

Geography / Modern Studies
Earthquake and Tsunami in the Indian Ocean
Long-term sustainable recovery
(Standard Grade; Intermediate 1 and 2)



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Background

On 26 December 2004 the Indian Ocean tsunami brought catastrophe to the human, physical and natural environments and killed over 250,000 people in cities, towns and villages along the coastlines of the region in southern Asia and as far away as East Africa, including India, Indonesia, Sri Lanka, Thailand and the Maldives, as well as the Seychelles, Tanzania and Somalia among others. In some cases it completely engulfed whole islands isolated in the Indian Ocean.

Experts estimate that environmental, social and economic recovery from the Indian Ocean disaster will take years and in some cases recovery will not be possible. The impact on the people and communities affected will last for decades if not lifetimes. The impact on the physical environment may be permanent.

Nothing could have stopped the earthquake and the resulting tsunami from happening as the natural Earth's forces that caused the disaster are beyond human control. However, commentators believe that it is likely that the impact, the extent of physical destruction and number of deaths caused by the tsunami could have been reduced substantially if the countries and people affected had been prepared for and warned of the impending tsunami and if the impact of natural events such as tsunamis had been taken into account when planning the location and construction of the local communities and the tourist infrastructure so close to the sea.

Case study: what is needed for recovery?

The Indian Ocean tsunami, the international response and aid effort have raised a number of important issues to be tackled including the challenge of ensuring that the generosity of others will count and in a sustainable way. In considering what is required for recovery many commentators agree that the following is needed.

Reconstruction and recovery of socio-economic infrastructure

Current efforts to provide shelter, clean water, sanitation and healthcare need to be sustained. National authorities need to work with local people and the international community to rebuild the livelihoods and communities.

Substantial aid and investment will be required to enable sustainable reconstruction and recovery of socio-economic infrastructure. National and international governments must keep their pledges and deliver the financial and other assistance promised when the disaster happened.

There needs to be good governance in planning the reconstruction of socio-economic infrastructure. Many commentators argue that those in power should be ethical in planning and decision making on the design and location of reconstructed buildings, communities and tourist areas to minimise the destructive impact of the forces of nature in future.

Existing buildings and ageing infrastructure must be upgraded, strengthened and improved to increase resistance to physical forces of tsunamis and earthquakes, especially hospitals and schools to avoid a double disaster. Strict building codes and construction standards need to be put in place and must be complied with.

Disaster reduction system

- The global community was shocked to find out that thousands of lives could have been spared if tsunami alert systems had been in place in the Indian Ocean region. It is now expecting that decisions on initiatives to rebuild the region will include establishing a system to protect against future disasters in the region.
- Although there seems to be little argument against the need for some form of disaster reduction system being put in place there is currently an international debate about what system should be put in place and how it should be funded and managed.

Lessons learned

- Valuable lessons learned from past experiences can be used for emergency response, recovery and disaster reduction. Those in power can use these lessons of the past when making decisions on recovery and disaster reduction in order to limit the loss of life and damage from future inevitable natural disasters.
- At the United Nations World Conference on disaster recovery held in Kobe on 18 January 2005, the tenth anniversary of the Kobe earthquake, the Japanese Prime Minister Junichiro Koizumi spoke of how the international community could learn lessons from the past to help make informed decisions for the future and offered to share the lessons of its own experience with the international community to support the development of disaster reduction programmes.

Web link:

Surviving a Tsunami – Lessons from Chile, Hawaii, and Japan:
<http://pubs.usgs.gov/circ/c1187/>

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In considering what is needed for recovery the United Nations in the Kobe Report calls for governments to:

... put in place a comprehensive framework for risk reduction for development of early warning systems, improved land use and settlement planning, better management of natural resources, safer building practices, effective risk transfer mechanisms and innovative financing mechanisms to address pre-disaster protective measures and post-disaster rehabilitation and reconstruction.

and

... a bilateral, regional and international cooperation framework to facilitate the sharing of good practices, developing common strategies and exchanging of information needs to be established.

United Nations, Kobe Report (draft)



Two girls smiling (© Red Cross)

Case study: disaster reduction system for the Indian Ocean region

There seems to be little argument among the global community regarding the need for a disaster reduction system. The real debate is about what system should be put in place and how it should be funded and managed.

Tsunami early warning system

Many believe that thousands of lives might have been spared in the Indian Ocean tsunami if adequate and effective technology was in place to warn the people of the tsunami before the killer waves struck.

The UN reports:

The Pacific Ocean has such systems in place, as 80% of large earthquakes occur around this huge ocean. The massive earthquake that caused the tsunami was detected and located just a few minutes after it occurred. The Pacific Tsunami Warning Center in Hawaii tried desperately to contact the affected countries across in the Indian Ocean. But there was no system in place in the region and the warnings did not reach the millions of people living along the affected coastlines.

Source: United Nations (<http://www.unisdr.org/ppew/>)

A new service announced by the Hawaii-based UNESCO/IOC International Tsunami Information Centre transmits Pacific Ocean tsunami warnings to official subscribers' e-mail addresses about 15 minutes after an earthquake has occurred.

Japan, which has a long history of tsunamis, has a warning system that uses a network of seismic stations and water-borne sensors to issue a warning within three minutes of an earthquake. Japan is involved in the setting up of the early warning system for the Indian Ocean in collaboration with other countries that have the technical expertise.

Benefits

- Earthquake can be detected and warnings issued before the tsunami strikes.
- Warning issued to all countries likely to be affected should be received almost instantaneously even though these countries might be thousands of miles apart from each other.
- Early warning systems give people time to get to safety before the disaster happens.

Disadvantages

- Experts advise that the success of a warning system depends largely on smooth regional coordination and cooperation. It is based on open communication and the commitment to share vital information, which might be difficult in areas where there is conflict.
- The technology also needs to be maintained/kept in good working order and at times updated and this can be expensive.
- False alarms can lead to complacency and real warnings might be ignored.

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It costs a lot of money to set up effective early warning systems.

The tsunami warning system

<http://www.geophys.washington.edu/tsunami/general/warning/warning.html>

It also requires cooperation between people in charge of social, political, economic, cultural and engineering issues.

In response to the tsunami disaster in the Indian Ocean, a special session was held at the World Conference on disaster recovery in January 2005 where delegates pledged their support to create a regional tsunami early warning system in the Indian Ocean. United Nations experts also decided to create a global early warning system to reduce the impact of natural hazards on vulnerable communities and to increase international cooperation to help save lives and livelihoods.

The new warning system will draw on the experience of the Pacific Ocean tsunami early warning systems:

<http://www.prh.noaa.gov/ptwc/bulletins.htm>

It will make use of the existing coordination mechanism of the Intergovernmental Oceanographic Commission (IOC) of the United Nations Educational, Scientific and Cultural Organisation (UNESCO).

<http://ioc.unesco.org/iocweb/index.php>

Education

Many argue that a technological warning system has limitations and public awareness raising and public education programmes are more important in protecting against such destructive forces of nature. Supporters of this argument point out the newspaper reports of a 10-year-old British girl sending a hundred people on one Thai beach to higher ground after seeing the sea recede, because she had been taught about tsunamis in school:

<http://ioc.unesco.org/itsu/contents.php?id=150>

The UN wants disaster reduction to be included in school curricula worldwide. 'A Coalition on Education' led by UNESCO will take the lead to incorporate disaster reduction education into school programmes and to make school buildings safer. In Japan, based on the experience from Kobe, communities have been trained and prepared in advance to face disasters.

Benefits

- People will understand natural hazards and know how to prepare for them and act when they happen.
- Children will know and understand what natural hazards are and which ones might affect them. They will see disaster-preparedness as part of their basic life skills.
- Costs are likely to be much lower than costs of an early warning system.

Disadvantages

- Public awareness campaigns do not always get the message over effectively, and need to be repeated regularly.

Comprehensive disaster reduction system

Many argue that an effective early warning system is not enough and a comprehensive approach is needed. Warnings are useless unless hazard-resistant socio-economic infrastructure is in place. People need to know how to be prepared for disaster and how to react if a warning is given, including where to go to for safety.

NOAA Coastal Services Centre reports:

After the devastating losses from the 1946 and 1960 tsunamis, Hawaii built a state-wide tsunami emergency response system. The system includes unified state and county emergency plans, evacuation maps that are published in telephone books, a coordinated state-wide siren system tied into an emergency alert system, and frontline emergency response personnel.

The UN argues for a complete and effective early warning system which comprises four elements:

- Prior knowledge of the risks faced by communities
- Technical monitoring and warning service for these risks
- Dissemination of understandable warnings to those at risk
- Knowledge and preparedness to act.

'What's early warning?' – on the UN's website Platform for the Promotion of Early Warning

<http://www.unisdr.org/ppew/whats-ew/basics-ew.htm>

UN WFP has developed the Humanitarian Early Warning Service (HEWSweb), a new website bringing together on one web platform the vast amount of information available from technical institutions on each type of natural hazard.

http://www.hewsweb.org/home_page/default.asp

Funding

The UN proposed a new funding initiative to meet the global challenge posed by natural hazards, recommending that countries earmark a minimum of 10 per cent of the billions of dollars spent on disaster relief for disaster risk reduction.

UNESCO has already outlined plans for a \$30 million system for the Indian Ocean, to be established by 2006, before being rolled out globally by 2007.

UN/ISDR website press release (PDF download)

<http://www.unisdr.org/wcdr/media/pressrelease/PR-200507-ROUND-UP.pdf>

Case study: turning point in improving global aid

Could the tsunami disaster be a turning point for the world? (The Independent)

http://news.independent.co.uk/uk/this_britain/story.jsp?story=597488

Politicians and commentators comment on whether 2005 might see a new determination to tackle global poverty.

The Indian Ocean disaster and unprecedented response highlights that there is a relationship between disaster reduction, sustainable development and poverty reduction. This prompts some difficult questions. One important question is whether the response to the tsunami disaster will bring about a shift in focus in the Government's aid policy to providing aid that will benefit all developing countries, not just those hit by the recent disaster. Speaking in the House of Commons, while Prime Minister Tony Blair commended the unprecedented response to the Indian Ocean tsunami disaster, he also highlighted the plight of the African nations and called for a similar sentiment and action in the response to the disaster faced by the people of the African continent on a regular daily basis.

If we were, as a result of the strength of our sentiment towards the victims of the tsunami, to turn that same sentiment into action on Africa, then perhaps those whose faith has been shaken by the monstrous consequences of the event we have witnessed would have it renewed. There could be no greater good to come out of it.

Tony Blair

Others share Tony Blair's concerns. At the World Conference on Disaster Recovery in Kobe, Japan, in January 2005 governments adopted the Hyogo Framework for Action: 2005–2015. The framework calls on governments to make disaster risk a priority on their political agendas and national policies in order to help strengthen the ability of all disaster-prone countries to reduce the risks facing millions of people who are exposed to natural disasters, and to invest heavily in disaster preparedness.

At meetings with the press at the World Economic Forum in Davos, Switzerland, Prime Minister Tony Blair, Musician Bono, Bill Gates, founder of Microsoft, and Bill Clinton, former USA President, all highlighted the plight of the African nations and the need for the international community working together to find a solution to alleviate the ongoing poverty and suffering.

However, some of those calling for increased aid to Africa are critical of the donor community's apparent double standards. The general view is that the international community's focus on the Indian Ocean disaster highlights its increasingly apathetic attitude towards the bigger, more silent disaster happening in Africa and elsewhere in the world every day.

In his article 'Six Million Dying of AIDS Amid Tsunami Largesse', Thalif Deen, Inter Press Service News Agency reporter, reports:

Ann-Louise Colgan of the Washington-based Africa Action noted that a massive and rapid resource mobilisation for the tsunami victims stands in stark contrast to the minimal level of global attention and resources given to crises that are less visible but equally deadly in Africa, such as HIV/AIDS.

Referring to the amount of donations contributed to the tsunami disaster, Stephen Lewis, UN Secretary-General Kofi Annan's special envoy for HIV/AIDS in Africa, said the Global Fund on AIDS, Tuberculosis and Malaria received an identical amount of about 5.9 billion dollars in pledges from the donor community. The difference between the two responses is that it took three years not three weeks to raise the same amount of money to combat a disease devastating millions of lives in Africa. He added that it took but days for the tsunami-affected

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countries to be granted a debt moratorium, but time and time again the rich industrial nations refuse to cancel African debts. Even when they agree that it must be done, they can't agree on a formula which would make it possible.

Jeffrey Sachs, Director of the UN Millennium Project, noted that every month 150,000 children in Africa, if not more, were dying from malaria, a largely preventable and utterly treatable disease. He commented that it took four months to receive any meaningful contributions for the UN's appeal for international assistance to resolve the humanitarian crisis in Darfur, Sudan. It also appeared that the issues of governance and corruption are being used as an excuse not to sustain or increase development assistance to African nations.

Adapted from 'Six million dying of AIDS amid tsunami largesse', Thalif Deen

Inter Press Service News Agency

<http://www.ipsnews.net/interna.asp?idnews=27187>

Web resource links

What is needed for sustainable recovery?

United Nations, Lobe Report (draft)

High Level Round Table 3: Emerging risks: what will tomorrow hold? (PDF download)

<http://www.unisdr.org/wcdr/thematic-sessions/hlrt-reports/high-level-round-table-3.pdf>

Oxfam

Oxfam has drawn its own conclusions about what is needed and some of the points are given below.

http://www.oxfam.org.uk/what_we_do/emergencies/country/asiaquake/lessons260105.htm

Reconstruction and recovery of socio-economic infrastructure

Tsunami reconstruction (UN Food and Agriculture Organisation)

<http://www.fao.org/tsunami/>

Disaster reduction systems

Nations call for safer hospitals and schools to prepare for disasters.

Press release from the World Conference on Disaster Reduction 2005 (PDF download)

<http://www.unisdr.org/wcdr/media/pressrelease/PR-200506-schools.pdf>

United Nations International Strategy for Disaster Reduction

<http://www.unisdr.org/>

Early warning systems (United Nations)

<http://www.unisdr.org/ppew/>

UN launches plans for global early warning system on natural disasters

<http://www.un.org/apps/news/story.asp?NewsID=13077&Cr=natural&Cr1=disaster>

United Nations to coordinate early warning system for Indian Ocean (PDF download)

<http://www.unisdr.org/wcdr/media/pressrelease/PR-200505-IEWP.pdf>

Global early warning system launched at conference on disaster reduction.

Full press release (PDF download)

<http://www.unisdr.org/wcdr/media/pressrelease/PR-200504-IEWP.pdf>

Plan for global natural disaster warnings launches (New Scientist)

<http://www.newscientist.com/channel/earth/tsunami/dn6900>

Global Disaster prevention needed, UN's Egeland Says (Bloomberg)

<http://www.bloomberg.com/apps/news?pid=10000101&sid=a8xQUJGiMlbo&refer=japan>

Tsunami warning system

<http://www.geophys.washington.edu/tsunami/general/warning/warning.html>

http://www.prh.noaa.gov/itic/more_about/warning_systems.html

Lessons of the past

The Japanese and Hawaiian experiences.

<http://www.unisdr.org/wcdr/basic-inf/why-hyogo.htm>

Surviving a Tsunami -- Lessons from Chile, Hawaii, and Japan

<http://pubs.usgs.gov/circ/c1187/>

Technology

Text message broadcasts could provide disaster alerts (New Scientist)

<http://www.newscientist.com/channel/earth/tsunami/dn6852>

Satellite imagery helping tsunami relief effort (New Scientist)

The pictures can reveal where aid is most needed and may also yield insights into the dynamics of the deadly waves.

<http://www.newscientist.com/channel/earth/tsunami/dn6847>

Can satellites aid earthquake predictions? (National Geographic)

http://news.nationalgeographic.com/news/2004/07/0720_040720_earthquake.html

Education

Education is key to tsunami safety (National Geographic)

http://news.nationalgeographic.com/news/2005/01/0124_050124_tsunami_warn.html

http://news.nationalgeographic.com/news/2005/01/0118_050118_tsunami_geography_lesson.html

FEMA tsunami fact sheet

<http://www.fema.gov/hazards/tsunamis/tsunamif.shtm>

FEMA for Kids – tsunami information page

<http://www.fema.gov/kids/tsunami/>

Comprehensive system

What's early warning? (UN website)

<http://www.unisdr.org/ppew/whats-ew/basics-ew.htm>

Tsunami: will we be ready for the next one? (New Scientist)

<http://www.newscientist.com/channel/earth/tsunami/mg18524825.000>

Response to disasters affecting other areas of the world

Africa 2005 Christian Aid website

<http://www.christian-aid.org.uk/africa2005/>

Africa: Tsunami side-effects

<http://www.africafocus.org/docs05/tsun0502.php>

Emergencies around the world (Oxfam website)

http://www.oxfam.org.uk/what_we_do/emergencies/index.htm

Africa TB and HIV: Fighting a dual epidemic in Africa (DFID website)

<http://www.dfid.gov.uk/casestudies/files/africa/zambia-protest.asp>

Scientists help tackle food shortages in the Sahel (DFID website)

<http://www.dfid.gov.uk/casestudies/files/africa/niger-sahel.asp>

USAID Africa humanitarian crisis

http://www.usaid.gov/locations/sub-saharan_africa/africa_humanitarian_crisis/

World disasters news map

<http://www.mapreport.com/disasters.html>

Turning Point – tackling global poverty

Kobe Report (draft)

High Level Round Table 3: Emerging risks: what will tomorrow hold? (PDF download)

<http://www.unisdr.org/wcdr/thematic-sessions/hlrt-reports/high-level-round-table-3.pdf>

Politicians and commentators comment on whether 2005 might see a new determination to tackle global poverty

Could the tsunami disaster be a turning point for the world? (The Independent)

http://news.independent.co.uk/uk/this_britain/story.jsp?story=597488

BBC news story: Africa loses aid to tsunami victims

http://news.bbc.co.uk/2/hi/programmes/file_on_4/4258443.stm

BBC news story: Charities struggling to spend tsunami funds

http://news.bbc.co.uk/2/hi/uk_news/4265261.stm

EU heroes and villains

Which countries are living up to their promises on aid, trade, and debt?

http://www.oxfam.org.uk/what_we_do/issues/debt_aid/eu_heroes_villains.htm

Questions

1. Explore the possibility that the disaster could have been prevented. Include consideration of:

- power of the natural forces involved
- location of human settlements and tourist areas
- design and structure of buildings
- political and socio-economic features of the communities hit
- nature and extent of the impact
- preventative actions people could have taken
- preventative actions national and local authorities could have taken.

Create a mind map to show your thinking. Do you think that the disaster could have been prevented? Give reasons for your answer.

You might find it helpful to use the background papers and case studies for the previous sections.

2. Experts estimate that environmental, social and economic recovery from the disaster will take years and in some cases recovery will not be possible. Substantial aid and investment will be required to enable reconstruction and recovery of socio-economic infrastructure.

Prepare a list of what is needed to ensure effective reconstruction and recovery in the affected areas. In your answer make some suggestions of how the international community can help.

3. You work for the Japanese Government's Disaster Reduction Programme. The Prime Minister has asked you to produce a presentation to promote the benefits of setting up an early warning system for the Indian Ocean. In your presentation include

- an explanation of what an early warning system is
- the benefits of using past experience
- an outline of how an early warning system could have helped the people and countries hit by the Indian Ocean tsunami
- an estimate of much it might cost to set up
- what Japan will provide to help to set up the system.

4. Produce public information materials on preparing for and surviving a tsunami, e.g. leaflets, posters, TV/radio adverts. Include information on what a tsunami is, how it acts, the damage that tsunamis can do and a note of dos and don'ts in preparing for and surviving a tsunami.

You might find it helpful to view the web resources at the web links provided.

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5. *The impact of the recent Asian tsunami catastrophe clearly demonstrates the ways in which the lives of people throughout the world are linked. While the disaster affirms difference and diversity it also shows a remarkable generosity of spirit and resource from a great range of nationalities and agencies. Additionally, while the importance of emergency disaster relief is evident, there is also a more fundamental realisation of the need to work towards a more just and sustainable world and to address the underlying causes of poverty and injustice.*

Spokesperson

The Education for Global Citizenship Unit, University of Glasgow

Read the statement above and then complete the following

Do you agree or disagree with the statement that the tsunami disaster clearly demonstrates the ways in which the lives of people throughout the world are linked?

Provide evidence to support your view.

6. The Indian Ocean disaster will not change attitudes. People and governments will continue to respond to the disasters that hit the headlines. The plight of the African nations will continue.

Relief worker

Give arguments for and against the above statement.

WebQuest: disaster reduction system

Introduction

The Indian Ocean region does not have a tsunami alert system and much of the global community are expecting that decisions on initiatives to rebuild the region after the initial aid efforts will include putting experts and technology in place to establish an effective tsunami early warning system for the whole region.

Many argue that an early warning system has limitations and that more important in protecting against such destructive forces of nature are public awareness raising and public education programmes.

However, there appears to be little argument against the need for some form of disaster reduction system being put in place. The real debate is about what system should be put in place and how it should be funded and managed.

Task

You are an expert on Disaster Reduction Systems with the Pacific Tsunami Warning Center in Hawaii. The United Nations has asked you to assist it in developing a disaster reduction system for the Indian Ocean region.

Your task will be to investigate and assess the suitability of different disaster reduction systems currently in use. Based on your findings you will draw conclusions and based on these conclusions you will make a recommendation for the disaster reduction system that should be developed.

Process

You can work on your own or in partnership with others. Your teacher will tell you how this will be organised.

Before you begin decide/agree with your partners the following:

- a fair allocation of research and presentation tasks among the partners (e.g. research by area or web resource)
- the arrangements for progress update and feedback sessions with your partners, including communication medium (e.g. regular meetings (face to face/VC), discussion forum, e-mail communication or weblog)
- deadlines for completion of individual elements of the task and final deadline (if not already set by your teacher)
- how you will present your findings and recommendations (e.g. written report, video or PowerPoint presentation).

Background preparation

- Read *Long-term Sustainable Recovery* background and case study materials.
- Complete *Long-term Sustainable Recovery* activity questions. (This is optional and your teacher will let you know if you are to carry out this task.)
- Research into each area listed below using the web resources provided:
 - Early warning systems
 - Education
 - Comprehensive System.
- Record your findings using the research template.
- Participate in update/feedback sessions.

Analysis of findings

On completion of the research, conduct an analysis of your findings. Define the main issues from different perspectives and draw your main conclusions. Based on your conclusions make recommendations for a disaster reduction system. If you are working with others get together with your partners to share and discuss findings and conclusions and recommendations.

Prepare your report, including:

- Introduction
- Briefing on the disaster and impact
- Summary findings on:
 - Tsunami early warning systems
 - Education
 - Comprehensive system
- Conclusion
- Recommendations for action
- Credits (e.g. note of sources used, partners you worked with, other people who helped).

Deliver your presentation (oral, PowerPoint, AV presentation; circulate written reports).

Resources

Use the web resource links given in this document.

Conclusion

Summary record of achievements

By completing this WebQuest you will have developed your skills of enquiry. You will also have developed your knowledge and understanding of disaster reduction systems, their importance in relation to achieving long-term sustainable recovery in disaster-affected areas and the relative benefits and disadvantages of the current systems in use and the need to ensure that disaster reduction systems adopted by national and international governments are appropriate for the areas at risk.

Evaluation

Your teacher will tell you how your work will be evaluated and how your achievements will be recorded.

Reflection

Reflect on the following. Use the template provided to record your thoughts.

- What has been achieved
- Own contribution
- Contribution of partners
- Own level of interest and motivation
- Level of interest and motivation of others
- What you would do differently and why
- WebQuest activity

WebQuest: turning point

Introduction

Those calling for increased aid to Africa are critical of the world's seeming double standards. The general view is that the international community's continued focus on the Indian Ocean disaster on 26 December 2004 highlights its increasingly apathetic attitude towards the bigger, more silent disaster happening in Africa and elsewhere in the world every day.

One important question is whether the extraordinary response to the tsunami disaster will signal a turning point for the world, and a change of aid policy. Will governments provide aid that will benefit all developing countries and not just those hit by disasters?

Task

Your task is to consider the case for and against the view that the Indian Ocean tsunami disaster has been a turning point for the world. To help you to do this you will take on a character role (see list below). In your character role you will investigate and draw conclusions on the following hypothesis.

The extraordinary international response to the Indian Ocean disaster indicates a turning point for the world: a change to priorities of governments towards aid policies that will benefit all developing countries not just those suffering from sudden disasters that hit the headlines.

You will investigate the hypothesis and define the main issues from different perspectives (e.g. politicians, non-governmental organisations, the United Nations, business people, special envoys, pressure groups, environmental/political activists, people affected by the disasters, etc). From this investigation you will draw your main conclusions regarding the given hypothesis.

You will prepare a presentation on the main issues and conclusions from your character's perspective. You will deliver your presentation to delegates at an international conference on global aid and argue your case for or against the viewpoint. A final conclusion will be drawn by delegates based on the conference presentations.

Examples of character roles

- **African ambassador** – viewpoint is that the western world has turned its back on Africa.
- **International business person** – agrees with the African Ambassador to an extent but thinks that money is the answer.
- **Politician from a G8 country** – wants to help the African nations but is concerned that absence of good governance and conflict creates a continual barrier to development.
- **World political leader** – wants to cut through all the red tape and tackle the problem head on.
- **United Nations envoy** – concerned about donor apathy in relation to Africa.

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- **Political activist** – wants cancellation of all debts.
- **NGO representative** – tired of facing barriers when trying to provide aid especially to sub-Saharan Africa.
- **African expert on AIDS** – provides evidence of the needs of African nations, self-help activities and the problem with assistance that arrives too late or is not appropriate.
- **Tsunami survivor from Aceh, Indonesia** – provides evidence of the benefits of receiving substantial and immediate international assistance.

Process

You will work in partnership with others. Your teacher will tell you how this will be organised.

Before you begin, agree the following with your partners:

- allocation of role play characters from the list given or your own alternative characters agreed with your teacher. Make sure that there is a good mix of characters who will give evidence for and against the viewpoint
- a fair allocation of research and presentation tasks among the team (e.g. research by area or web resource)
- arrangements for progress update and feedback sessions with your partners, including communication medium (e.g. regular meetings (face to face/VC), discussion forum, e-mail communication or weblog)
- deadlines for completion of individual elements of the task and final deadline (if not already set by your teacher)
- how you will present your findings and recommendations (e.g. written report, AV, PowerPoint presentation).

Background preparation

- Read background papers and case studies for *Long-term Sustainable Recovery*.
- Complete activity questions. (This is optional and your teacher will let you know if you are to carry out this task.)

Research

Process

- Research into each area listed below using the web resources provided.
 - Response to the Indian Ocean tsunami disaster (*)
 - Disasters affecting other areas of the world, particularly Africa
 - Response to disaster in other areas compared with the Asian tsunami disaster

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- Statements, reports, opinions and actions of politicians, NGOs, UN, business people, special envoys, political activists, people affected by the disasters, etc.
- Record your findings using the research template.
- Participate in update/feedback sessions.
- When your research is complete, share your final results with your partners.

Analysis of findings

On completion of the research, conduct an analysis of your findings. Define the main issues from different perspectives and draw your main conclusions. Based on your conclusions, make recommendations for a disaster reduction system. If you are working with others, get together with your partners to share and discuss findings and conclusions and recommendations.

Presentation

Prepare your report/presentation. Include the following:

- Introduction (include a note introducing yourself in your character role, a brief outline of the structure of your presentation and whether you are arguing for or against the viewpoint)
- Overview of Indian Ocean disaster and other natural disasters currently happening around the world
- Summary findings on:
 - response to Indian Ocean tsunami disaster
 - response to other disasters compared with the Indian Ocean tsunami disaster
 - statements, reports, opinions and actions of politicians, NGOs, UN, business people, special envoys, political activists, people affected by the disasters, etc.
- Conclusion
- Credits (e.g. note of sources used).

Deliver your presentation to conference delegates at the international conference on global aid.

When all presentations have been made, participate in a discussion of the presentations with the other delegates and, based on this, draw your main conclusion.

Resources

Web resource links for:

- Turning Point – tackling global poverty
- Links in *Emergency response and relief effort*.

Conclusion

Summary record of achievements

By completing this WebQuest you will have developed your online investigative enquiry skills. You will also have developed your knowledge and understanding of the impact of the Indian Ocean tsunami disaster and global response and that there is a relationship between disaster reduction, sustainable development and poverty reduction.

Evaluation

Your teacher will tell you how your work will be evaluated and how your achievements will be recorded.

Reflection

Reflect on the following. Use the template provided to record your thoughts.

- What has been achieved
- Own contribution
- Contribution of partners
- Own level of interest and motivation
- Level of interest and motivation of others
- What you would do differently and why
- WebQuest activity.