



**ADVANCED GCE**  
**GEOGRAPHY B**  
Issues in the Environment

**2691/RM**

**RESOURCE MATERIAL**

**Monday 21 June 2010**  
**Afternoon**

**Duration: 2 hours**



**INSTRUCTIONS TO CANDIDATES**

- Do not hand in this Insert at the end of the examination. It is not required by the Examiner.

**INFORMATION FOR CANDIDATES**

- This document consists of **12** pages. Any blank pages are indicated.

Fig. 1

# APPEAL FOR THE PAKISTAN EARTHQUAKE SURVIVORS

Nearly two months on from the devastating earthquake in Pakistan the lives of thousands of families are threatened by freezing temperatures and heavy snows. Please give whatever you can *today* to help Concern Worldwide deliver life-saving supplies — *before it becomes impossible to reach them.*

## URGENT HELP NEEDED

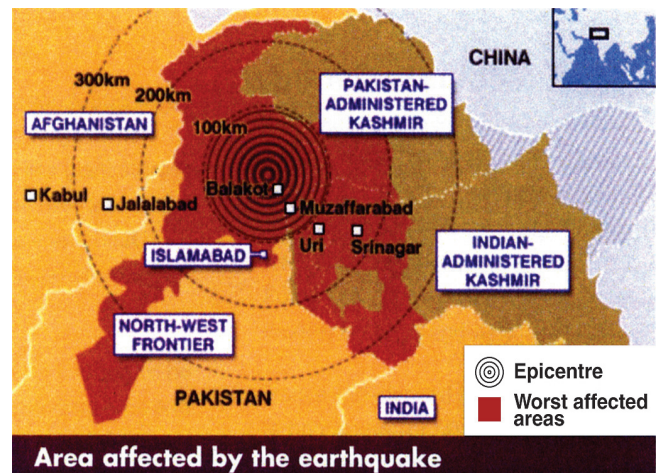
This emergency is far from over. Thousands of families have been through the most unimaginable trauma – the majority of them have lost relatives, their homes, their livelihoods, and all of their possessions. Now, as the harsh Himalayan winter descends, families are in despair about how they are going to make it through the next few weeks.

**Please help Concern Worldwide now. We urgently need to deliver blankets, mattresses and tents so families have a better chance of surviving through the winter.**

The scale of damage in Pakistan is catastrophic. In some areas whole towns and villages have been completely destroyed. Concern Worldwide has been working in Pakistan since 2001 – and so we were well placed to respond when the earthquake struck.

**Since then our teams have been helping families in five of the worst affected areas and we will stay throughout the crisis and beyond, working seven days a week to assist those in greatest need.**

The immediate challenge we face is delivering shelter items, as well as food, medical kits and clean water for drinking, cleaning, washing and helping people fight disease. We have 3-4 weeks at the most until heavy snows make the roads impassable and cut off thousands of people in remote, mountainous villages. Already each day is getting colder and night-time temperatures drop to as low as -20°C. People are dangerously at risk from pneumonia and hypothermia from being outside in these freezing sub-zero temperatures.



**If families do not receive shelter and food immediately, many thousands more people could die.**

**£25** could buy a life-saving winter tent to protect a family from the harsh Himalayan winter

**£40** could help buy nutritious food for people left homeless by the earthquake

**£100** could help construct a latrine and washing area to protect families from disease



Fig. 2

The long, hot summer days of 2003 may have been appreciated by many, but the heatwave had tragic consequences for some, as Louise Davies explains

# Heatwave

**E**arly August 2003 saw summer temperatures soar to record levels across Europe. England experienced daily temperatures well in excess of the August average, resulting in a heatwave. Temperature records were broken in England and Wales, with Brogdale in Kent recording the UK's highest ever temperature of 38.5°C on 10 August.

Hot, dry continental air was drawn over England and Wales from Spain. This so-called 'Spanish Plume' combined with a ridge of unusually high atmospheric pressure to cause temperatures which were more than 6°C to 8°C above their normal August value.

The resulting heatwave had a serious impact on mortality in certain regions and age groups. In England, between 4 and 13 August 2003 there were 2,091 (17 per cent) more deaths and 1,311 (1 per cent) more emergency hospital admissions than the expected average for the same period in the previous five years.

## The age factor

People aged 75 and over are most vulnerable to heat-related mortality. During the heatwave, deaths in England in this age group increased by 23 per cent compared with the expected average for the previous five years.

Smaller increases in mortality were seen in most regions in the 0–64 age group. This may reflect an increase in mortality in children and infants, who are also at risk from heat-related deaths, or an increase in mortality from chronically sick adults.

## Summer in the city

London is an urban heat island. Buildings and roads absorb the sun's rays rather than reflect them, acting like giant storage heaters. A lack of open space and heat released from vehicles exacerbate this phenomenon.

It has often been known for London to be 10°C hotter than its surrounding area and not to cool down as much as rural areas during night-time. This, combined with an increase in air pollution, does not make for a healthy environment when temperatures soar.

Over the period of the heatwave, night-time temperatures in London reached 26–27°C, and a maximum daytime temperature of 37.9°C was reached during the day of 10 August. Concentrations of particulate matter and ozone peaked on 8 and 11 August respectively.

From 4 to 13 August, deaths in London increased by 42 per cent above the expected average. Emergency hospital admissions were 6 per cent above the expected average for the period, and were 16 per cent higher for the 75 and over age group.

## The rest of Europe

The heatwave in Europe began in early summer 2003, when Switzerland experienced the hottest June since record keeping began 140 years ago. In July, the heat engulfed the whole continent.

France experienced its highest temperatures for 50 years with 11 consecutive days in August seeing temperatures above 35°C. Nearly 15,000 more people died than would have been expected between 1 and 20 August 2003.

As in England, the greatest number of deaths was in the 75 and over age group with more than 60 per cent of deaths occurring in hospitals, private healthcare institutions and retirement homes. Some cities in France reported more than 100 per cent increases in mortality during the heatwave.



Fig. 3





Fig. 4



# In Burma, the ancient teak forests are being ripped apart...

# ...in Chelsea, the banned wood is sold at the UK's top flower show

Exhibitors at Britain's biggest garden show, the Chelsea Flower Show, are selling hardwood from the unprotected rainforests of Asia in trade that has been condemned by one of the country's leading environmental bodies.

The organiser of the show, the Royal Horticultural Society, backs the certification of timber to ensure garden tables and chairs on sale there are environmentally friendly and meet standards on child labour and human rights.

But several traders are exploiting the high profile of the Chelsea Flower Show to promote Burmese teak – even though the main certification body in the UK, the Forest Stewardship Council (FSC) refuses to certify the country's timber. One salesman claimed the teak tables on show at his stand were FSC-certified from Thailand, even though the FSC does not certify any teak from Thailand.

Exhibitors routinely get round RHS rules on sustainable timber by submitting documents for a "sample" of their products, while ensuring the main supply comes from cheaper sources, according to one garden furniture

supplier who sells only legitimate timber.

Evidence about the availability of wood not proven to be environmentally or socially responsible comes amid rising concern over the fate of the world's great forests, which are under ever increasing threat. Yesterday the International Tropical Timber Organisation released figures showing that less than 5 per cent of the world's tropical forests are being sustainably managed.

The Royal Horticultural Society (RHS) said it did everything it could to ensure only certified timber was sold. Its brochure warns buyers to insist on certified timber: "If global timber resources are not managed

in a sustainable way, the long-term availability of timber and the biodiversity which relies upon it, cannot be assured. Some tropical hardwoods are already under threat due to excessive harvesting."

Friends of the Earth estimates that the multi-million pound trade in hardwood garden furniture in the UK destroys 143,000 square kilometres of tropical rainforest annually.

Greenpeace said: "The management of the RHS needs to take drastic action to ensure that immoral and environmentally-damaging logging like this is not available at the show."

## ■ Falling timber

- Between \$10bn (£5.4bn) and \$15bn a year is lost from developing countries' economies because of illegal logging
- Britain imports illegal timber equivalent to a forest three times the size of Luxembourg each year
- Global forest loss exceeds 12 million hectares per annum
- Up to 1.6 billion people depend on forests for their livelihood

- The EU imports around 45 per cent of all timber exported from the Amazon Basin
- Up to 8,000 square miles of the Amazonian Basin is being lost every year
- The UK has the third highest importation levels in Europe – behind Sweden and Finland
- Since 1980, an area of tropical forest bigger than India has been cleared for agriculture, mining and urban development

Fig. 5



**spotlight** on Malawi

# death by starvation

**Severe food shortages are forcing Malawians to harvest their maize too early. Without urgent action, people face the prospect of death by starvation.**

Rhoda Bwaila stares starvation in the face as she sits in the queue to get her grain milled at the maize mill in Chitera. She knows that by harvesting her maize crop before it's ripe, she may have nothing to eat in a few weeks' time.

"I must survive. I can't wait until the maize gets dry in the garden. I normally harvest 125 kilos every year, which lasts me six months. This year the maize will run out before harvest time because I'm harvesting it green." Rhoda, 22, expresses the feelings of many people who've brought their grain to the maize mill in Chitera.

**Rhoda Bwaila is one of many facing starvation in Malawi.**

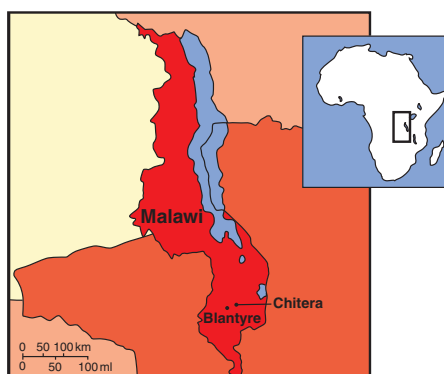


Rhoda is one of millions of Malawians facing starvation in what World Vision programme manager, Wells Sakala has labelled 'one of the worst food crises in living history'. According to reports, a quarter of the population is in grave danger. Over 8,000 people have already died of starvation. Others are harvesting maize crops too early or eating roots of banana plants, which are making them ill.

Malawi used to be a strong food producer and, until 2000, exported many tonnes to neighbouring countries. But a series of calamities reversed this trend. Torrential rains, followed by a long period of drought, destroyed crops. Last year, under international pressure, the government exported most of the country's food stocks and the cost of maize tripled.

Malawi is not alone in this crisis. Other countries in southern Africa, including Mozambique, Zambia and Zimbabwe, are also in the grip of famine.

Medium and long-term prospects are bleak. People have been eating crops that should feed them and their families between July and the beginning of 2003. Whether Malawians have anything at all to eat over the next crucial six-month period depends on the international community and also how much food the Malawian government imports from neighbouring countries.



## the hunger facts

- **8,000 – 10,000 people have died of starvation.**
- **Up to 3 million people are in danger of starvation (population: 10.9 million).**
- **UN World Food Program is importing 3,000 tonnes of food per month and co-ordinating relief efforts.**
- **World Vision, Red Cross, Concern Worldwide and Catholic Relief Services are working together to distribute food aid.**

Fig. 6



# Who is the poorest of them all?

**T**here is a tendency for development professionals to assess poverty and health levels in developing countries using readily available general information such as national statistics, average incomes and GDP. But the reality can be very different. Poverty is multi-faceted and often cannot be accurately measured by how much an individual or family earns, or how frequently they attend a health centre.

Global reproductive health agency, Marie Stopes International, is especially concerned with how poor sexual and reproductive health (SRH) can directly affect levels of poverty. Poverty is not just a cause of poor SRH but also a consequence of it. In Bangladesh maternal death and morbidity, poor health due to sexually transmitted infections (including HIV), and lack of information about, and access to, family planning services, worsen already existing difficulties caused by the physical lack of resources. In order to help break this destructive cycle, it is critical that the poorest are able to

gain access to affordable, quality SRH services. But for this to happen, we must first identify precisely who the poor are. And even within the undeniable poverty of a Dhaka slum, there is a social hierarchy based on internally acknowledged poverty levels.

“Understanding poverty in the community is a very complex process,” explained Dr Yasmin H Ahmed, Managing Director of Marie Stopes Clinic Society (MSCS) in Bangladesh. “Through our work in the slums we have seen how poverty can vary from one slum to another and even within the same slum.”

It cannot, therefore, be presumed that an SRH centre in a slum area will automatically provide services for all those who need them.

“We needed to find a way not only of identifying the poorest to ensure that they are not being marginalised, but also involving the community itself in the process to find out how they defined the reality of their own poverty,” said Dr Ahmed.

MSCS has 44 slum-based mini health centres offering a range of SRH services including mother and child health, family planning, treatment for sexually transmitted infections (STIs) and general healthcare.

MSCS commissioned the PRIP Trust, a Bangladeshi non-government organisation, to carry out participatory research in three slums in Dhaka. In each slum, a random sample of households was approached and individuals invited to make up focus groups: one of men, one of women and one mixed. These groups then defined which indicators best represented poverty in their community.

The poverty grading process has enabled MSCS to target the poorest in the community more accurately and to allocate its subsidised treatment funds through a family health card scheme. The health card is given to very poor families, and all members of the family listed on the card can receive free services at the mini centres.

“All the people we have given health cards to have come to the centre,” says Shabana, an MSCS volunteer. “Some people now come only because of the card. It’s important to focus more on the very poor, as they need to become more aware of health issues.”



# The Gambia:

## PARADISE or PURGATORY?

**O**n the west coast of Africa, The Gambia is one of the continent's smallest countries.

It benefits from traditional winter sun (October–March), sand and sea tourism, and is under six hours' travel time from Britain. English is relatively widely spoken making it easier for tourists to interact with local communities. The Gambia has 10 ethnic groups, all with different cultural traditions and languages, and for its size is a remarkably diverse and tolerant society – it is a shame that we fail to appreciate this diversity, but more could be done to enable us as holidaymakers to engage with and understand this richness.

The Gambia is one of the 48 Least Developed Countries. More than half of the population lives on less than a dollar a day, with most of the population surviving on subsistence agriculture. As is the case for many developing countries, tourism is a major industry for The Gambia.

Tourism began in the 1960s when cruise ships started to call at the port of Banjul.

Forty years on, tourism is now a significant part of the national economy, attracting up to 100,000 visitors a year. However, the industry is highly seasonal.

The World Tourism Organization estimates that tourism creates 7.8 per cent of The Gambia's Gross Domestic Product, that the industry directly employs 5,000 people and indirectly employs a further 6,000.

Britain and The Netherlands account for two-thirds of all international tourists here and British tourists benefit from the purchasing power of the major UK travel companies who feature The Gambia. Large tour operators function to some extent like supermarket chains – they contract bulk on our behalf and secure good prices which UK tourists are pleased to accept. The large number of run-down hotels, some standing empty and some semi-derelict, is testimony to the fact that the margins are tight and that it is often difficult to maintain tourist areas.

While low prices are good for tourists, they are not good for The Gambia. However, without the large travel companies, the number of international visitor arrivals would be very much lower.

The Gambia is not competitive as a summer sun destination partly because of its rainy season and the associated malaria risk, but the real problem is that there are cheaper, easily

accessible, summer alternatives on the Mediterranean.

For The Gambia, tourism is an important export sector and a livelihood strategy for its people. The Gambia has large numbers of repeat visitors with 44 per cent of peak season winter arrivals having visited previously. Forty per cent of all visitors bring school materials, a further 10 per cent bring other gifts, nurses bring out medicines; and sometimes cars and other equipment are sent out to The Gambia to create or enhance livelihood opportunities for poor Gambians.

Tourists spend an average of £25–30 per day on meals, souvenirs, crafts, guides, excursions and handicrafts, making a significant contribution to the economy. Roughly one-third of this is spent in the informal sector, providing a livelihood for juice pressers, taxi drivers, fruit sellers, craft workers and local guides.

The real issue is about how much of the tour operators' and tourists' expenditure remains in The Gambia.



Fig. 8

# The global growth of China

WITH economic growth averaging nearly ten per cent per year and an endless stream of transnational corporations setting up inside the country, China is rapidly becoming the economic powerhouse of the 21st century. From a largely agricultural country fifty years ago China has transformed itself into one of the major industrial countries of the modern age, producing consumer goods for sale the world over. Just take a look at where your iPod or digital camera were made – the chances are that it was in China. And what about your Nike trainers and Adidas leisurewear? Both of these companies have massive factories inside China. Take a stroll around a Chinese city and don't be surprised to see a few familiar names, including McDonalds, Kentucky Fried Chicken, Starbucks as well as retail giants like Tesco, Wal-Mart and B&Q. Wherever you look, it's clear that China is a growing force in the world economy.

## CHINA — FACTFILE (2008)

- China is the world's largest consumer of raw materials. In 2007 China used the following proportions of global raw material consumption (approx)
 

Oil	–	11%
Iron Ore	–	34%
Cement	–	46%
Petrochemicals	–	10%
- China is a major world producer of consumer goods. In 2007 the following % of consumer goods were made in China (approx)
 

Cameras	–	62%
DVD players	–	54%
PCs	–	40%
Clothes	–	26%
- There are over 500 million mobile phone users in China
- Car ownership has doubled in the last ten years
- China is one of the top five trading countries in the world
- China is the second biggest producer of industrial pollution

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