 2005:1).

In a personal communication Kreussler states that ‘DRM and education has become a relevant topic in Sri Lanka’ and [as a result] ‘some organizations and institutions have started working in this area’ (D. Rea, 24 July 2006). Even though GTZ has promoted disaster risk management within the educational system its teaching is seen as separate and distinct from that of DME. While DRM education focuses on risk elements (i.e., the building of safe schools, etc.) DME focuses on teaching individuals how to prepare for disasters prior to a disaster.

As previously stated, education has always been a high priority for the Sri Lankan government. Because of the 2004 tsunami, floods, droughts, landslides and other forms of disasters, as well as the lack of DME in Sri Lanka the need for DME should not be understated. Such education is not only appropriate for those vulnerable communities (children and adults alike) who have already experienced disasters but also for those who promote and offer humanitarian assistance. In promoting such education, however, it is important to ask the following questions:
What Should Disaster Management Education Include?  
When Should It Be Applied?  
Where Should Disaster Management education Begin?

1.4.1 WHERE SHOULD DISASTER MANAGEMENT EDUCATION BEGIN?

Since it is more effective to use the educational system to disseminate information, it is proposed that disaster management education be incorporated within the regular school curriculum. DME can be taught on all three educational levels (primary, juniors and seniors). However, for this report only those who are within the upper end of their primary education and junior level schooling (i.e., children between grades 5-11) should be included. Furthermore, while those children designated as ‘seniors’ are certainly of an age and physical stature very often they are pulled from school in order to help support the family through work initiatives. It is anticipated, therefore, that junior-aged children will be the first to have a learning advantage, and that by educating them in disaster management courses they will not only become resilient in coping with re-occurring disasters, but they will use this learning experience to educate others within their community in the form of peer education.

1.4.2 WHEN SHOULD IT BE APPLIED?

The need for DME needs to be implemented quickly. The purpose of disaster management education is to learn how to reduce the risks of a disaster before yet another disaster, therefore protecting children from on-coming danger.

1.4.3 WHAT SHOULD DISASTER MANAGEMENT EDUCATION INCLUDE?

While various disaster management educational suggestions will be globally shared by this researcher (by the use of a survey questions attachment through email) it is important that those actors already involved in educating Sri Lanka children bring forth their own ideas, opinions and suggestions in the questionnaire. However, in order to identify key strategies with which to protect Sri Lankan children if another disaster occurs, disaster management education topics could include such things as evaluating and developing emergency plans, when to evacuate, and how to take care of vulnerable individuals once
the initial disaster phase is over.

1.5 CONCLUSION

In a developing country which faces numerous hazards it is important to implement life saving techniques. Knowing how to better protect Sri Lankan people will allow the country to continue up the ladder of economic and educational success in order to build community resilience. The premise here is that children are able to take part in assisting others before, during and after a disaster as has been shown in UNICEF’s 2005 report. Furthermore, the youth participants were ‘unanimous in their wish to be more included in community affairs and to be given responsibilities in both disaster planning and response’ (UNICEF 2005:3). While there is a cultural attitude in that children expected to obey their elders, it is the desire that they be part of the participatory process of rebuilding Sri Lanka. Such a process can be achieved by having them involved in community activities where they are able to help build community resilience and at the same time still partake in family values.
CHAPTER 2

2.1 LITERATURE REVIEW

A literature review of disaster management and Sri Lankan school education was undertaken to discover information and views applicable to the topic. For the purpose of this thesis, a vast amount of debatable on-line documents, journals, national standards, and governmental policies have been uncovered. Other material, such as concepts and definitions of the topic has also been included to see how they relate to disaster management education.

Disasters fall under different categories and can be classified according to their speed of onset: sudden or slow. Sudden onset disasters are generally caused by geological and climatic nature often occurring in a matter of seconds. Slow onset disasters are of environmental causes and may take months, years or centuries to develop (Alexander 2001:9). Establishing a definition of a disaster is essential particularly if an event is indeed a disaster. However, it needs to be determined how such disasters affect the community and particularly children and their education.

2.2 DEFINITION OF A DISASTER

Having disaster definitions are important. Different kinds of disasters disrupt the livelihoods of people in different ways. Consequently, one of the most difficult concepts in the literature is to arrive at a definition of a disaster. The discussion has been ongoing for sometime and is described by numerous authors (Neal 1997:239-64). Over time, there have been many attempts to define such events however such efforts often run into the problem of either being too broad or too narrow. By declaring a disaster external assistance can be claimed. Therefore, events that are to be included or excluded from the analysis clearly need to be identified.

According to the World Conference on Disaster Reduction Sri Lanka defines a disaster as the

‘actual or imminent occurrence of an event which endangers or threatens to endanger the safety or health of any person or group of persons in Sri Lanka or which destroys or damages or threatens to destroy or damage any property and includes: a landslide, a cyclone, a flood, a drought, an
There appears to be no separate financial accounting to assist with actual floods/landslides relief in Sri Lanka. In one region where the main disaster events are forest fires, the only available equipment to put out fires was a backhoe (Sri Lanka Parliament Report: 2005c). Buildings, therefore, would be destroyed since there are no other equipment (such as a fire truck) with which to put out the fire. If the buildings happened to be schools it would not possible to evacuate school children, to save their textbooks or themselves. Thus, their lives and their education would become greatly impacted. Furthermore, even though families are assisted with the rebuilding of their homes should a disaster occur, this is performed on a case-by-case basis and is thus not seen as a guarantee of financial assistance (Sri Lanka Disaster Management Act 2005: 12).

2.2 THE DISASTER PHASES

Figure 2.1: Sri Lankan Disaster Model

Neal suggests that in the definition of a disaster there is the ‘notion of disaster phases’ (International Journal of Mass Emergencies and Disasters: 239). These phases usually rely on similar categories such as preparation, response, recovery, and prevention which all occur at any time and anyplace of the given disaster (International Journal of Mass Emergencies and Disasters). According to the National Disaster Management Centre’s website (NDMC), Sri Lanka’s Disaster Model uses prevention, mitigation, preparedness, response, recovery and rebuilding phases. Here, it is noted that prevention and mitigation are seen as two separate functions as opposed to other models (Alexander 2002: 5). Having such a distinction suggests that actions are not only to be taken to prevent a disaster before it occurs. Reducing risk during the mitigation stage and realizing the impact of a hazard will be realized on the public as well as the environment. Comparing the Sri Lankan disaster phases to other disaster stages it is noted that while there is a response phase, there is no planning stage. This implies that while Sri Lanka may feel it is prepared for new disasters that no individual planning has taken place. There is, however, a
national plan that recognizes that implementing the plan will be at national, provincial, district, and village levels (World Conference on Disaster Reduction 2005). The biggest difference in this model is the placing of the ‘impact’ diagram. Having it situated inside the disaster circle (as opposed to placing it next to or before the after the Planning/Preparedness stage) suggests that the disaster impact has affected every stage of the cycle.

Some authors attempt to break down the recovery and response phases – however this is usually done within the rehabilitation and reconstruction stage (International Journal of Mass Emergencies and Disasters: 239-264). However, in meeting with the Sri Lankan Parliament Clark refers only to the different phases within disaster preparedness, namely, prevention, mitigation, response and recovery (2005: 24th Meeting). Traditionally, the ‘recovery’ phase usually comes after the initial onset of a given disaster. Here, it is seen here within the preparedness stage. Again, while ‘response’ is usually seen as the actual response to a disaster, it is again seen here within the preparedness phase. Therefore, it is unclear how Sri Lanka views the disaster model and if indeed it is still seen as the model used as seen on the NDMC website.

2.4. CLASSIC DEFINITIONS IN DISASTER MANAGEMENT

There are a number of concepts that apply to Disaster Management and to DME in particular. Such principles - Hazards, Vulnerability, Risks, Resiliency, Capacity Building and Mitigation will be discussed with a view of increasing disaster education awareness to Sri Lankan school children.

2.4.1 Mitigation

Alexander states that ‘disasters tend to be repetitive events, wherein they form a cycle that can be divided into phases of mitigation, preparedness, response and recovery’ (2002:5). Mitigation, therefore, comprises all actions designed to reduce the impact of future disasters, which are usually divided into structural and non-structural forms (Alexander 2002:5).

Nissanka states that ‘the GOSL did not think about disaster management nor mitigation plans from the time of Sri Lanka’s independence (1948) until 1996. As a result, many people did not think that Sri Lanka had reached the disaster
prone status as is seen in India, Bangladesh, Pakistan and Nepal’ (2005). Given that people were not aware of this, there have been few opportunities with which to reduce the impact of future disasters.

2.4.2. Capacity Building

In order to provide quality education, it is necessary to enhance the capacity of the entire educational system. Typically, this requires on-going training and monitoring, material and moral support. According to the Inter-Agency Network for Education in Emergencies (INEE, No Date) teachers need to be provided with necessary skills to enter and manage the classroom within the school level.

At the community level, village leaders and local government officials need training in how to monitor and support the educational programs in their areas. At system level, national governments, as well as local and international non-governmental organizations, require training to improve their educational activities, especially in addressing the protection needs of children (INEE, No Date).

Disasters were viewed as being unsystematic and highly centralized, top-down events with inflexible bureaucracies (Rajakarunanayake et al 1999). Following the 2004 Tsunami it was discovered that there was a lack of coordination among governmental authorities. However, with the implementation of the 2005 Disaster Management Act a new decentralised disaster management dimension has been introduced. Concepts aimed at including the community - rather than the ‘top-down’ approach of government bodies have now been included (National Institute of Disaster Management 2006). While most disaster efforts have previously focused on relief and rehabilitation, it is hoped that this new approach of capacity building will be introduced where not only parents and the government are involved, but inclusive of children as well. This is important because children have already demonstrated they are capable of assisting during times of disasters (UNICEF 2005). This can only be achieved if capacity building (through the guise of DME) is taught in Sri Lankan schools where children can be involved in the decision-making process of further disasters.
2.4.3 Resiliency

McEntire (2001:191) sees resiliency as ‘the amount of coping capacity, or the ability to react or effectively recover from a triggering agent that becomes disastrous.’ Most people, while being exposed to hazards and risk, have an inner quality of wanting to help out, therefore reducing the element of vulnerability. If there is a strong social bond between people and the government before a disaster strikes - where trust and the exchange of information has been allowed to develop - individuals will be seen more resourceful in times of need. Children are often not included in these dialogues. As a result, there still appears to be an element of ‘children should be seen, but not heard.’ The fact remains that while children want to be loved and protected, they also want to feel needed by their community. During UNICEF’s 2005 Forum Report children from the Philippines, Nepal and Bangladesh discussed the roles that they, as children, played in helping their communities recover from the tsunami. It was discovered that by protecting other young people these children would psychologically have a better chance of returning to normalcy after the disaster (UNICEF 2005:22). It is therefore suggested that children be included in emergency preparedness as, by doing so, it will increase their awareness of risk elements as well as improve their chance of survival when another disaster does occur.

2.4.4 Risks

Blaikie et al (1994) suggests that the risks that people face must be considered as a complex combination of vulnerability and hazard, because disasters are a result of both of these. ADB states that ‘the risks from natural hazards to Sri Lanka were considered low’ prior to the tsunami (2005). However, since Sri Lanka was not aware that they were even considered to be in a disaster prone status, the country could automatically “assume” that any risk to hazards were low. Creating an environment of safety within Sri Lanka is crucial, especially when considering that children must be protected at all times. This can only be done through disaster management education.

2.4.5. Vulnerability

Disasters impact people in different ways. Social and economic relationships determine that some sectors of the population (i.e., those who tend to be
marginal to the centres of power and who have less resources) are more vulnerable to disasters than others. It is important to examine social relationships in ‘normal’, everyday conditions so as to understand degrees of risk and vulnerability in ‘abnormal’ times - when disasters strike. No matter how one might attempt to define them, disasters - whether in a physical, economic, social, or human context are linked to vulnerability. Despite the interests and initiatives on vulnerability reduction, the vulnerabilities of people continue to increase in many developing countries (Delica-Willison & Willison 2004:145).

2.4.6. Hazards

According to Blaikie et al (1994:21) ‘hazard refers to the extreme natural events which may affect different places singly or in combination at different times. Accordingly, a hazard has varying degrees of intensity and severity’. Floods are common across Sri Lanka during the monsoon season with the 2004 floods displacing over 120,000 people along Sri Lanka’s eastern coast (Lokuhapuarachchi 2004). The disruption to agriculture (the economic backbone of Sri Lanka) was significant. Then came the 2004 Tsunami which compounded the difficulties. This is a classic example of how multiple hazards compound a previous catastrophe.

2.5. SRI LANKA’S DISASTER MANAGEMENT ACT

Despite Sri Lanka’s multi-hazard environment, the country has lacked a comprehensive disaster management strategy until 2005. As a result, very few mechanisms were put in place prior to the 2004 Tsunami. Looking to the educational sector very little in the way of disaster preparedness was undertaken (Kreussler 2005:53). As a result, focus on empowering the public with ways and means to reduce disaster losses, and to promote disaster awareness amongst children through the school curriculum has become an important factor within the country (Government of Sri Lanka 2005:p. xiv)

The framework for the Act was gained from the Sri Lankan Parliament Report (Sri Lankan Parliament 2005:11). Specifically, the Act

‘provides for a framework for disaster risk management in Sri Lanka and addresses disaster management (DM) holistically, leading to a policy shift from response-based mechanisms to a proactive approach toward DRM; and for establishment of Institutional and Legislative systems for a ‘legal’ framework for DRM’ (see Appendix 2.1)
According to the Sri Lankan Parliament report specific functions are to be carried out by the DMC under the guidance of the NCDM. Accordingly, the NDMC was formed not only to prepare disaster management plans but also to provide education in schools and universities. Figure 1 indicates the organization of the DMC at a national level showing how and, in particular where such training is embedded in the overall structure of the NDMC.

2.6 UNIVERSAL DECLARATION OF HUMAN RIGHTS

The Universal Declaration of Human Rights (UDHR: 1948) states that ‘everyone has the right to education,’ and that ‘education shall be free, at least in the elementary and fundamental stages. Elementary education shall be compulsory’ (UDHR: 1948). Despite education considered as a ‘right’, there are wide gaps in Sri Lankan education where, either due to the conflict or the affects of disaster such as the Tsunami, many children are unable to go to school. Additionally, while children in non-affected areas do attend primary school, they often do not complete secondary school because they are needed within the home or are forced to seek employment to supplement the family income. However, as one can see from the Millennium Development Goals (MDGs) below Sri Lanka has made significant efforts to achieve such progress.

2.7 MILLENNIUM DEVELOPMENT GOALS

The Government of Sri Lanka joined the international community in pledging their support for the Millennium Declaration at the United Nations Millennium Summit in September 2000 (Galagoda 2006). These goals, then, are seen as the world’s targets for reducing extreme poverty by the year 2015.

Looking at the Sri Lanka Attaining the MDGs report, it is noted that Sri Lanka already attained the numerical goals in universal primary enrollment in during school year 1990-1991. Therefore, it is ‘far ahead of the other countries of South Asia in terms of having reached near-universal primary enrollment and completion’ (World Bank 2005b: 56). However, the Sri Lankan education system faces two major challenges. First the 4% of children aged 6-10 who do not attend school and the 5% of primary aged children who do not complete primary school (World Bank 2005b: 47-8).
The GoSL recognizes that good education cannot be achieved without having good quality teachers. In an effort to modernize the primary school curriculum along the same lines used in Britain, the government has instituted new policy initiatives in curriculum, pedagogy and teacher education/training. Efforts to improve the quality of teacher education and training have been forthcoming ensuring that all teachers are trained through a three-year pre-service teacher education course before entering the teaching profession. Reforms have also sought to promote child-friendly, student centered learning in primary schools (World Bank 2005b:54). However, according to some schoolchildren this has not yet taken place universally (UNICEF 2005).

2.8 CONVENTION ON THE RIGHTS OF THE CHILD

A guiding principle of the Convention on the Rights of the Child, the most widely-ratified human rights treaty in history, is that the best interests of children must always come first, in good times and bad, in poverty and prosperity, in war and peace (Bellamy 1998).

The Convention was adopted and ratified in 1989. As part of the convention, ‘a child has a right to education, and in particular, the making of primary education to be free yet compulsory for all’ (Conventions of the Rights of the Child 1989). Sri Lanka, while still a less developed nation has continuously provided education in some form, however with the on-going conflict more and more children have not been able to attend school ~ which is their right by law.

2.9 EMERGENCY EDUCATION versus DISASTER MANAGEMENT EDUCATION

Nicolai (2003:11) suggests that “emergency education is seen as a ‘set of linked project activities that enable structured learning to continue in times of acute crisis or long-term instability’. It is seen as a response activity, where education is normally carried out for a certain period of time and usually within the response phase of the Disaster Model. After the response period, and especially when donor funds are no longer available, this method of teaching can often be phased out. Children return where they were prior to the disaster often with non-qualified teachers.
Disaster Management education, on the other hand, is considered a developmental activity, i.e., one which will teach and sustain children's learning about disasters before they occur. It is felt that by teaching this alternative method of education it will enhance the well-being of every child before, during and after a disaster, rather than introducing it at the onset of an emergency where they are in a vulnerable state.

2.10 MINIMUM EDUCATIONAL STANDARDS

Prior to 2004 individual agencies who were teaching Emergency Education were doing so often without special guidance. Seeking to define and standardize teaching a special task force was initiated and, with collaboration by both UNESCO and the INEE a Minimum Standards handbook was developed (INEE 2004).

However, when looking for standards for DME there are none. According to an email received from Mendenhall, ‘there are no plans to develop a separate set of standards for disaster management education at this time, but there has been a lot of discussion about creating additional supplementary materials that would complement the [minimum] standards…. Several members will be working on this type of tool kit in 2007’ (D. Rea 03 October 2006). However, this should not be confused with the teaching of Disaster Management as an entire discipline, at which point looking to the Sphere Project would prove beneficial.

Despite there not being specific guidelines with which to teach DME, the Sri Lanka Ministry of Education has developed educational and quality standards for its teachers and principals (cited in INEE 2005:12). According to Perera ‘teacher education in the 18 Colleges of Education is being reformed’ and thus ‘most of the Minimum Standards [as suggested by INEE] are observed routinely’ (cited in INEE 2005:12).

Even though emergency education is still being taught in Sri Lanka, disaster management education is emerging as a developmental tool within the public educational sectors. Emergency education and disaster management education are two separate and distinct teaching disciplines. DME, a developmental activity, falls under the realm of disaster preparedness (thus
teaching individuals how to better prepare themselves should a disaster occur). Emergency Education is seen as a response activity and is a crisis management activity. UNESCO suggests that Emergency Education should have its own guidelines. It is suggested here that DME be integrated into the school curriculum. Therefore, it needs its own guidelines.

2.11 CONCLUSION

This chapter looked at disaster definitions as well as disaster phases. Within the Sri Lankan disaster model reference was made as to how the ‘impact’ symbol was placed inside the cycle alluding to the fact that the disaster affected every stage of the cycle. In most other disaster models this symbol would normally be placed prior to the response/relief stage (International Journal of Mass Emergencies and Disasters 1997:239-264). Other classic definitions were discussed in an effort to increase disaster education awareness within Sri Lankan children. Reference was also made to the Sri Lanka Disaster Management Act in order to know how it is to protect its citizens. Other documents such as the Universal Declaration of Human Rights, Millennium Development Goals and Convention on the Rights of the Child were reviewed as to how each pertained to Sri Lankan education. Finally, Emergency Education and Disaster Management Education were evaluated to show their differences.
CHAPTER 3: COUNTRY PROFILE OF SRI LANKA

Sri Lanka has experienced different kinds of weather-related events, man-made conflicts and political changes within its history. The complex issues which the country faces will be addressed under separate discussions. A country profile on Sri Lanka will provide background information on the political, social and economic situation of the country. A brief history of weather-related disasters within Sri Lanka will be discussed. The internal conflict which can be seen as a disaster in its own right will only be briefly discussed since it would be impossible to gain adequate, up-to-date information.

The Democratic Socialist Republic of Sri Lanka is an island of 66,000 square kilometres situated in the Indian Ocean, and is surrounded by the Gulf of Mannar, and the Bay of Bengal (see Figure 2). The Foreign & Commonwealth Office Country Profiles (F&CO 2006) reveals that its climate is hot and humid, resulting from monsoons from May to September along the coastline and from November to March within the north-east region (F&CO 2006). Although the country has faced two decades of...
civil war Bermeo (UNDP 2005) states that ‘Sri Lanka has long been at the forefront of human development among developing countries. Access to health and education is widespread and results have been impressive.’

There are vast regional disparities between the Sinhalese and Tamil culture. Beginning in the mid-1950s the majority Sinhalese community's politicians in Sri Lanka (then called Ceylon) embraced ethnic outbidding as a way to attain power. In doing so this laid the foundation for a gruesome civil war between the Sinhalese and Tamils (Devotta 2005: 141-159). As a result, more than two decades of civil war between government forces and the Liberation Tigers of Tamil Eelam (LTTE) have devastated large parts of Sri Lanka’s north and east. This has resulted in an ethnic conflict between different ethnic groups. Individuals residing in the north and east of the country (which includes the LTTE) have been affected not only by becoming internally displaced, but by having a lack of food, water and educational facilities (Reuters 2006). As of May 2006 approximately 70,000 people have been killed and one million people being displaced (FC&O 2006).

There are other regional disparities as evidenced between the Buddhists, Hindu and Muslims. Figure 3.2 shows the ethnic communities and religions. Sinhalese, whose identity is articulated in Sinhala Buddhist terms although there is a Christian minority among them; Tamils whose identity is defined linguistically and territorially with reference to a traditional homeland in the North and East although a considerable number of them are settled outside this region; Upcountry Tamils who are differentiated from the other Tamils because of their more recent Indian origin and geographic location in the plantation areas of the upcountry; and Muslims whose identity is expressed in religious terms and comprise Moors and Malays settled throughout the country with the largest concentration in the East. Today, these four groups are generally represented by communal political parties in the country's legislature (Zackariya & Shanmugaratnam 2000).
Figure 3.2 Ethnic Communities & Religions
3.1.1 Politics

Sri Lanka has been influenced by four hundred years of colonialism under the Portuguese, Dutch and British. Since its independence, the political scene has been dominated by two parties: the United National Party (UNP) and the Sri Lanka Freedom Party (SLFP), now a part of the People’s Alliance (PA). Following the assassination of Prime Minister Banadaranaike, his widow Sirimavo Banadaranaike became leader of the SLFP, serving both as Prime Minister and leader of the opposition.

A republication constitution was adopted in 1972 with Banadaranaikie remaining in power. The UNP returned to power in 1978 and adopted yet another constitution based on an executive presidency. Elections were to be based on proportional representation. Ranasinghe Premadasa won the presidential election in 1988 until his assassination in 1993.

The SLFP became part of the People’s Alliance coalition and was headed by Mrs. Chandrika Kumaratunga. Having won the general elections in both 1994 and 1999, she went on to serve as President until November 2005. The PA also won the next Parliamentary elections in October 2000. However, in 2001 – less than a year after being re-elected, the PA lost their majority and new elections were held in December 2001. The UNP, led by Ranil Wickremasinghe won 109 seats with the PA coming in second with 77 seats. Leading to an arrangement of political cohabitation between two rival parties, Kumaratunga became President and Wickremasinghe became Prime Minister.

In November 2003 President Kumaratunga suspended parliament, fired three key ministers and declared a state of emergency. As a result, a working agreement was not reached between the President and Prime Minister. In January 2004 the SLFP signed an alliance with the People’s Liberation Front (known locally as the Janatha Vimukthi Peramuna or JVP for short) forming the United People’s Freedom Alliance (UPFA). In February, the President dissolved Parliament and called for general elections in April. These elections produced a new political order with the victory of the UPFA (SLFP and JVP alliance), and formed a minority government. In September 2004, the Ceylon Workers’ Congress (CWC) joined the government representing Indian-origin
Tamils however it only had a small majority of eight seats. In June 2005 the JVP left the government after the President decided to sign a post-tsunami funding arrangement with the LTTE. Presidential elections again took place in November 2005 with Mahinda Rajapakse (SLFP) being elected President taking fifty-three percent of the vote.

A cease-fire agreement was signed in February 2002 between the GoSL and the LTTE placing a temporary halt to hostilities. However, while this temporary injunction did pave an opening for peace, such talks have been stalled since April 2003 (The World Bank 2005). This has had an effect on social provisions for the population such as education, social services, health and governance. This is important as having political instability impacts on educational policy and implementation of issues such as curriculum.

### 3.1.2 Population and Social Development

“It is easier to rebuild roads and bridges than it is to reconstruct institutions and strengthen the social fabric of a society” (Raphael 1998: 8).

The United Nations Economic & Social Commission Organization reveals that Sri Lanka has a population of 19,682 inhabitants (UNESCO 2006). The Asian Development bank states that about 17.5 million of the population live in seven of the country’s nine provinces, and one-fifth to one-third of the population (3-5 million) is categorized as poor. The World Bank also states that ninety percent of Sri Lanka’s poor live in rural areas, where access to basic services is limited. Only thirty-eight percent have electricity, fifty-five percent sanitation and sixty-one percent have access to safe drinking water (The World Bank 2005).

Ethnic groups include Sinhalese, who form 73.8% of the population, Tamils (Indian and Sri Lankan combined) at 8.5%, Moors at 7.2% and others at 10.5% (CIA Factbook 2006). 74% of the population speak Sinhalese which is the official national language of Sri Lanka. 18% speak Tamil which is the second national language. However, it should be noted that English is commonly used in government and is spoken in about 10% of the population (CIA Factbook 2006). Social exclusion, driven by ethnicity, language, religion, and conflict, has been deeply ingrained for decades, resulting in reduced opportunities and extreme tensions among different groups.
The GoSL recognizes gender equality and is protected by law. It also insures free education with healthcare services widely available. Therefore the country has made substantial progress in terms of development.

Figure 4 shows the population density in Sri Lanka as of 2005 with most of the population being concentrated around the capital city of Colombo as well as in the north of the country. The less densely populated areas are within the north and east of the island.

Figure 3.3: Population Density Sri Lanka (Inhabitant/Km2)

Source: UN/ISDR 2005

3.1.3 Poverty Distribution

While Sri Lanka has made progress with regard to poverty reduction the poverty situation is completely different when seen as a regional or provincial level. Even though poverty has decreased in Colombo and western provinces the rest of the country, especially the north-east region has not seen a similar reduction. While this has not been reflected in any data, poverty is well-known within this area simply because of the on-going conflict.

Table 1 displays poverty distribution by ethnic groups. It is noted that poverty affects all ethnic groups almost equally however less poverty is indicated in the Sri Lankan Tamils.
Table 3.1: Trends in Poverty 2002 by Ethnic Groups

<table>
<thead>
<tr>
<th>Ethnic Group</th>
<th>Poor in %</th>
<th>Non-poor %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sinhala</td>
<td>18.9</td>
<td>18.1</td>
</tr>
<tr>
<td>Sri Lanka Tamil</td>
<td>22.1</td>
<td>77.9</td>
</tr>
<tr>
<td>Indian Tamil</td>
<td>20.8</td>
<td>79.2</td>
</tr>
<tr>
<td>Sri Lanka Moors</td>
<td>21.2</td>
<td>78.8</td>
</tr>
</tbody>
</table>


Table 3.2 below indicates poverty distribution by region however the north-east provinces are excluded. Looking to the table it is noted that Uva, Sabaragamuwa and the southern provinces are most affected by poverty with Matara following closing behind. Again, one can assume high levels of poverty within the north-east provinces.

Table 3.2: Trends in Poverty 2002 by Regions and Districts

<table>
<thead>
<tr>
<th>Region</th>
<th>Poor per region in %</th>
<th>District</th>
<th>Poor per district in %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Western</td>
<td>9.2</td>
<td>Colombo</td>
<td>5.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Kalutara</td>
<td>17.7</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Gampaha</td>
<td>9.2</td>
</tr>
<tr>
<td>Central</td>
<td>20.8</td>
<td>Kandy</td>
<td>20.9</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Matale</td>
<td>24.5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Nuwara Eliya</td>
<td>18.2</td>
</tr>
<tr>
<td>Southern</td>
<td>23.6</td>
<td>Galle</td>
<td>21.7</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Hambantota</td>
<td>27.8</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Matara</td>
<td>23.2</td>
</tr>
<tr>
<td>North Western</td>
<td>22.3</td>
<td>Puttalam</td>
<td>24.5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Kurunegala</td>
<td>21.2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Polonnaruwa</td>
<td>20.1</td>
</tr>
<tr>
<td>North Central</td>
<td>18.1</td>
<td>Anuradhapura</td>
<td>17.2</td>
</tr>
<tr>
<td>Uva</td>
<td>31.8</td>
<td>Badulla</td>
<td>32.5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Moneragala</td>
<td>32.4</td>
</tr>
<tr>
<td>Sabaragamuwa</td>
<td>28.9</td>
<td>Ratnapura</td>
<td>30.1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Kegalle</td>
<td>27.5</td>
</tr>
</tbody>
</table>

**Source:** Adopted from Department of Census and Statistics (DCS) Sri Lanka: HIES – Household Income and Expenditure Survey. 2002 (Excluding Northern and Eastern Provinces)
3.1.4 Economy

In 2004, real GDP grew by just over five percent which is a reflection of the economy’s impact to adverse shocks, i.e., the surge in international oil prices or the severe drought followed by floods and the tsunami. Economic activity in 2005 has been affected by the tsunami which devastated over two-thirds of the country’s coastal belt. This has affected fishing, agriculture and the local tourist industry. Hotel and restaurant bookings have declined, and dampened the growth prospects of banking, small industry, domestic trade and transport sub-sectors. However, industry and services are growing and with improved weather conditions, the agricultural sector has once again rebounded. According to the World Bank ‘the economy is currently growing at an annual rate of 5.9 percent and per capita GDP is currently estimated at U.S. $1,030 ’ (The World Bank: 2005).

While countries such as Afghanistan, Mozambique and Sierra Leone have had to come to terms with the destruction of their formal economy, Venugopal reveals that ‘two decades of conflict in Sri Lanka in the 1980s and 1990s have paradoxically been a time of strong economic growth’, (cited in Dissanaike 2003). However, Perera suggests that although reforms pushed through during the war years improved productivity and growth, the country continued to ‘pay through the nose for the war’ (cited in Dissanaike 2003). Funds for education, health and poverty reduction stagnated while military spending sky rocketed. A third of the 2000 budget was spent on defence, while eight percent went into health and fourteen percent into education.

Figure 3.4 suggests Sri Lanka is a ‘model low-income country’ in line with a handful of developing countries such as China, Vietnam, Cuba and Costa Rica (The World Bank 2005b:3).
While economists feel that Sri Lanka is a ‘model low-income country’ there are those who, because of the conflict, consider that parts of the country, such as the northern town of Jaffna, will suffer disastrous economic effects. According to Tharmalingam (2006) “if this [the fighting] continues Jaffna’s economy will be crippled and our people destroyed. We would die of starvation and our soil would become dry and ruined” (Reuters 2006).

3.2 HISTORY OF DISASTERS IN SRI LANKA

3.2.1 Internal Conflict and its effect on education

The ethnic conflict between the GoSL and the LTTE is seen as an effort for the LTTE to gain an independent homeland within the country’s north and east provinces. While the peace treaty has not officially been broken, it appears that the treaty is ‘in name’ only. Despite a February 2002 truce, clashes have escalated between the two sides with more than 67,000 civilians, troops and rebel fighters being killed since 1983 and approximately 3,000 alone this year (Reuters Foundation 2006).

Children often become the target whilst a country is experiencing political turmoil. Sri Lankan children are no exception. Fearing reprisal of new bomb attacks the GOSL ordered the indefinite closing of all schools after the Tamils
accused the government’s air force of bombing a rebel-run orphanage (Fickling 2006). The twenty-year old conflict has also affected the re-building of schools damaged by the fighting (as well as the tsunami), which has resulted in organizations like GTZ having to halt its school building programs (ReliefWeb 2006: Education).

### 3.2.2 Weather-Related Disasters

According to UNISRD (2001) ‘*floods, landslides, cyclones, droughts, and coastal erosion are the main causes for natural disasters*’ impacting on Sri Lanka. These disasters have caused loss of life, damage and destruction to property on a significant scale. The 2004 tsunami can now be added to Sri Lanka’s list of natural disasters. The scale of destruction on the coastal regions was significantly greater than previous recorded natural disasters.

The Sri Lanka National Disaster Management Centre records and publishes this data on its website (NDMC 2005). However, it is often not clear which years are being discussed. To analyze frequency of statistical data and/or other data there needs to be a clear distinction of the year of its occurrence. There is a paucity of information with regard to how disasters affect students and education on the NDMC website, therefore not much information has been recorded and/or shared prior to the tsunami with the exception of flood damage.

**Floods**

Sri Lanka has ten major rivers which cause flooding (Country Report 2003). Floods are the most common type of disaster in Sri Lanka, with the November 2003 floods being the worst in 60 years (International Federation of Red Cross and Red Crescent Societies 2003). The flood affected more than 125,000 people, with many of the survivors losing everything they owned. School children were severely impacted since the floods not only destroyed over one hundred schools, but another 200 schools were completely washed away (International Federation of Red Cross and Red Crescent Societies 2003). Floods are frequent and 2005 saw yet again another urgent flood appeal in various districts. While only six individual were killed, over 63,000 families were affected (Action by Churches 2005).
Landslides

Even though there has been an increase in landslides during the last two decades, there again appears to be no record of how many school children have been affected. In the 2005 landslides six people (all within the same family) were killed and fifteen homes were destroyed (Siber News: 2005). It is likely that some children were killed. Heavy rains have increased the occurrences of frequent landslides especially during the last two decades within the mountain slopes of the Central and South Western regions. The landslides of January 1986 and again, those of May and June 1989 surpassed all previous landslides in recent memory, with the 1986 event being the most damaging one (Country Report 2003).

With each new natural disaster a second disaster usually happens. Already having experienced the 2004 Tsunami, it was expected that, as a result of the Sumatra earthquake Sri Lanka would be at risk for major landslides in the area of Kandy, Matale and the Uva Province. According to Dissanayake, ‘the December 26 earthquake seems to have disrupted surface layers in Kandy, Matale and the Uva Province’ (2003) This resulted in a sudden mudflow from the ground, cracking in buildings, and fluctuations in water levels in these areas.

Droughts

The 2001 Drought resulted in interruption to the island’s power supply causing hardship to the people and crop yield. Each year different areas are faced with a drought, and because it is only for a short time, these disasters often go unreported. However, severe droughts of national significance have occurred over a considerable period of time (Country Report 2003). While there was a severe drought from 1935 to 1937, others followed, including one in 2001 which caused major set backs to the Sri Lankan economy and its citizens (Country Report 2003). Even though droughts are not be classified as sudden disasters, they do cause hardship and financial loss mostly to farmers (Country Report 2003). As the Sri Lankan economy is agriculturally-based this impacts significantly on development.
Coastal Erosion
Approximately 55% of the shoreline is subjected to or threatened by coastal erosion (Country Report 2003). More than half of the 19.5 million (2003 statistics) population lived in villages, towns and cities of the coastal districts. Therefore, the economic importance of these coastal areas has always been paramount. Shoreline retreat due to sea erosion has been a severe problem in Sri Lanka, resulting in damage to and loss of property and infrastructure facilities and development efforts (Country Report 2003). UNISRD states that ‘floods, landslides, cyclones, droughts, and coastal erosion are the main causes for natural disasters’ (2001). However, there is no mention of coastal erosion in the Top Ten Disasters in Sri Lanka table seen below.

Table 3.3: Top Ten Disasters in Sri Lanka

<table>
<thead>
<tr>
<th>Disaster</th>
<th>Date</th>
<th>Killed</th>
<th>Disaster</th>
<th>Date</th>
<th>Affected</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flood</td>
<td>17 May 2003</td>
<td>235</td>
<td>Flood</td>
<td>17 May 2003</td>
<td>695,000</td>
</tr>
<tr>
<td>Landslides</td>
<td>8 Oct 1993</td>
<td>65</td>
<td>Drought</td>
<td>Aug 2001</td>
<td>1,000,000</td>
</tr>
<tr>
<td>Flood</td>
<td>30 May 1989</td>
<td>325</td>
<td>Drought</td>
<td>Mar 1989</td>
<td>806,000</td>
</tr>
<tr>
<td>Epidemic</td>
<td>Nov 1987</td>
<td>53</td>
<td>Drought</td>
<td>1987</td>
<td>2,200,000</td>
</tr>
<tr>
<td>Flood</td>
<td>24 May 1984</td>
<td>45</td>
<td>Drought</td>
<td>1983</td>
<td>1,800,000</td>
</tr>
<tr>
<td>Wind Storm</td>
<td>24 Nov. 1978</td>
<td>740</td>
<td>Flood</td>
<td>Dec 1983</td>
<td>1,250,000</td>
</tr>
<tr>
<td>Flood</td>
<td>25 Dec 1969</td>
<td>62</td>
<td>Drought</td>
<td>1982</td>
<td>2,000,000</td>
</tr>
<tr>
<td>Wind Storm</td>
<td>22 Dec 1964</td>
<td>206</td>
<td>Wind Storm</td>
<td>24 Nov 1978</td>
<td>1,005,000</td>
</tr>
<tr>
<td>Wind Storm</td>
<td>25 Dec 1957</td>
<td>200</td>
<td>Flood</td>
<td>25 Dec 1969</td>
<td>1,000,000</td>
</tr>
</tbody>
</table>

Source: Adopted from OFDA/CRED International Disaster Database (2005)

Cyclones
According to the Sri Lankan Meteorology Department cyclones normally hit the country during the months of October, November and December (Nonis: 2004). Like tsunamis, they do not occur frequently, however such a disaster should not be discounted. While the country has been affected mostly by cyclone activity occurring in the Bay of Bengal, the eastern, northern and north-central regions are the cyclone prone areas of Sri Lanka. The 1978 cyclone for example affected more than one million people, killed nearly a thousand individuals, partially and completely damaged nearly 250,000 houses, destroyed ninety percent of the coconut plantation in the Batticaloa district and resulted in the government having to spend over 600 million Sri Lankan Rupees ($5,639,100) to bring immediate relief to those affected (Country Report 2003).
Tsunamis

The 2004 Tsunami brought a new dimension of reporting on the impacts on Sri Lanka. Along with its widespread destruction, the country saw a plethora of INGOs, who, regardless of whether they registered their organization or not, began compiling statistics on the event.

The tsunami devastated the country not only socially, economically, and politically, but also educationally. Save the Children (2006) reported that the tsunami was responsible for the deaths of 126 teachers, with another 331 teachers became disabled and 1,689 were displaced. With respect to students, 3,372 students died, 6,610 became disabled and over 49,230 were displaced. Finally, 74 schools were completely damaged, 108 were partially damaged and 446 functioned as camps for the internally displaced (Asian Tribune 2006).

Students who survived the tsunami have continued to experience extreme hardships. The Save the Children’s report reveals that ‘seventy per cent of school children in tsunami-affected areas of Sri Lanka continue to suffer extremely difficult conditions at school’ (Asian Tribune 2006). However conditions were different depending on the area. The study shows that in the Northern Province (where the Tsunami [and the war] has had a disastrous effect on children’s education) 40% (579 out of 1447) of children had nowhere to sit since there were no chairs. Many children in the Southern, Northern and Eastern provinces were forced to study in temporary sheds which were not much more than shelters with zinc-sheet roofs. Subsequently, many of them complained that because of the extreme heat and the noise impact while under these roofs during the rainy season impacted their learning.

The report states that approximately 45% of the children did not have access to sufficient water – both in the southern and northern provinces. The situation became worse after the tsunami where over 60% of children in these same provinces either did not have access to any water facilities nor access to sufficient water. According to one student, ‘since there are only 4 water taps for nearly 1500 students we cannot drink water during the intervals as first preference is given to small children and when we are late for the next period the teachers punish us’ (Asian Tribune 2006).
3.3 DISASTER MANAGEMENT EDUCATIONAL STRATEGIES

Disaster Management education is much more than talking and implementing emergency plans. It is about when to include and incorporate minimum standards such as those contained within the Sphere Project. As part of its humanitarian charter the Project sets out the premise that those who have been affected by disasters ‘have a right to expect humanitarian assistance and to enhance the accountability of the humanitarian system in disaster response’ (The Sphere Project 2004). Schools following the Sphere guidelines would ensure Sri Lankan children of having ‘safe and equitable access to a sufficient quantity of water for drinking’ and that ‘queuing time at a water source would be no more than 15 minutes’ (The Sphere Project 2004). Again, if these guidelines are followed, students would not only have an adequate amount of water, but they would not have to queue for long periods of time which, at the moment results in their being punished for not returning to their classrooms on time. The problem of implementing this is making sure adequate resources are allocated and deployed short term and in the recovery period.

3.4 CONCLUSION

The severity and frequency of natural disasters that Sri Lanka experiences may not be on the same high scales as one finds in some countries such as Africa. However, the exceptional damage of the 2004 Tsunami suggests natural disasters may be becoming greater. Climate change may increase vulnerability to Sri Lanka. The damages, hardship and the relocation arising from natural disasters, together with the man-made disasters and civil conflicts are causing development difficulties for such a small country.

In this chapter the Sri Lankan country profile was examined. It was discovered that although the country has been at war for over twenty years it has continued to be at the forefront of human development. Next was a review of the country’s political, social and economic views where it was learned that Sri Lanka is seen as a model low-income country. Also included was a review of the population and the social development. A discussion of various weather-related disasters showed how vulnerable the island is leaving it ‘open’ for almost any kind of event. Finally, it is concluded that disaster management education is much more than talking and implementing emergency plans. It is
about working together to build a safer and healthier Sri Lanka. While it is imperative that such preparedness continue it *can* be done with the children of Sri Lanka, for they are not only the future generation, but they are also miniature “peace brokers” who see no difference in colour, race or creed.
Different countries use different methods with which to plan and prepare for a major emergency. This chapter reviews how Sri Lanka has historically responded to disasters and how, because of the tsunami, the country is moving toward developing a sustainable and safer environment.

4.1 LEGAL POWERS of GOVERNMENT: Responding to a Disaster

Savanamuttu (2005:1) states that ‘the culture of governance in Sri Lanka was to centralize everything.’ Up until now, there has never been an opportunity for actors to partake in different roles following a disaster.

There has always been confusion as to the line of hierarchy among the different streams of administration at national, provincial and district levels’ (Sri Lankan Parliament 2005:32). This resulted in Sri Lanka seeking out and becoming one of the first countries in the region to adopt the Incident Command System (ICS) (USAID 2006: 4). This system has been put in place allowing governments to quickly respond to any emergency situation (USAID 2006: 4). It has now been established that the Command System should start with three levels:

I. National
II. District
III. Divisional

At the national level, the Disaster Management Council and the Director General of the DMC will work as Incident Commander (IC). The organizational structure is seen in Figure 4.1 below (USAid 2006: p. 12).
At the District Level, the positions for ICS can be non-regular positions. It is anticipated that the armed forces, police, and the local government authority) can be trained to take up those positions in different incidences. The Disaster Secretary will work as the Command Officer as seen in Figure 4.2 below:

**Figure 4.2: District Level structure**

### Non-Regular Positions

At the Divisional Level, the secretary will work as a commander and other positions will be non-regular and trained to existing cadres (see Figure 4.3).

4.1.1 Institutional Framework at the National, Provincial, District, Division, Local and Village Levels

For some time, it was felt that there was a need to strengthen legislative powers of related agencies with regard to capacity building and to ensure smooth implementation of the system. In addition, parliament members felt there was a need to strengthen information management systems so as to clearly define existing and emerging disasters, as well as understanding the link between development and disasters (Sri Lankan Parliament 2005:32). In December 2005, the Ministry for Disaster Management was established and an institutional framework was established (see Figure 4.4). On January 2006 the above ministry was renamed becoming the Ministry of Disaster Management and Human Rights with a human rights portfolio being added to the Ministry (Hettiarachchi 2006). Furthermore, there was a need for ‘strong information coordination systems for emergency response’ (Sri Lankan Parliament 2005:32). In other words, there needed to be an approach that could work at all levels so that the coordination of disasters could be seen as a group effort.
Figure 4.4: Institutional Framework for DRM in Sri Lanka

The DMC’s broad mission is ‘to create a culture of safety to reduce the vulnerability of the population to natural hazardous events in the future’ (Sri Lankan Parliament 2005:33). Disaster management was once thought of as a response mechanism, where no thought was given to potential risks. Since the 2004 tsunami it is now seen as a holistic approach where there is a proactive approach (Hettiarachchi 2006). With the NCDM now at the helm, the centre will play a significance part in disaster management operations. Most importantly, it will formulate a National Policy and Programme for disaster management. Secondly, it will need to ensure that every ministry, government department and public corporations prepare specific guidelines with respect to the Disaster Management Plan. Finally, the Council will not only facilitate and support local resilience but they will also promote public awareness programmes in the event of a further disaster through the Disaster Management Centre training facilities (Sri Lankan Parliament 2005: 92-3).

4.1.2 Disaster Management Centre Operations

The DMC is assigned functions and responsibilities by the NCDM (see Appendix 4.1). According to the Parliament Select Committee, members proposed that the Centre should be headed up by a Director General. Here, the role will be instrumental in strengthening connections between various actors who play a role within DRM (such as the Department of Meteorology, local planners, land use managers and those who disseminate early warning
systems (Sri Lankan Parliament 2005: 34). With the establishment of the DRM system, disaster management became a devolved subject as per the 13th Amendment of the Constitution. Ministers of provincial councils have now been included in the Council as members. This will help to ensure participation at a more local level.

4.1.3 Preparation of Emergency Plans

Sri Lanka has taken care in preparing for a National Disaster Preparedness and Response Plan. This is based on information gained from Turkey, Germany (Sri Lankan Parliament 2005:302), Japan and Korea (Sri Lankan Parliament 2005:317) as visits were made to view each country’s disaster preparedness plan. Following the numerous road trips and meetings with appropriate stakeholders the development of a Disaster Preparedness and Response Plan (DPRP) are now mandatory for all government ministries, provincial councils, national and provincial departments, boards, corporations, private agencies, and all educational facilities. Since little activity was performed with regard to emergency plans, it will provide a good opportunity for disaster management education to be included. Within the educational sector it should assist the disaster response activity in Sri Lanka, and more especially school children.

The plan includes the establishment of disaster response teams within the school level. Such a programme within the schools will build capacity and increase the well-being of those within educational institutions. The inclusion of this type of activity (as well as other educational endeavours) suggests Sri Lanka’s ongoing commitment to its people and in particular to its children.

4.2 CONCLUSION

In this chapter it has been learned that until the 2004 Tsunami Sri Lanka typically responded to disasters by a centralized method. The tsunami changed that by being one of the first countries within the region to adopt the American Incident Command System. Instead of disaster management being a response mechanism, it has now moved forward to a system of preparation where there
is a proactive approach. The DMC operations have been instrumental in bringing actors together and, as a result it is hoped that there will be more participation at every level.
5.1 HISTORICAL OVERVIEW OF SRI LANKAN EDUCATION SYSTEM

Sri Lanka has a long history of change in its educational achievements which has resulted in high levels of primary school enrollment and completion of grade levels (The World Bank 2005:45). In this chapter a historical overview of the Sri Lankan educational system will be conducted. The 2007 national curriculum will also be examined since it marks a change in the traditional coursework. Finally, a review of the present day educational developments will be reviewed to not only understand how the government proposes to improve the system but whether disaster management education could be included in any program.

The Sri Lankan educational system was introduced during the colonial time and was based on the British System. Since it was centralized at that time the State dictated the school curriculum and the management of schools.

Sri Lanka honoured the right to education as a Fundamental Human Right many years before it was encompassed in the Universal Declaration of Human Rights in 1948 (MoE 2005: 3). Many initiatives in education developed as Sri Lanka became an independent nation. However, 1997 was seen as the beginning of the ‘year of educational reform’ which propelled Sri Lanka to a new dimension in education. Initiatives moving away from traditional teaching methods were introduced. These reforms were grounded on enhancing life competencies and upholding the value of peace and social cohesion. They were also focused on development of the mind, where there were traditionally a culture of ‘memory-based’ examinations (MoE 2005: 6). However, with this new change students were now given an opportunity of thinking in a creative manner with a focus on problem solving. The aim was to create a generation of well-rounded citizens who were seen as having a wide range of skills, who were employable and who were ready to face the challenges of the future (MoE 2005: 8).

Another set of initiatives was also proposed in 1997. Reforms, based on the recommendations of the National Education Commission (NIE) were also implemented (MoE 2005:6). Under the Compulsory Education Regulations,
school attendance committees were responsible for ensuring that all children from age five to fourteen years were enrolled in a school. Literacy centre programmes were introduced by the non-formal branch in order to provide alternative education opportunities to children not able to attend formal education. Other school related items (such as food, clothing and stationery) were also provided free of charge to needy students (MoE 2005:7). In addition, early childhood care and education was promoted through the expansion of preschool facilities. Provincial councils were now empowered with statutory authority on preschool education (MoE 2005:7).

A ‘four-pronged’ strategy was adopted in 1997 allowing for quality improvements to the existing educational system. Within this strategy, curricula and text books were revised to reflect a child-centered, activity-based learning thus bringing about a sense of empowerment to students. A new methodology for teaching and learning was also introduced where teacher training was emphasized. The lack of material within classrooms was also examined. As a result, funds were allocated to upgrade classroom resources. Finally, school principals were given management training (MoE 2005: 7).

Beginning in 1999 a programme of reform was initiated and consequently, the following goals were outlined:

1. To provide a system of education that would equip students with the necessary knowledge to empower them, and to
2. Create a generation of young people with correct values, compassion and care toward others to be able to live with tolerance towards one another (MoE: 2006).

### 5.2 NATIONAL CURRICULUM

As is demonstrated in Figure 5.1, the Sri Lankan curriculum consists of three key stages of education: primary, junior secondary and senior secondary years. Referring to the diagram below the second tier includes tertiary and university education, with the third including vocational training (MoE 2005: 9).

GoSL provides free education from the primary stage of general education to the first degree level of university education. While education is compulsory
from the age of five to fourteen, the government is looking to extend the upper age to age sixteen (MoE 2005: 8).

Figure 5.1: Curricular Emphasis during stages of education

<table>
<thead>
<tr>
<th>Stage</th>
<th>Ages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary Education – Year 1-2 (ages 5-6)</td>
<td></td>
</tr>
<tr>
<td>Primary Education – Year 3 – 4 (ages 7-8)</td>
<td></td>
</tr>
<tr>
<td>Primary Education – Year 5 (age 10)</td>
<td></td>
</tr>
<tr>
<td>Junior Secondary Education – Year 6 – 9 (ages 11-14)</td>
<td></td>
</tr>
<tr>
<td>Senior Secondary Education – Year 9, 10, 11, years (ages</td>
<td></td>
</tr>
<tr>
<td>Pre-University Stage – Year 12 &amp; 13 (17-18)</td>
<td></td>
</tr>
</tbody>
</table>


Curriculum reforms are planned to begin in 2007 for Grades 6 and 10 and will include modernized text books. EED&P reveals that the junior secondary tier will be subject-based with a *thematic approach* allowing for learning to become more meaningful and relevant (MoE 2005:11). Five core subjects (Sinhala Language, Tamil Language, Mathematics, History and English Language) will be included. Incorporated in the curriculum are subjects where disaster management education could be implemented. For instance, Science and Technology could introduce a basic GIS module. In the Life Competencies modules topics ranging from *First Aid* to *How to Prepare Oneself in a Disaster* could be implemented. Having such a course option could mean that students will be able to participate in a particular subject and apply it to every day occurrences.

Referring to the Table 5 below it is noticed that enrolment rates are far higher in primary grades than in the junior level. However, the students within the junior level are well within the main age and focal point of this research as far as disaster management education is concerned. In recognizing that theirs *is* an age where they generally do not continue in school for economic reasons, it is a
time whereby creativity and intuitive reasoning could be implemented to keep them in school. While children are marginalized through lack of education and economic situations, children can be useful citizens of the community.

**Table 5.1: Net Enrolment Ratios Sri Lanka**

<table>
<thead>
<tr>
<th>Grades 01-05</th>
<th>Grades 06-10</th>
</tr>
</thead>
<tbody>
<tr>
<td>97.6%</td>
<td>77.6%</td>
</tr>
</tbody>
</table>

**Source:** Adopted from Education for Economic Development and Prosperity, Ministry of Education 2005

### 5.3 MANAGEMENT OF EDUCATION

Education is managed by the Sri Lankan Central Government which shares responsibility with the provincial councils (MoE 2005: 24). While all children in government schools (and some in private schools) are provided with free education, there are a few fee-levying elite private schools. Most of these institutions come under the management of the Central Ministry of Education or the Provincial Ministries of Education where the community plays a participatory role through School Development societies (MoE 2005: 24). It is the responsibility of the central government to formulate national policy on education and national curriculum. Incorporating disaster management education would first have to be approved by not only the government but also the school development societies.

Current thinking is to further devolve education management to the level of individual education institutions, which would allow principals, section heads, and teachers to become more empowered (MoE 2005: 25). It is also planned to involve the local community which will, it is hoped, increase school effectiveness and performance. A pilot test, school-based management has been introduced in 1552 schools and is seen as a step toward enabling schools to be governed autonomously. The involvement of communities is also seen as important and individuals can contribute to the development of the school, thus giving a sense of ownership and pride within the community (MoE 2005: 25). There is, yet, another key advantage involving communities at the school level: already close to the school they will have ample opportunity with which to learn
about disaster management education if it were to be introduced. The community, as a whole, would benefit.

5.4 PRESENT DAY EDUCATIONAL DEVELOPMENTS

The information does not reflect what has and continues to transpire in the North and East of the country where the Separatist Tamils are waging a war. As a result, no accurate information can be portrayed. Even though policies and frameworks have been established it is difficult to ascertain if they have indeed been implemented in these areas because of the disruption the fighting has caused.

Following a major review of the Sri Lanka educational system the 2006 Education Sector Development Programme and Framework (ESDPF 2006:40) was developed. There was a need to promote equitable access to basic and secondary education to all and to improve the quality of education. Additionally, it was planned to enhance efficiency and equity of resource allocation, as well as to strengthen education governance and service delivery.

By decentralizing local government, education governance and service delivery can be enhanced. The increased autonomy within schools will allow principals to address individualised programming which can lead to children having new and improved educational and technological opportunities. This, for future generalists can lead to enhanced leadership and management skills. Since they are the learners of today their input on emerging disaster-related incidences is of the utmost importance.

To enhance efficiency and equity of resource allocation it is planned to have a medium-term expenditure framework for education established. Over the course of five years (beginning in 2006), educational authorities will implement programmes of a long-term change. There will be a need to have more quality and financial management at all levels. A public expenditure tracking system (PETS) with which the flow of expenditure can be traced is planned (MoE 2005: 42).

To improve the quality of education entails an enrichment of the curriculum which allows children to become a part of the knowledge-based world. With a
developing curriculum there is room for the introduction of new subjects with cross-curricular themes allowing for the promotion of social cohesion and community support. Teaching children about impending disasters within their own world as well as the outside environment should enhance their practical knowledge and skills. Joining the children and members of the community together would prove to be beneficial especially if school-based disaster management response teams were introduced into the school-based educational system.

In promoting equitable access to education school family networks have been established where a ‘family’ of approximately five to ten schools in a given geographical area will be planned ‘in a rational manner to avoid exclusion’ (MoE 2005: 40). Within this network a school will provide GCE A/L Science and Technology classes. Having these S & T modules would be an excellent space in which to teach disaster management education.

5.4 CONCLUSION

This chapter has looked at the educational sector in Sri Lanka. It has identified how changes to the curriculum and management are taking place post Tsunami. Here is an opportunity for DME to be implemented into the curriculum. It is believed this is in line with government policy and could be practically implemented. This would save lives and is cost effective.
CHAPTER 6

6.1 PREPARING FOR THE FUTURE: INCORPORATING DISASTER MANAGEMENT EDUCATION IN SRI LANKAN SCHOOLS: BACKGROUND

To incorporate DME into Sri Lankan schools it must be done in a simplistic manner where the subject not only ‘grabs’ a child’s attention but also has a relevant and lasting meaning. This can be done in varying degrees and methods. Through the use of drama children are able to write and produce disaster-related plays, giving them a sense of teamwork. Literature-based disaster scenarios (stories, activity books, etc.) can be accessed by not only giving children a chance to be heard, but to increase their level of English understanding. Board games, produced with a disaster theme in mind, allow students to have fun yet at the same time learn how to protect themselves. While Disaster Management cuts across all disciplines there is not one subject that could be excluded.

This form of education is non-existent in Sri Lanka and much can be done to introduce it with regular school education. However, prior to introducing it, it is necessary to understand the teaching approaches within Sri Lanka. This is particularly important since Sri Lankan children have experienced a non-participatory (rather than a participatory approach in the U.K.) teaching approach where a rote method of teaching has been experienced (DFID 2004:1). Next will be a curriculum review to discover where DME can be integrated. Finally, a list of suggested DME activities will be presented which are based on own ideas, internet research of other country programs, Sri Lankan teacher ideas and NGO/governmental agency input.

6.1.1 Teacher-centered Method versus Child Participatory Approach

The curriculum is the main instrument for teaching and learning in the formal education system (Smith et al 2003: 28). Over time, Sri Lankan teachers have taught a ‘teacher-centered’ method of instruction (Kreussler 2005:70). Under the 1997 education reforms, curricula and teaching methods were revamped with a focus of ‘shifting to the creation of a generation of well rounded citizens who were employable and ready to face the challenges of the future’ (MoE
While teacher instruction has improved, teacher quality is still considered poor, especially in the area of discipline. Save the Children report that ‘despite the prohibition of corporal punishment in Sri Lankan schools, it is estimated that this method of punishment is still favoured by up to 55% of teachers’ (Save the Children 2006). In other instances, teachers were told to simply relate information to the students and not develop relationships with them (Hatchell 2006). Updated teaching methods need to be reviewed to incorporate a more conducive teacher-student environment. While changes can be effective by the content of a curriculum, the methodology of teaching needs to have a high standard. Therefore, training of teachers through pre-service and in-service programmes is highly emphasised (MoE 2005: 7).

6.1.2 Curriculum Review

Even though the country has experienced the Tsunami, it has continued to move ahead with its curriculum review. Looking forward to a ‘modernized competency based curriculum’ (see Table 6.1), the Ministry of Education has revised the existing curriculum to reflect the development of competencies (MoE 2006).

The primary curriculum (years 1-5) is integrated around four subject areas: first language (Sinhalese and Tamil), Mathematics, Religion and Environmental Studies (MoE: No Date: 2). Beginning in 2007, changes to the curriculum at the secondary level (covering years 6-11) will be introduced (NIE 2006). The curriculum for years 10 and 11 will be re-organized to incorporate a core topic area with baskets of subjects from which options will be selected. Students are expected to study ten subjects for the GCE (O/L) Examination, consisting of five core subjects and five optional subjects from the baskets of subjects as seen in Table 6.1 (MoE 2006).
### Table 6.1

<table>
<thead>
<tr>
<th>Core Subjects</th>
<th>Basket 1 Environmental Studies</th>
<th>Basket 2 Aesthetic Subjects and Literature</th>
<th>Basket 3 Technical Subjects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Religion</td>
<td>Physics</td>
<td>Art</td>
<td>Information Technology</td>
</tr>
<tr>
<td>Sinhala/Tamil Language</td>
<td>Life Competencies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mathematics</td>
<td>Chemistry</td>
<td>Dancing (Udarata, Pahatarata, Sabaragamuwa, Bharatha)</td>
<td>Agriculture and Food Technology</td>
</tr>
<tr>
<td>English</td>
<td>Biology</td>
<td>Music (Sinhala, Carnatic, Western)</td>
<td>Fisheries &amp; Food Technology</td>
</tr>
<tr>
<td>History</td>
<td>General Science</td>
<td>Drama and Theatre</td>
<td>Design and Technology</td>
</tr>
<tr>
<td>Geography</td>
<td>Literature (Sinhala, Tamil, English)</td>
<td></td>
<td>Arts &amp; Crafts</td>
</tr>
<tr>
<td>Civics and Governance</td>
<td>Arabic Language &amp; Literature</td>
<td></td>
<td>Home Economics</td>
</tr>
<tr>
<td>Business Studies, Accounting and Entrepreneurship</td>
<td></td>
<td></td>
<td>Speed Writing, Word Processing &amp; Document Production</td>
</tr>
<tr>
<td>Classical and Modern Languages (Pali, French, Sanskrit, German, Hindi, and Japanese)</td>
<td></td>
<td></td>
<td>Health &amp; Physical Education</td>
</tr>
<tr>
<td>Sinhala/Tamil as Second National Language</td>
<td></td>
<td></td>
<td>Media &amp; Communication</td>
</tr>
</tbody>
</table>

**Source:** Adopted from Ministry of Education, Sri Lanka 2006

**6.1.3 FUTURE CURRICULUM**

Looking at the 2007 Curriculum, and in particular to the Life Competencies curriculum for Years 6-9, it is evident that the N.I.E. has a clear focus to teach students about the affects of disasters (NIE 2006:16-22). For example, beginning in Year 8 students are introduced to the element of risk and how they can ‘avoid, minimize or manage risk, as well as how to cope with disaster’ (NIE 2006:16). Discussion could not only lead to debates on risk, but on mitigation, vulnerability, hazards and resiliency. An exercise could be to list who the most vulnerable people are and how (or if) this could be changed. While this would stimulate students’ minds it would fulfill a portion of the subject content, as well as promoting a participatory approach within the classroom. While it is
appropriate to learn about risk, students should also be taught the basics about disasters. Here, Disaster Theory could be incorporated into the module so students know how disasters are defined.

Another portion of the Year 8 curriculum is to identify good leadership qualities. Since children want to be included in community affairs ~ thus being seen as leaders (UNICEF 2005:3) the concept of volunteering and/or peer education could also be introduced.

Moving to Year 9, students are informed that they ‘should develop the capacity to cope with disaster and to respond quickly with relief and remedial measures’ (NIE 2006:21). Various discussions on capacity building could be incorporated, and how, they as students could affect relief efforts. It is suggested that students ‘engage actively in relief and rehabilitation work through involvement in ongoing projects’ (NIE 2006:21). This could be seen as a community/volunteer service where students are given school credit and/ or a stipend/scholarship toward university tuition. Here, they would develop awareness of others and self while contributing to ongoing projects. It would also give them a goal of working toward a university degree since a stipend could pay a portion of the tuition. Finally, students are asked to understand the roles of peer mediators and facilitators. Introducing peer education is again appropriate here. Students could be taught first aid and/or CPR by a facilitator and then teach other students. The result would be that there would be multiple individuals who would be able to save lives should another disaster occur.

Students in Years 10 and 11 are given opportunities to learn about their government and its response to disasters. Within the Civics and Governance curriculum students have an opportunity to learn how government activities affect disasters. Here, one activity could be to look at Hurricane Katrina and the Tsunami to see how governmental officials responded. Yet another discussion could lead to how the government views developmental activities. Within this discussion students could debate on the influx of NGOs and how this has impacted peoples’ lives in Sri Lanka.

Upper years are also to learn about the provision of welfare systems. While there are social service provisions within the country, the Minister of Social
Service and Welfare expects to ‘produce about 40,000 social service activists’ because of the high demand resulting from the tsunami and the war. (Development from Disasters Network 2006). According to Eyre ‘support systems are crucial to recovery from disasters…. Communities involved with disasters are often more resilient afterwards’ (Eyre: Lecture 2006). Students want to be involved. Having them design and implement a peer social service system within schools would be valuable. Just as there are first aid posts in most (U.K.) institutions a social service post could also be developed.

Year 11 students are given opportunity to explore environmental and sustainable development issues (NIE 2006:9). Again, this appears to be a viable opportunity to introduce discussions on disasters. For example, a case study could be introduced where students could assess damage done to the physical, social and biological environment.

Within the Geography curriculum it is suggested that students ‘should be able to identify the major geographical characteristics of the area in which the school is located through a group field study’ (NIE 2006:6). This could serve as a two-fold project – to understand land characteristics not only from a geographical standpoint, but also from a disaster view. It is possible that this module could be integrated with life competencies subjects. For example, looking at landscapes, rivers and streams could be incorporated with risk assessments of the area. Such assessments could be used to see if water levels are too high or too low and whether there are blockages to ecosystems. Buildings also can be assessed with the assistance of a building inspector and at the same time there could be a short lesson on cordonning off areas.

Students wishing to include sciences in their learning are given ample opportunity to do so. Since Sri Lanka is an agricultural society it is vital to that they understand how to be resourceful with water. Having a lack of water can lead to crop failure, lack of income, famine and death, thus producing another round of disasters. Knowing how to properly manage water resources will aid in saving lives and property.

The above comments, while simplistic in nature, can be integrated into almost any school subject. This review was done in a pragmatic approach to include
the subjects at hand and can be designed by students themselves. To balance these practical suggestions there are other suggestions that have a creative flair to them which allows students to have fun while learning.

6.1.3 Disaster Management Education Activities

More focus has been placed on older students throughout this research. However, even though younger students are usually smaller in stature and thus not viewed as strong (as older students) they too can learn about disasters. Book-related activities, and other easy-to-do exercises can be adapted to fit any age group.

By showing picture-book activities of disasters most children will be able to visualize meanings. For example, when looking at ‘Let’s learn to prevent disasters’ (UNISDR No Date) children can immediately gravitate toward learning its content since it is colourful and easy to understand. Core definitions are found throughout the book, along with boundless disaster-related activities to keep children of all ages remain focused.

Children can construct their own Community Hazard and Risk Maps showing important buildings such as schools and hospitals, farm land and other places that could be affected during a disaster as seen in Figure 6.1. This map could be strategically placed so that members of the community could understand the hazards and risks within each community. It would also prove to be helpful to the tourist community who, unlike the residents, are not aware of localized dangers (UNISDR:14).

Figure 6.1

Source: UNISDR: Let’s learn to prevent disasters! No Date. p. 14
Children can also design their own ‘Fire’ poster to show other children and members of the community what to do in the event of a fire (see Figure 6.2).

**Figure 6.2**

![Fire poster](image)

**Source:** UNISDR. Let's learn to prevent disasters! No Date. p. 20

This could lead to inter-scholastic competitions to see which school can come up with the best logo. The winning poster can then be posted in designated places with an award going to the winning team.

Another method of introducing DME is by board games. *Riskland* is an educational board game that deals with disaster prevention. The game conveys pertinent messages that help children understand how some actions can reduce the impact of disasters, while others can increase their vulnerability (See Figure 6.3.).
Figure 6.3: Riskland.

Children can look to FEMA’s school activities and in particular to the on-going saga of *The Disaster Twins* (FEMA 2003). Here, the story line shows how the children deal with a particular episode (for example, an earthquake). At the end of each chapter is a quiz relating to what has occurred in the chapter.

Emergency Management Australia (EMA) produces excellent educational resources. Older children can produce a short school play based on a picture story book about a disaster. Still others can become a local emergency manager for a day and discuss what they would do if they were in charge of a local emergency service (EMA: 5). A cartoon strip can be drawn to show how people respond to a particular emergency. This could be placed in the local paper which then could be read by various communities (EMA: 7).

American Red Cross has an excellent disaster-related site for children. For the smaller child there are coloring books about almost any kind of disaster. For the older children can read about the adventures of the Disaster Detectives, as well as participating in different activities throughout the document.

Children can participate in evacuation and emergency plans at school. By already participating in local hazards, and risk assessments older children can present these assessments to the local disaster management center. Exercises can be devised to incorporate a make-believe case study to determine how the community can be catered for should there be a disaster. By using Alexander’s

6.2 CONCLUSION

Within this chapter teaching methods were discussed. It was discovered that although these teaching methods were to have been revamp this has not taken place. Next, a curriculum review took place. During this review it was noted that there are many instances were disaster management education could be included. Finally, several ‘creative’ DME activities were suggested not only for the older children but also for the younger students.

The roles that children play before, during and after disasters are often crucial and life-saving. As has been evidence here, children are able to participate in peer education, prepare emergency and evacuate plans, proceed with rescue efforts and first aid procedures. These are just a few of the benefits that disaster management education offers.

Other long-reaching goals, such as increased enrolment, higher literacy and retention rates are seen as positive forces within Sri Lanka. As children become more aware of their surroundings so will the community and country at large. This, then, leads to less vulnerability and more resilience in Sri Lankan citizens.
7.1 SRI LANKAN SCHOOL CASE STUDIES/QUESTIONNAIRES

The basis for this research thesis were two different survey questionnaires which, when completed could provide answers as to how teachers/NGOs, and the Sri Lankan Ministry of Education viewed disasters. To introduce the questionnaires a DME Survey Introduction was given to all (see Appendix 7.1). It is suggested here that by understanding disasters such individuals would be more able to prepare themselves for impending events.

Of primary concern was the feasibility of introducing disaster management education as a developmental activity into the Sri Lankan school curricula. This form of activity is important since Sri Lanka will continue to experience various forms of emergencies. Having continual, on-going disaster training will build capacity and resilience within children. To experience disaster education in times of disasters will not allow individuals to prepare for such events nor allow them to move forward with their lives.

7.1.1 QUESTIONNAIRE SURVEYS AND ANALYSES: Schools/NGOs and Ministry of Education

Schools

Enlisting the help of a local family who are established within the educational field (the wife being a teacher and the husband a retired principal) schools within the Galle District (see Figure 7.1) were randomly chosen to participate in the survey. Within each school there were between two to four English-speaking teachers. In total, there were twenty-five teachers within nine schools.

As part of the questionnaire (see Appendix 7.2) teachers were asked if they had received any training on how to conduct an emergency plan. 60% of participants claimed that they had received some training, leaving 40% of individuals who had never received training. Out of the 60% nearly half (28%) stated that while they had received training most would not feel confident in carrying out an emergency plan. Coupled with the 28% who felt they had received inadequate training, it could be stated that 68% did not actually receive
appropriate training. Two years later 40% of individuals have still not received any formal disaster training.

**Figure 7.1**
List of Schools Affected in the Galle District, Sri Lanka

DME includes a wide range of activities which are designed to save peoples’ lives. Of the participants surveyed 76% stated that they would like to have life saving skills included in the curriculum. These activities include First Aid, CPR, HIV/AIDS, evacuation methods, disaster definitions, mental health awareness, fire and electrical emergencies, road traffic accidents, cyclones, drought, flood, landslides and earthquake training. Of all the teachers visited, not one school had an evacuation plan in place, although 10 teachers (40%) stated they did have a pre-designated evacuation area. This means that 60% did not. Clearly, having an evacuation plan is important especially since the area is prone to a multitude of disasters.

Ninety-two percent of participants agreed that DME should be included in the school curriculum. Even though disaster preparedness subjects are to be included in the 2007 curriculum, most schools interviewed were not aware of this. However, while disaster preparedness subjects are to be a part of the
curriculum, topics such as First Aid/CPR and evacuation methods are not. (EED&P:40).

**NGOs**

Looking at NGO websites most provide email addresses. Therefore, an assumption could be made that they operate by using email. Local Sri Lankan schools do not since most do not have computers. While an identical questionnaire was emailed to sixty-two NGOs (see Appendix A.7.2) (involved in Education and Disasters within Sri Lanka), only two agencies replied.

The Save the Children respondent stated that training on emergency plans had been received and therefore felt confident in conducting an emergency plan. However, the Oxfam Novib representative claimed that while no training had been received, this individual would know what to include in an emergency plan. Both organizations would be in favour of receiving additional lifesaving skills such as information on HIV/AIDS, First Aid/CPR as well as learning various disaster definitions. Since both organizations are involved with the protection of children both wanted additional information on how such children could be protected in times of disasters when adults were not around. While each agency felt that DME *should* be included as a developmental activity they wanted to know if teachers would be capable of delivering the information as intended. Having DME included within the curriculum would give children additional coping skills and thus build up resilience both as an individual and within a group setting. However, should educational teachers be responsible for the teaching of DME?

**Ministry of Education Questionnaire:**

One hundred and sixty three schools were fully destroyed or partially damaged by the 2004 Tsunami (MoE 2005). Since that time the MoE has been busy rebuilding its institutions and procuring the much-needed supplies that were destroyed during the disaster. Regardless of this it was felt that since the MoE is a governmental institution communicating via email would have sufficed. Therefore, an email was sent with a similar questionnaire to that already sent to schools and NGOs (see Appendix 7.3). However, no reply was forthcoming.
Additionally, whilst in Sri Lanka a meeting was attempted but to no avail. As a result, no information was received from this institution.

7.1.2 Individual Case Study: Mahamaya Girl’s School, Hikkaduwa, Sri Lanka

When interviewing the two teachers at the Mahamaya Girl’s School in Hikkaduwa, Sri Lanka, it was learned that the resource teacher was the only individual to receive training on how to develop an emergency plan. Consequently, the teacher felt confident in carrying out such a plan. Both teachers felt that it would be advantageous to include peer education where teachers and students alike would be taught a particular subject and then pass on the training to others within the school community.

This school is an interesting case study since the resource teacher has already identified hazards and areas of risk surrounding the school property. To that end, a model of the school - which will eventually include the nearby railroad and other hazards - has been built with the purpose of talking about risks to school children (see Figure 7.2). By having this as a visual aid it is hoped that students will become more aware of the dangers surrounding the buildings.

Figure 7.2

7.2 REVISITING DISASTER DEFINITIONS

As mentioned in Chapter 2 it is difficult to have an all-inclusive disaster definition, even though there are merits to having a pre-defined meaning. Throughout this research ~ and most especially within the received questionnaires this has become very evident. Here, it is extremely useful to list out some of the meanings received for the various meanings do show how little (or how much) individuals know about disasters. According to teachers and NGOs, a disaster is:

'\textit{the absence of normal community organisation and safety}';

'\textit{is a hazard, which has a big impact (death, destruction) because of a high degree of vulnerability among people (but maybe also environment) in the area}';

'\textit{severely damaged to the peoples and their lives}';

an '\textit{unexpected damage of human beings as well as their belongings, property and environment}';

an '\textit{unexpected collapse in all sections such as lives, properties, jobs, environment, etc.}';

an '\textit{unexpected damage to property and human lives. People were killed, property were damaged, people lost their jobs and environment got polluted}';

'\textit{sudden happenings that caused damage to property and human beings as well as caused to kill and confuse}';

'\textit{something happen[ed] suddenly and it destroyed lives of people and property, etc.}';

'[\textit{a]} natural or artificial insult to the humanity.‘

7.2 RECOMMENDATIONS

The first aim of this research was to include DME as a developmental activity within Sri Lankan schools. While the research included only a small sample of schools it is clear that teachers want DME to be included as a developmental activity. Even though DME is to be included in the 2007 syllabus it appears that only a small amount of schools in certain areas will be selected for receive it. Many other schools will not receive \textit{any} instruction. Disaster Management
Education is a new global activity. Sri Lanka has paved the way for educational excellence. Let it lead the way with DME being taught in all schools.

The second aim of this research was to incorporate DME into Sri Lankan school curriculums. According to the Fritz Institute report (2005:3), only 38% of all NGOs have received disaster training since the 2004 Tsunami. Therefore, they have not gained sufficient information and/or instruction with regard to DME. In a personal interview Bitter states that while there are qualified senior advisors from different agencies who may or will be teaching disaster preparedness subjects, such teaching has been only for short periods (D. Rea, 16 November 2006). Instead, it is suggested here that post-graduate disaster management students be enlisted to teach DME and done so in greater length and scope. There are qualified individuals (such as those graduating from Coventry University, UK) who are able to teach the subject, especially since they have had extensive training. To that end, internships should be developed with accredited universities linked to the Sri Lankan Ministry of Education and Disaster Management Centre for the purpose of teaching DME.

Disaster management is a complex issue. Teachers - and more importantly students - deserve to have a sound knowledge about catastrophic events occurring in their country. While Bitter states that educational material has been, and continues to be gathered by GTZ (D. Rea 16 November 2006), such teaching is still not in schools. This is unfortunate particularly since it is nearing the end of 2006 – two years after the tsunami.

A third aim of this research was to incorporate DME into Sri Lankan schools for the purpose of establishing disaster response teams. Such teams are usually made up of individuals with First Aid/CPR and life saving skills which can be obtained through peer education. According to Dhanasir there were over 1000 such individuals in Sri Lanka prior to the tsunami. However, Dhanasir states that many of these individuals have migrated to countries like Dubai after the tsunami to seek employment (Dhanasir: Personal Interview). While much of this research was spent on interviewing teachers, it was learned that there are individuals still in Sri Lanka who could volunteer their services by teaching First Aid/CPR and life saving skills because they have already been trained in this area (see Appendices 6 and 7). A good starting point would be to contact the
Life Saving Association of Sri Lanka (based in Colombo) to collect names of current residents to begin a volunteer drive to initiate First Aid/CPR and life saving skills within schools. This would fulfill the aim of initiating disaster response teams within schools.

The fourth aim was to increase disaster awareness within Sri Lanka. While visiting the schools it was noted that while very little information had been passed onto schools, there was concern about safety of students and staff. As was seen in the questionnaires, many teachers had varying definitions about what constituted a disaster and what they could do about such events. It is therefore imperative that DME training be provided to all schools and not just a selected few.

7.3 CONCLUSION

As is seen in the U.K., school children have the opportunity of enrolling in First Aid/CPR, Lifesaving and other disaster preparedness courses (British Red Cross, No Date). While there has been evidence of First Aid and CPR courses being taught in Sri Lanka, little has been done within the last two years to re-introduce this. However, there are students who, according to UNICEF’s report have had the necessary training. Throughout the questionnaires it has been seen that there has been very little or no disaster preparedness training in sample schools. As mentioned earlier, if DME is to be effective it needs to be seen as a consistent, ongoing endeavour. Children need to receive regular, dependable lessons on how to protect themselves and those around them. While there have been a number of floods and landslides since the 2004 tsunami (WHO 2006) there will be other more serious events. Should the world wait until that time to act, or should action be taken today?
Figure 7.3. Boys at Seenigama Junior School, Galle District, Sri Lanka. Rea/November 2006
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Appendix 4.1: Organization Structure of the Disaster Management Centre

Source: Adopted from the Report of Sri Lankan Parliament Select Committee on Natural Disasters 2005
APPENDIX 7.1

DISASTER MANAGEMENT EDUCATION SURVEY INTRODUCTION:

My name is Deborah Rea. I am a post-graduate student at Coventry University, United Kingdom where I am currently attending the one year Taught Msc Disaster Management course. The final component on the Course requires the preparation of a substantial piece of independent work on a dissertation. For this work, I have elected to research education in Sri Lanka with a focus on evaluating likely changes after the 2004 Tsunami. I would very much like your assistance in my research work.

The findings of my initial research identified that Disaster Risk Education has now been included in schools (that is, looking at particular risks within the school environment). However, it is understood that incorporating Disaster Management Education (DME) has never been included in the school curriculum.

For my dissertation topic I am therefore looking at Sri Lanka to see if it would be feasible to incorporate Disaster Management Education into the school curriculum. I am particularly interested in doing this as a developmental activity rather than a relief activity (where assistance comes much later within the disaster cycle model). It is envisaged that DME would include such topics as preparing an emergency plan, practicing fire drills and evacuation methods, and discussing the meaning of a disaster. The premise here is to teach upper-end primary school and all secondary school children with a method of protecting themselves in possible future disasters. It is anticipated that educational methods used would be of a participatory nature where children will not only learn through taught modules but through activity sessions such as specifically-designed disaster-related board games.

In order for me to learn how NGOs, educators, and governmental officials view disasters within Sri Lanka, I am including a two-page survey sheet. The purpose of the questionnaire is to find out your opinions about Disaster Management education and whether it would be relevant to teach in Sri Lanka schools. The survey will take approximately twenty minutes to complete. I
would therefore be grateful for your assistance in answering the attached questionnaire. After its completion I would appreciate your returning it to me via email. Where applicable, please highlight the ONE option that best represents your answer. Again, thank you for your assistance.

Deborah Rea
APPENDIX 7.2

QUESTIONNAIRE FOR MINISTRY OF EDUCATION:

Date: ______________________________

1. Does the Ministry write emergency plans?
   [ ] Yes [ ] No

2. Do all Sri Lankan schools have emergency plans?
   [ ] Yes [ ] No
   If Yes, how often are these plans reviewed?
   [ ] Every six months [ ] Every Year [ ] Every Two Years [ ] Never

3. If each school has an emergency plan, does staff have knowledge and access to it?
   [ ] Yes [ ] No
   If yes, does each staff person play a certain role within such plan?
   [ ] Yes [ ] No

4. If each school has an emergency plan, do students have knowledge and access to it?
   [ ] Yes [ ] No

5. After a disaster are parents compensated for school-related losses?
   [ ] Yes [ ] No

6. Would the Ministry be willing to introduce Disaster Management Peer Education where a group of students are taught life-saving skills and who would then teach other students these techniques?
   [ ] No [ ] Maybe [ ] Yes

7. How often are risk assessments performed on schools?
   [ ] Every month [ ] Every six months [ ] Every year [ ] Never

8. How often are children taught to evacuate buildings?
   [ ] Every month [ ] Every six months [ ] Every year [ ] Never
9. Have risk assessments been performed on vulnerable school areas (i.e., the coastal region, the north-east province, etc.)?

[ ] Yes    [ ] Occasionally    [ ] No

10. Has the Ministry ever use finger-printing methods for purposes of identifying students?

[ ] Yes    [ ] No

11. How does the Ministry define a disaster?

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

12. Name three things where the Ministry has made significant achievements with regard to primary and secondary education:

a. _______________________________________________________________________
   _______________________________________________________________________

b. _______________________________________________________________________
   _______________________________________________________________________

c. _______________________________________________________________________
   _______________________________________________________________________

13. What kind of training are head teachers required to take?

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

Thank you for completing this survey. Please do not hesitate to contact me at deborahrea2000@yahoo.com if you have questions. From data received, disaster education topics will be compiled. These could later be used in classrooms for the purpose of teaching Disaster Management education courses within the Sri Lankan school system.
APPENDIX 7.3

QUESTIONNAIRE FOR SCHOOLS AND NGOs

Name of School/Organization                  To-day’s Date:
________________________________________  ___________________

1. Have you ever had any training on how to conduct an emergency plan?

[  ] Yes  [  ] No

If Yes, do you feel confident in carrying out such a plan?

________

2. If No, would you be willing to learn some additional life-saving plans?

_____________________________________________________________

3. Would you know what to include in an emergency plan?

[  ] Yes  [  ] No

4. What would you consider to be the most important topics for disaster management education? For example, would topics such as HIV/AIDS, First Aid/CPR disaster definitions by relevant to your teaching methods? If not, what other topics would you include?

_________________________________________________________________
_________________________________________________________________
_________________________________________________________________
_________________________________________________________________
_________________________________________________________________

5. Should disaster management education be included in the Sri Lanka school curriculum?

[  ] Yes  [  ] No

If Yes, how would you incorporate it into the curriculum?

_________________________________________________________________
_________________________________________________________________
_________________________________________________________________
_________________________________________________________________
_________________________________________________________________

6. Would you use disaster management educational methods in classrooms?
[ ] Yes [ ] No

If No, please explain why:
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

7. Should disaster management education be considered as a development activity where such education is taught prior to a disaster?

8. Peer Disaster Management Education is education that is first taught to a group of students who then teach other students. How useful would this be in schools?

[ ] Not Useful [ ] Somewhat Useful [ ] Useful [ ] Very Useful

9. What does the word ‘disaster’ mean to you?
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

10. If your colleague was injured while out in the field, would you know how to assist him/her?

   ___ Yes      ___ Maybe      ___ No

11. Do you have monthly practice evacuation/fire drills?

    [ ] Yes [ ] No

12. If there is a disaster during school hours is there a pre-designed area to gather students outside the school building?

    [ ] Yes [ ] No

Thank you for completing this survey. Please do not hesitate to contact me at deborahrea2000@yahoo.com if you have any questions. From data received, disaster education topics will be compiled which could then be used in classrooms for the purpose of teaching Disaster Management education courses within the Sri Lankan school system.