

Examiners' Report  
June 2012

GCE Geography 6GE04 01

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## Introduction

The key areas to be focused on in this report are **frameworks, methodologies, scales of case studies** and **conclusions**.

It is also worth noting here that approximately 100 candidates did not label their questions, please could centres remind their candidates to indicate which question they are attempting by putting a cross in the appropriate box.

## Question 1

**Evaluate the importance of different factors which influence how successfully people and organisations cope with tectonic hazards.**

**Explore** the factors which influence the effectiveness of responses used by different groups of people to cope with tectonic hazards.

**Research** volcanic and seismic hazards to examine the range of responses applied in contrasting locations.

Even in plans, candidates rarely highlighted **key words** in the title, in this case 'successful' and 'cope', and did not go on to define or create criteria. Even better candidates made ad hoc judgements about coping, based on indicators such as death toll, damage, time taken to return to normality etc. The identification of **criteria** for success was mostly by the better candidates and included the recent innovation of being able to text donations.

People and organisations were used as a term, but rarely developed, leaving the examiners to do the hard work of linking to the title. Few candidates made efforts to define the word 'cope' in their introductions, often relying on pre-learnt sections which were not particularly focused on the title. (Amongst the examples of candidates' responses which follows this introduction is one which includes an answer scoring top marks for focus on the question, accurate definitions and a detailed framework of how the report was to be tackled.)

Many candidates spent far too long in their introductory sections drawing the four plate boundary types, and writing generally about the theory of plate tectonics, or even more time consuming, drawing world sketch maps. Few candidates got into top level for this largely because of incomplete **definitions** - many not getting beyond 'hazard'.

Many candidates focused on damage done, i.e. **impacts** rather than the successfulness of **coping**. The **framework** was the key to getting a clear answer to this question together with setting up criteria for what 'successful coping' meant. Those who used the response model of Modify, Modify Vulnerability and Modify the Loss often led to them omitting factors which are important in determining coping e.g. many concentrated on human factors with no thought to the fact that it might have been the magnitude or type or the unexpectedness of the event. There were several **other approaches** to this question:

- By human and physical **factors** or social, economic, political and environmental factors, with examples used to illustrate each factor although this sometimes led to repetitiveness or underdevelopment of the argument. The hazard profile was used very effectively by some candidates especially when they also incorporated people and organisations into the model.
- **Models** were used by many to frame or develop their report. This could be highly effective as it showed conceptual understanding and enabled candidates to produce an effective and evaluative report. Popular were the hazard cycle, the 'Do nothing, adapt, leave' model and Park's model of coping over time (short and longer term). Smith and Kates models also featured. These often generated better answers, especially those using the risk equation, Alexander's response tree and Whittow's triangle of factors. The Degg model was popular as a starting model but was often never used again which reduced 'Analysis' marks. By groups, perceptions of groups and nature of hazard, this turned out to be quite a confusing structure.
- Better were candidates who posed **mini questions** such as 'how important is the level of development in influencing how successfully ...' and 'how important is magnitude and frequency in influencing...'. This resulted in a clear and consistent focus on the question. The conclusion enabled risk equation candidates to evaluate the relative importance of the factors.

- **Economic status / level of development**, was often the weakest form of framework, it meant that students made little evaluation of other different factors. Haiti featured prevalently in this method as did Japan. Better candidates expanded into the controls this has over other factors especially technology, education and even political stability.
- **Case Study Approach**, often in no particular order or simply by tectonic type. This was usually adopted by weaker candidates who tended not to score too highly on 'Application'. There were exceptions however where the candidate really set the framework and focused well and developed the criteria for their chosen exemplars. Another popular approach was to select 2 case studies to compare from each of the 3 hazard types, which if chosen well worked better. Popular choices were Haiti v Loma Prieta (economic wealth), Montserrat v Nevada del Ruiz v St Helens (monitoring and response), and the Boxing Day v Japan Tsunamis (magnitude or wealth), Kashmir (remoteness/access), Heimay and Etna (modify the event). Less convincing were comparisons of, for example, Haiti to Mount St Helens.

Whichever framework was chosen, candidates identified a wide range of factors influencing success/strategies chosen/impacts across social/environmental/economic/political groupings but were often reticent to come to a **decision** as to the critical factors involved in any one situation. Environmental degradation was often considered as a factor adding to secondary issues of coping. Weaker candidates simply listed all the reasons they could think of that would affect the impact of the disaster and how it was responded to.

A range of **case studies** were seen including the older ones of Bam, Kashmir, Kobe, Mt St Helens, Nevado del Ruiz, Montserrat California (all), 2004 Asian tsunami, Nyirongongo and more recent activity in Mexico, Christchurch, Haiti, Iceland and Mt Etna. Some deliberately chose the Decade Volcanoes group effectively. Whilst it was pleasing to see recent examples, knowledge and understanding of the most recent case studies was often limited. For example, many of the students stereotyped Haiti as a country that had a large number of victims due to being a low income country with little ability to respond. However, few students realised that help from richer countries was criticised for being slow and not reaching the areas where it was most needed. Similarly, many candidates knew very little about the Japanese tsunami beyond the magnitude. This was a title that allowed good differentiation. Weaker candidates had a very simplistic approach, often based on levels of economic development. There was some identification of **anomalies** by better candidates seeking to show complexity in the topic, such as Haiti and sensible discussion on secondary effects such as cholera but they often spent too long discussing the sensationalist aspects, such as the Sendai earthquake/tsunami and the impact of Fukushima without looking at the coping strategies used.

Some students produced exceedingly descriptive accounts of hazard response with little genuine evaluation. Others had **inaccuracies** – particularly that Japan has coped well with its recent earthquake because of its high GDP and that Montserrat had coped poorly because of a low GDP. Better candidates were able to go beyond this simple analysis and recognise real world complexity. There were some basic geographical **misconceptions** e.g. 'Italy/Africa/China have ineffective/corrupt governments...!', 'Majority of tectonic hazards are south of equator, so that's why they are poorer countries'.

Some candidates set out tables with case study facts side by side for a comparison – this didn't work well, as it often lacked the details that are required for the higher marks.

This answer to Question 1 scored full marks on its introduction.

You are advised to use this page to plan your answer and then begin your answer on page 4.

**DEFINE**

Haiti 2010 - Haiti model - lots of reasons - vulnerable - *BBC World channel 4 doc "Japan tsunami"*

Infrastructure / poverty - Armenia - *no plan* - **PARK MODEL** - *code* - *National Geographic*

- political instability - Armenia - *no plan* - **PARK MODEL** - *code* - *National Geographic*

- lack of preparation - *no plan* - **PARK MODEL** - *code* - *National Geographic*

- **organisations** - FEMA - *code* - *National Geographic*

- **scale** - *sendai 2015* - *Pacific ocean* - *1300* - *earthquake proofing*

- **EVALUATE** - *importance of them in the event*

- **Thinking on feet - knowledge** - *phuket - Haemai*

**1 Introduction**

1.1 It is estimated by 2025, 600 million people globally will be living in technologically active areas. For this reason it is vital people and organisations play a key role in how to cope with the technic hazards.

**1.2 focus**

this report will focus on and explore how important different factors affect

1. Cameron Dunn et al (2009)

and are of great importance to how people cope with tectonic hazards.

The report will highlight case studies of particular tectonic hazards and the importance of different factors in people and organisations ability to cope.

### 1.3 Framework.

This report will follow the framework of grouping key factors that played a vital role in people and organisations ability to cope.

The groupings will consist of 'lack of preparedness', 'organisation to help people', 'knowledge - spontaneous decisions'.

### 1.4 Definitions

Tectonic hazard - The movement of the earths crust, predominantly causing earthquakes, volcanoes and tsunamis. These pose as a huge threat to humans.

Cope - The inability to not be overwhelmed by a hazard, and to make all efforts to not exacerbate the death toll, as well as bringing some kind of normality back.

Organisations - Groups of people, working to help pre, during, post disasters to minimise financial, social, environmental costs. For example FEMA, CAFOD, RED CROSS.

<sup>1</sup> Cameron Dunn et al. (2009)

## 2. Methodology

2.1 The sources used in this report, show a wide variation. This was in order to research from a variety, in order to be free from bias and to gain lots of detail in the factors which influence coping with tectonic hazards. Video footage from DVDs and television documentaries were used. For example the 2005 BBC documentary "The killer wave" and channel 4 documentary "The Japan earthquake caught on camera". These visual representations allowed for a greater understanding of tectonic events. For example that of the Jendai earthquake and tsunami, 2011. Giving an idea of the vast scale of destruction. These visual sources were also complemented with books, to give a basic grasp and understanding, from reliable sources. For example 'The Earth Shock' Andrew Robinson, 'Violent Earth' Simon Lamb and 'Geography A2 edexcel. In particular the geography edexcel textbook' Digby et al, gave high levels of detail for the moment magnitude, 1995-1997. The textbook was also useful in that it gave a list of sources, textbooks, websites to research. This was useful for the report as a starting point for research. As well as this the National Geographic article 'The eye of the tsunami' 2011 was used as a source for the Jendai earthquake, giving high levels of detail for the Misaki-Namurikawa area.

## 2.2

The case studies this report will focus on are firstly the 2004 tsunami, 2004. This will exemplify how important warning systems are in ~~reducing~~ altering other areas, and the huge importance

that can have on the ability they have to cope. In contrast to this the Jendai, Japanese earthquake, 2011 will be looked at in this report, to show effective responses through technology, and good government organisation. Finally the Haeimay eruption in Iceland of 1973, although slightly older. It is used in the report as an almost flawless response and people and organisations, working together and thinking on their feet to deal with an event.



### ResultsPlus Examiner Comments

This was one of the rare candidates who tried to define what the word 'cope' meant rather than hazard response.

For full marks in an introduction ensure you define all terms accurately, preferably quoting a reputable source in this case the USGS rather than wikipedia or dictionary.com! You must also pull apart the title and explain what you think it means, and thirdly you must justify the models/case studies to be used not just list them.



### ResultsPlus Examiner Tip

Try to keep the methodology separate from the introduction, it fits neatly immediately after the introduction before you go on to discuss your main findings.

This response achieved 9/10 for the introduction.

## Introduction

A natural Hazard is a "perceived event with the potential to threaten life and property" (Whittow 1980), a tectonic hazard is an occurrence caused by tectonic activity. Taking this into account it is clear that tectonic hazards <sup>pose</sup> ~~pose~~ a certain of threat to countries around the world though the levels of danger varies. By analysing the link between hazards, risk and vulnerability as shown in the disaster risk equation:  $\text{risk} = \text{vulnerability} \times \text{hazard}$ , it is possible to forge a link between the varying impacts of tectonic activities and the way in which people cope with them and the varying degrees of success. By drawing on knowledge from my own research and gathered information; it is clear that varying levels of coping with tectonic hazards are down to physical factors, human factors and technology, and by analysing these factors I hope it becomes apparent which are of more importance in determining the success of people coping with tectonic and volcanic hazards. By exploring the differing levels of response in <sup>Case studies</sup> ~~locations~~ such as; Haiti 2010 earthquake, Bam 2003, Christchurch 2010, ~~and~~ Tohoku, Japan 2011 and Kobe 1995 I hope to highlight the ~~the~~ ways in which successes when coping with earthquakes vary in regard to physical, human and technological factors. Other case studies I've chosen to mention are Volcanic eruptions on Merapi in 2009,

Chaitan, Chile in 2010, Eyjafjallajökull, Iceland in 2010 and Pinatubo in 1991 \* because the responses ~~are~~ used and ability of these countries to cope with and respond to these tectonic hazards varied ~~in~~ and were of different success. By relevant paradigms and theories will be used to support arguments and analyse the importance of factors in influencing how successfully key players ~~coped~~ with and responded to these tectonic events. Some players which clearly had a role in the ability of countries to cope with tectonic hazards were local governments, communities, emergency services, <sup>governments,</sup> non-governmental organisations, aid organisations, the media, and engineers, architects and planners; therefore their role in determining the success of people in coping with tectonic hazards will be evaluated. I will also make note of secondary events that occurred after the initial earthquake or volcanic eruption that could have played a part in the success of these various locations in dealing with ~~the~~ and coping with the tectonic event.



**ResultsPlus**

**Examiner Comments**

The trilogy was covered - focus, framework and sourced definitions.



**ResultsPlus**

**Examiner Tip**

Ensure all aspects of the title are discussed in the introduction - here the concept of 'coping' needed extra highlighting.

This response got 12/15 for its conclusions, i.e. top level marks, because it identified the complexity in the title and had a meaningful end as well as ongoing evaluation.

## Conclusion

To conclude, it is evident that there is a vast range of both human factors (e.g. level of development (infrastructure as displayed in the USA's Mt St Helens and California hazards) perception of hazard (trans ~~level~~ of fatalistic perception vs California's adaptive perception) and advanced technology and physical factors which sometimes overcame the human factors as seen in Japan where the 9.0 magnitude ~~earthquake~~ out-emerged the fact that it was a developed country and had catastrophic impacts. The importance of these factors vary greatly depending on geographic location, level of development and arguably more importantly, the type and magnitude of hazard. This is displayed by comparing volcanic hazards and seismic hazard. With volcanic hazards it's more predicting the eruption in time to evaluate people whereas with earthquakes it is significantly more difficult to do so, meaning the most influential factor is not ~~proper~~ <sup>level</sup> of preparedness in terms of predicting and evaluating in time, but being prepared through infrastructure i.e. by the use of seismic

Structures which would cause less infrastructural damage and loss of lives as shown in the Hachikeng earthquake/tsunami in China. With volcanoes, seismic buildings would be much influential in ability to cope as the buildings will get melted by the lava and/or pyroclastic flows which destroy everything in it's path. The report also shows that there are some factors we can control to help cope successfully such as better education and training of what to do in the event of a hazard where as some factors are completely out of human control e.g. the magnitude of the event as shown by Japan's <sup>Hokkaido</sup> earthquake and Indonesian tsunami, as well as the time of occurrence e.g. Iran's early morning earthquake and the early morning tsunami in Indonesia which makes it more difficult to cope since ~~not~~ everybody is awake to hear warnings.



### ResultsPlus Examiner Comments

This conclusion shows clearly the difference between seismic and volcanic hazards.



### ResultsPlus Examiner Tip

Remember to directly refer back to your own case studies in the conclusion and avoid putting in new material.

## Question 2

### To what extent do cold environments present different management and development challenges?

**Explore** the wide range of management and development challenges which exist when humans attempt to use cold environments.

**Research** a range of cold environments in different locations to illustrate contrasting uses.

One surprising issue here was the lack of understanding of what really constitutes a cold environment. Too many candidates appeared to create their own description/definition that was either incorrect or inaccurate - however it did mean that those who had revised stood out with some accuracy over Polar, Alpine, Periglacial and relict environments. When quoting the source of a definition it is preferable to use a textbook or a specialist and reputable site such as The British Society of Geomorphologists rather than [www.dictionary.com](http://www.dictionary.com).

Only the best candidates managed to focus fully on the question producing an evaluation of the **similarities and differences** faced by different cold environments.

Few candidates were able to give good definitions of **management and development**. This was reflected in the introductory framework and also in the main bodies of the reports, where it was clear that many candidates were unable to discuss both of these issues with the same degree of confidence, and often reverted to simple all embracing 'challenges'. This was clearly a lack of preparation, given that it was the focus of the pre-release.

#### Frameworks

- Some candidates were able to structure their report around the types of challenge or types of response (conservation, managed exploitation, complete exploitation) or management (do nothing, sustainable etc) and this produced a more effective analysis, although often development challenges were ignored.
- An effective framework was to look at development then management from the 3 perspectives of living, working and visiting which allowed lots of valid comparisons between places such as the Arctic compared with Antarctica, Mount Everest versus Mont Blanc.
- The most popular response however, was to structure a report around different types of cold environments which often then became an account of 3 or 4 different case studies. Better answers used comparison case studies within the conceptual framework, illustrating different challenges followed up with a sub-conclusion as ongoing evaluation.
- Weaker candidates wrote descriptive answers which often just recounted everything they knew about management in cold environments. They just described the challenge, or the case study with no real analysis as to how the challenge could be dealt with and if the way they should be managed varied by location.

Stronger candidates were often able to look at challenges at a range of scales, and could compare the problems in Antarctica, with the various territorial claims and with national or regional challenges. They also considered not just environmental considerations but the needs of named indigenous peoples.

The most common **case studies** were as follows, although candidates often lacked knowledge of the complexities of these regions.

- Antarctica – usually almost totally focused on tourism or the Antarctic Treaty.
- The Arctic – as if it is one homogenous area, grouping together land and sea ice, N Europe, Siberia and N America.

- The Alps – again, often as a whole, with only a few candidates naming specific locations such as ski resorts like Chamonix, HEP projects etc.
- Alaska - a contrast of the Trans-Alaska Pipeline (TAPs) and ANWR, unfortunately numerous candidates wrote that Alaska is a periglacial area, whereas it varies from temperate rainforest in the south to glacial areas in the north.

More able candidates used more unusual case studies with clear evidence of wider reading, for example, Greenland, Zaskar region of India, Siachen glacier in Pakistan, Bhutan, the Remarkables in New Zealand, Bhutan and Oymyakon in Siberia. Himalayas, Iceland, Lapland and Kilimanjaro/Mt. Kenya also featured.

The use of relict case studies was not required, although it could have easily shown complexity in the argument about development and subsequent management. Those candidates who did use landscapes such as the Lake District or Snowdonia rarely went further than vague statements about trampling or 'I went on fieldwork to the Trossachs or Iceland' without any details pertinent to the title.

This answer had a very weak end conclusion and drifted off into a methodology. It scored better on preceding sub conclusions but only achieved 7/15 altogether.

### Conclusion:

After the research of both periglacial and glacial polar/alpine - locations Alaska, The Alps and Antarctica, it can be seen that the exploration of these cold environments ~~from~~ evolved by both human and natural physical factors, these regions are presented with a range of development and management challenges.

From economic factors of construction, accessibility compromised by unstable permafrost ground and environmental factors due to extreme cold, all prove to have, to full extent, challenged the development of cold landscapes, with Alaska acting as the cold environment at greatest pressure from challenges<sup>presented</sup> ^

With reference to figure 3 it can be seen the reliability of my research information and content. Overall the vast range of news, reports and online information gave ~~total~~ reliability<sup>and variation</sup> ^ to my readings. However,

reports such as no 6 on the table - Alfred Wegener - proved somewhat biased to his readings and data, ~~and~~ questionable due to being constructed only in peak-summer periods in Antarctica<sup>showing limited variability</sup>. Similarly with the NEAT project, as the alpine website promoted <sup>mainly</sup> recreational aspects of the development and not challenges presented. Yet, the Geog Edexcel information and Nelson Thorne acted as to all extent, reliable sources of information and secondary references



**ResultsPlus**

**Examiner Comments**

Keep enough time to properly evaluate your report - not in the sense of how well you did it and how much research you carried out, but what the case studies/concepts/models you used showed in relationship to the title.



**ResultsPlus**

**Examiner Tip**

Try to write a side or so for the final conclusion.

## Introduction

### Focus

The focus of this report will be to analyse the different management and development challenges that exist in different types of cold environment. It will then attempt to summarise the extent of these challenges in different areas.

### Definitions

All three different types of cold environment will be referred to in this report. They are: polar glacial, alpine glacial and periglacial environments.

Polar glacial environments are characterised by their high latitude (above  $66^{\circ}$ ) and extreme cold and dry climate. There is minimal precipitation in these areas making them similar to deserts. Examples include the Antarctic Ice Sheet and Shelves as well as Greenland Ice Sheets (Edexcel A2 textbook by Dunn et al).

Alpine glacial environments are characterised by their high altitude and mid-low latitudes. These areas have high levels of precipitation and a high daily temperature range. Examples include the European Alps and the Himalayas. (Edexcel A2 textbook by Dunn et al).

Periglacial environments can be defined as areas 'at or near' glaciated areas. They are characterised by thick permanently frozen sub-soil and underlying rock known as permafrost. This

ground has negligible effect on landform formation on its own, but does contribute when combined with the Active layer. Examples include Siberia and Alaska. (Nagle and Witherick (2002) 'Cold Environments')

This report will also be referring to different types of challenge, with a focus on management and development challenges in particular. A challenge is defined as any factor that needs to be overcome in order to use or exploit a cold environment. They are preconditions. (Edexcel A2 textbook by Dunn et al).

Development challenges can be defined as difficulties that need to be overcome to enable both the social and economic advance of a cold environment. This is derived from the definition of development that refers to the improvement of the 'human condition'. (Edexcel A2 textbook by Dunn et al).

Management challenges can be defined as difficulties that need to be overcome in order to control the use of cold environments as well as to minimise conflicts between different key players. (Edexcel A2 textbook by Dunn et al).

This report will also refer to countries in terms of their economic status / development. Countries will either be referred to as MEDCs (more economically developed countries) or LEDCs (less economically developed countries). (Edexcel A2 textbook by Dunn et al).

## Framework

In this report I will be looking at the extent to which Cold environments present different management and development challenges. I will first look at the challenges presented by polar glacial environments, and will use Antarctica as my main example but will also include a brief comparison to Greenland. I will then look at the different challenges in an alpine glacial environment, using the Swiss Alps as my main example but also including a brief comparison to Mount Kilimanjaro. I will then look at the different challenges in periglacial environments and will use the Trans-Alaska pipeline and Arctic National Wildlife Refuge (ANWR) as my examples. I will then conclude my findings and summarise the extent of these challenges in Cold environments as a whole.

## Sub-Conclusion

This section should emphasise the fact that the extent of management and development challenges varies even within the same country. This is shown to be due to how the area is used in different parts of a country, whether it is exploited or preserved for example, as is the case with Alaska. Again, the situation in these periglacial areas varies compared to polar or alpine environments.

## Conclusion and Evaluation

The extent of management and development challenges in Cold environments varies as a result of numerous factors. These have been shown to be the type of Cold environment, the economic development of the area and the contrasting uses and/or conflicts that result from them.

As was shown by Antarctica, effective management strategies

help to reduce development challenges but increase management challenges, by resulting in more conflict. Greenland demonstrated an opposing situation, that with less management comes more development challenges. The Swiss Alps still has high management and development challenges, despite numerous investments and its status as an MEDC. The situation in Mount Kilimanjaro is getting worse also, mainly due to the enhanced greenhouse effect (global warming) leading to a fall in tourism. The trans-Alaska pipe is already constructed so development challenges are minimal but

it does still require monitoring and management in order to prevent oil spills. As for the ANWR, like Antarctica it is well protected at present and should remain so in the future. This does however mean that management and development challenges are still high.

As for a final conclusion, the relationship between the extent of management and development challenges and the type of cold environment is a complex one, that no single model can explain in its entirety. Polar glacial environments have been shown to have high development challenges, mainly due to their harsh climate but varying management challenges. Alpine glacial environments present fewer development challenges, as the climate is less harsh but the same, if not more management challenges. As for periglacial environments, these generally present high management and development challenges, unless effective management is in place.



### ResultsPlus Examiner Comments

There was a good attempt here at weaving in definitions to the focus, quoting a source too. The framework includes justified case studies.

The conclusion shows clear understanding of the title.



### ResultsPlus Examiner Tip

Remember the trilogy for the introduction: focus, definitions, framework.

For the conclusions - remember do not include any new material and return to the case studies in the report by grouping them in a way useful to answer the title.

### Question 3

**To what extent do the characteristics of food insecurity vary in rural and urban areas?**

**Explore** the characteristics of a range of current socio-economic political and environmental issues affecting food insecurity in both rural and urban areas.

**Research** contrasting rural and urban locations, at different levels of development, that experience a range of issues linked to food insecurity.

The focus of this question was the variation in the characteristics of food insecurity between rural and urban areas, but there was a mixed reaction to defining the term 'characteristic' given in the title and the basics of access/affordability/availability and the increasingly globalised food supply chain to urban areas were not commonly teased out.

Generally the best analyses synthesised the complex interactions of characteristics in the form of issues or factors in specific regions or countries. The best reports compared or contrasted rural and urban food insecurity in particular countries and used a framework with economic status or economic, social and political headings. Despite the term in the title being 'food insecurity', many candidates defined food security in the introduction, which does not gain marks in the 'Definitions' section. The significance of the command phrase 'to what extent' was not picked up by many candidates and therefore the report was often more narrative than evaluative.

Very few candidates seem to have been able to eloquently thread an argument throughout the whole report that focused solely on difference between food insecurity in rural and urban areas, instead becoming distracted by a much wider swathe of contemporary food insecurity issues, especially biofuels and food miles.

The best candidates quantified food insecurity with reference to the IFPRI or Maplecroft indices. Measures of malnutrition, FAD and FED or quotes from news reports pertinent to food insecurity were equally good. Weaker candidates made general statements about food insecurity – or expected the reader to infer food insecurity from other development indicators i.e. a low HDI was often used as a substitute for actual data on food insecurity.

The range of frameworks included:

- By factors: socio-economic/politics/ environment - comparing CS's within sections. This enabled candidates to develop their answers effectively. These candidates had built well on the pre-release. Candidates often split these criteria up and developed concepts such as globalisation, desertification and obesity into their answers. They then also broke down the strategies by considering rural and urban areas. Often this enabled them to provide a detailed comparison. However, by using this method, candidates often didn't consider concepts fully and couldn't access the higher bands of marks.
- By urban / rural – then discussing issues within each area. This framework typically meant that candidates struggled to develop their report fully. It meant that the structure was poor as they tried to fit too much into different sections.
- By urban/ rural HICs, and urban/rural LICs.
- Simply by economic development - which often did not allow the rural/urban divide to be developed.

**Concepts and models:** a variety of models were employed to develop the framework. A number of students used Malthus and Boserup to introduce comparisons of rural and urban, but were generally not so effective as using the FAOs three or four pillars of food security, which as a tool to identify rural and urban variation proved very effective.

## Case Studies

- The best candidates used **clearly defined** rural and urban case studies with some excellent details of the Kalahandi Syndrome, applied to Orissa and elsewhere. Conflicts featured, especially in Sudan and Zimbabwe, and climate change in the Sahel region. There was good detail on Dharavi in Mumbai and some excellent reference to specific Chinese cities, not just Shanghai, for rural-urban migration and its effect on food insecurity in the contrasting areas. Research on obesity in Detroit was outstanding, as was the use of Mumbai by one centre as an interesting example of malnutrition from lifestyle choices and lack of food.
- The reports with the greatest coherence, developing the rural/urban variation, were those that had their comparisons within the same country. For example, in Bangladesh the links between rural production/consumption and urban consumption in Dhaka, showing how food insecurity at times varied little between the two areas and at others quite considerably, worked far better than rural Mali or Chad compared to urban USA. Other rural-urban links within India and China were also effectively demonstrated, particularly when the access/affordability/availability framework was used. However, there was overall a worryingly poor use of specific case studies applied within this question, with **many too generalised urban and rural areas quoted**. Often whole countries were used, with simplistic patterns of MEDCs being 'urban' and LEDCs being 'rural', or rural China/Bangladesh and urban China/Bangladesh with no specific location at all. Many candidates inferred issues of food insecurity, e.g. explained problems of war/drought/corrupt governments, but didn't link it to how it leads to food insecurity. Many quoted floods in Dhaka seeming to think it affected agricultural production in the city!
- Few saw the mutual reliance of urban and rural areas, or the fact that most urban areas rely on imports either from their own country or, with usually more insecurity, from abroad.
- Some candidates used the whole of sub-Saharan Africa as one rural area which meant responses were rather general, also ignoring the fact that within this area there are urban zones with problems. Zimbabwe was often used, with vague ideas of Harare being a rural area!
- Characteristics of food insecurity in more developed areas rarely went beyond obesity and food banks, e.g. New York, London, Glasgow or Southend, with limited reasoning. Some picked up on transitory food supply issues from incidents like Katrina or Fukushima.

This response achieved 9/10 for its introduction.

## INTRODUCTION:

The definition of food insecurity, as defined by the FAO which is the Food and Agriculture Organisation, is when people do not have access to <sup>enough</sup> safe and nutritious food to be able to lead a safe and active lifestyle. The FAO also recognises the two different types of food insecurity, these are chronic and transitory food insecurity. Firstly, Chronic Insecurity is long-term or persistent problems such as famine, an example of this is in a place such as rural Niger, where families do not have enough food to feed themselves. Secondly, Transitory Food Insecurity is short-term or temporary problems such as immediately after a natural disaster, or due to a crop fail in a certain year. There are also two types of Food Deficit, as explained in the A2 Edexcel Geography textbook written by C. Dunn et al, these are FAD and FED. Firstly, FAD stands for the Food Availability Deficit. This means that there is no food available, that there is none in your cupboard, in the shops in your village or in the surrounding areas. Secondly, FED stands for the Food Entitlement Deficit, and

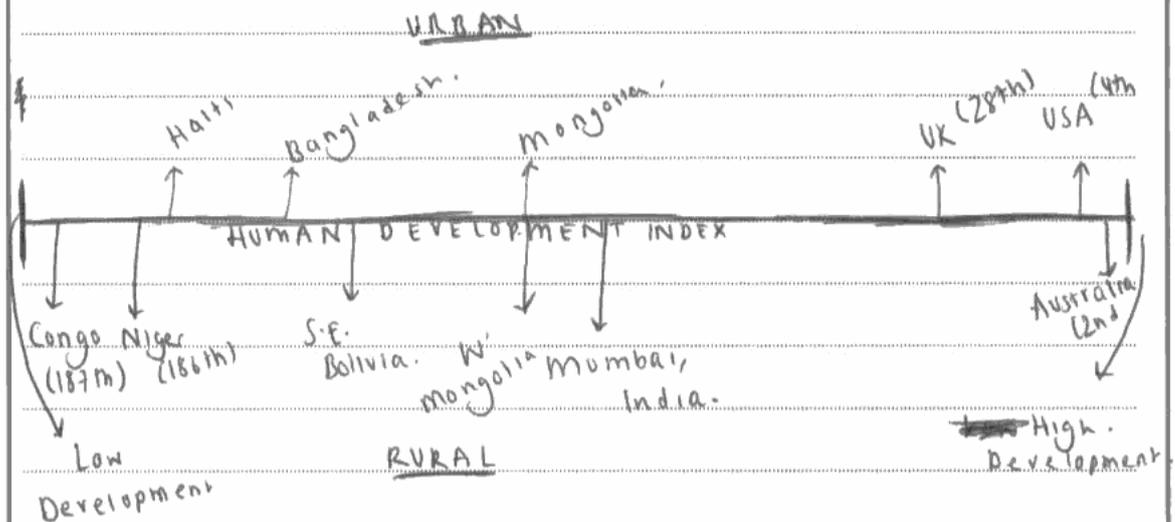
means that there is food available but you just can't access it for whatever reason. It could be due to a lack of money or a lack of access.

The factors which cause Food Insecurity are split up into three broad categories, these are Political, Socio-economic and Environmental. However, there is overlapping from each category, as it is impossible to class most things as just one problem. For example, poverty is generally seen as a socio-economic problem but what if it is caused by environmental problems. The table below shows the three broad headings:

POLITICAL	SOCIO-ECONOMIC	ENVIRONMENTAL
• Civil unrest + war	• Lack of employment	• Floods
• Government spending particularly <sup>on</sup> military	• Lack of education	• Droughts
• Military rule	• Lack of motivation	• Failed crops
• Lack of rural investment	• Lack of access to healthy + nutritious foods	• Natural disasters
		• Biodiversity - • Attacks of pests

In order to conduct this report, I will need to look at a number of case studies in both urban and rural areas which range from highly developed places such as Detroit in the USA to extremely under developed places such as the Democratic Republic of Congo, Africa. On the

Diagram below, the spectrum of the Human Development Index, I will show the range of case studies that I am going to use.



This shows the range of case studies I will be using within my report.

### Framework

The concept of food insecurity, or security, is not a simple one. It is very complex and interlinked problem. There is not just one main problem or cause of food insecurity. These problems can be split into three broad categories of ~~one~~ environmental, socio-economic and political. However, this factor overlap and there is not one factor which can just be put into one category. As this concept is so complex, I am going to firstly assess my rural case studies ranging

least developed & most developed, men my urban  
case studies, again ranging from or least to  
most developed.



**ResultsPlus**

**Examiner Comments**

The obvious trilogy is present - focus, definitions, framework.



**ResultsPlus**

**Examiner Tip**

Ensure you use terms directly from the title not the pre-release, i.e. characteristic needed more emphasis.

#### 4.0. Conclusion

Overall, in ~~conclude~~ considering the different challenges posed to both rural and urban areas by food insecurity, it is evident that the extent to which such challenges or characteristics vary is affected by various socio-economic, political and environment factors. One such factor is level of development. For example, it can be seen that where development is lower and poverty exists, such as in the case of South Africa (see 3.1), there is less variance in rural and urban areas in terms of food security. <sup>In contrast</sup> whereas where levels of development are higher such as in the USA (see 3.2) and China (see 3.3), the characteristics of food insecurity tend to be much more distinct ~~in~~ between rural and urban areas, partly due to urban areas having the greatest ~~a~~ levels of affluence. ~~The~~ Interaction between urban and rural areas in such cases as in China (3.3) can also affect food insecurity to a greater degree. However, it must be acknowledged that food insecurity is a complex issue and that in attempting to assess it, many factors must be considered.



#### **ResultsPlus** Examiner Comments

The conclusion is not long but it is succinct, returning to key ideas and case studies.



#### **ResultsPlus** Examiner Tip

Referring to specific sections is an example of a true report style.

## Question 4

**'Differing cultural attitudes to the environment inevitably lead to conflict, both locally and globally.'** Discuss.

**Explore** the range of different cultural relationships between humans and the environment and the extent to which this may lead to conflict.

**Research** a range of examples at a variety of scales, to illustrate different cultural values towards the environment.

The pre-release stated a variety of **scales**, and centres had obviously trained their candidates for this by collecting examples at global-national-regional-local scales. However, the actual exam wanted a difference between global and local which was not always adhered to, and this was disappointing given scale is an essential aspect of a geography course. Too many candidates had no real global examples or over-generalised national cultural relationships as their local examples.

The vast majority of candidates got to grips with cultural attitudes to the environment, with some definitions, however in many answers, **conflict** was not defined or simply seen as inevitable so the best answers moved on from this premise.

Some lost the **focus of cultural attitude**, and went into descriptive almost Unit 3 Contested Planet mode about peoples' use/destruction of environments. Even in the simplest situation – Brazil/Peru/Sarawak/ - rainforest/loggers/oil/mining/Government – candidates wrote basic descriptions of the indigenous tribes/other groups with little or no attempt to consider the actual values/approach of the groups involved. Also, given that so many candidates chose China, there was a distinct lack of appreciation of the complexities and the differing attitudes within the country itself as well as global relationships.

As always with this type of topic, there were some personal 'crusades' and one or two 'tirades'. Weaker candidates produced a list of examples in no particular order and with little by way of criteria, although sometimes demonstrating a real passion for environmental issues. They tended to generalise about groups such as the Inuit or over-simplify the situation in Bhutan, and rarely referenced sources.

Better candidates looked at conflict resolution or examples such as national parks or UNESCO sites where different viewpoints could co-exist.

### Frameworks

- Most popular was using the model of pre-industrial/industrial/post-industrial.
- Kuznet's curve was popular in choosing case studies and most effective when combined with the industrial model and customised with tipping points. These candidates often concluded that conflict was inevitable but could be mitigated.
- Viewpoints were taken by some: animism, ecologism, moralism or Ecocentric versus Anthropocentric, all of which worked well.
- The categories of landscapes for life, sacred, profit, pleasure, were often effective.
- Some candidates tried a basic split between inevitable/not inevitable.

### Case studies

The key element, no matter what the approach, was the quality of the case studies allowing for effective analysis and complexities in the final conclusion. There was a tremendous range of case study material selected here with some interesting use of primary data by some candidates, especially in Dubai.

Secondary research focused on the Amish, Inuits, Aborigines and Uluru, rainforest tribes (Orang Asli, Kayapo), Japan, Finland and Bhutan. UK national parks were often mentioned, as was China, the Beijing hutongs and the Three Gorges dam. UNESCO was often used for global conflict resolution. There were few built environments used however although Curitiba and Masdar City were used quite well.

Some good use was made of the January synoptic element of Sweden and decoupling development from environmental degradation. The Aral Sea and Kyoto were often mentioned, but rarely fully applied back to cultural attitudes. Some candidates managed to refer to the topical Earth Summit +20 in Rio. At a local scale, some used the NIMBY attitude to, for example, wind farms successfully.

One group of candidates devoted a disproportionate amount of time on assessing environmental attitudes and conflicts in the film Avatar, when there are so many real life geographical examples which could have been chosen.

This response scored 10/10 for its introduction.

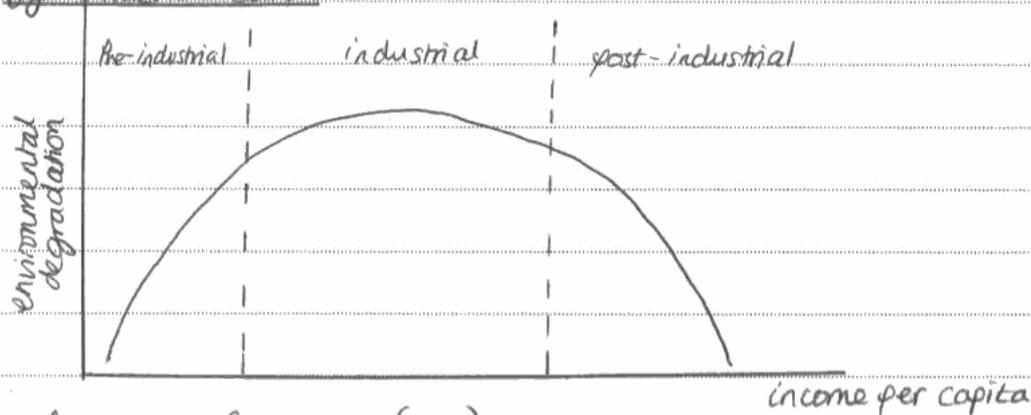
### Introduction

Culture as defined by <sup>1</sup>Dunn et al. (2009) is "a shared system of belief based upon religion, ethnicity, language and tradition which influence their way of life." Due to these different factors that influence cultural relationships to the environment conflicts are found at both a global and local scale. There are 3 overriding philosophies relating people to the environment eg; environmental determinism - where human activities are controlled by the physical environment (Lohwate 1966) human exceptionalism - where nature exists beneath humans as a resource <sup>(2)</sup> and equilibrium - where nature exists on an equal level as humans <sup>(4)</sup>. These philosophies and cultural relationships to the environment can also be influenced by the stage of economic development in a society, how society and individuals value the landscape and the impact of globalisation on society. Landscape values play a role in cultural relationships as there are different viewpoints which lead to conflict of landscape as life (landscape provides essential goods to humans leading to protection) landscape as sacred (landscape has significant religious significance leading to protection) landscape as profit (where it is over-exploited as a bank of resources) and landscape as pleasure (where the environment is conserved for leisure). The cultural relationship towards the environment, being influenced by the stage of economic development can be illustrated in the theory of Rostow's model and the Kuznets curve. Due to these differing factors which influence a cultural relationship, different societies and individuals have different interests leading to conflict at a range of scales.

~~the~~ figure 1 - reference (1) p323.

pre industrial	industrial capitalist    communist	post industrial
- landscape and resources conserved due to necessity	- landscape & resources overexploited	- landscape and resources increasingly conserved due to environmental concern
- equilibrium	- human exceptionalism	- equilibrium
- landscape as life and sacred	- landscape as profit	- landscape as life/pleasure
- traditional society	- take off / drive to modernity	- age of high mass consumption

fig 2. Kuznets curve



Reference - Panayotou (1993)

As illustrated in figure 1, each society at different economic development stages have different cultural relationships towards the environment, with the impact of their relationships shown in the Kuznets curve in fig 2. So therefore conflict is found at transition stages and within post-industrial societies.

In this report in order to illustrate conflict at different scales I will look at pre-industrial to industrial conflict in the Peruvian Amazon, industrial to post industrial conflict within Indian society and the conflict within post industrial of a hybrid culture, environmentalism vs consumerism in UK windfarms and Snowdonia National park, and the conflict of exported pollution in Japan, arising from globalisation.

## Methodology

Research for this report was mainly carried out through subject specific books, such as "Mitchell (2000) "Cultural Geography" which provided reliable data and information as books are well refereed. However the disadvantage of books is that case studies can be outdated, for example Arkins et al (1995) "People land and time". The internet also proved useful as there is a vast quantity of accessible information, however at times irrelevant to the report and not refereed e.g. 'wikipedia' so not reliable. Another precaution I took of the internet was bias found on websites such as 'greenpeace.org' especially towards marginal and vulnerable case studies. Official government data and reports such as 'UN Report 1987' provided accurate information for this report. Articles were also used in order to gain different ~~pers~~ perspectives, however care was taken with opinion articles such as Nelson, D (2011) The Telegraph "Death of a campaigner" due to bias. Journals also proved useful in providing information and specific case studies, for example Degand, E (2011) Journal: EIAS "India: Economic development and environmental issues."



**ResultsPlus**  
Examiner Comments

Details on models and application to the title always impress!



**ResultsPlus**  
Examiner Tip

Don't learn a generic introduction, practice lots of combinations/components then weave them together in the final exam - and remember to jettison case studies as well as deciding to keep some.

This answer scored 12/15 for its conclusions.

### Conclusions

Overall, the change of attitudes to the environment have been growing, more people at the global scale now want to realise the importance of conservation, either due to threats to economy or to actual environment. Management strategies in crease, as seen in the ~~Kyoto~~ Copenhagen Summit and in the developing stage of the Scandinavian countries. In the pre industrial era, conflict was a more avoided, and it mainly occurred locally due to famine - the issue was never global because the environment was a commonsality and to some of it had to be compromised for <sup>the</sup> local's ~~well~~ wellbeings. At the industrial stage, there was conflict at both local and global stages as seen with the ocean and strait sea however, if the majority of the population benefits, the conflicts can be

dispersed <sup>as</sup> seen in Beijing. The ~~more~~ complexity  
 arises ~~be~~ when political ideologies of governments comes  
 into play. The GNH of Bhutan is so high and it  
 is regarded as the 5th happiest nation ~~being~~ in the world  
 because the government prioritises ~~that~~ conservation. This  
 prevents conflict at a national / ~~global~~ scale. In order  
 to achieve this globally, at future UN meetings, such  
 as the Rio +20 Summit in June 2012, countries need to  
 avoid conflict and should make their political ideologies  
 like Bhutan. Bhutan puts the people ~~first~~ <sup>above</sup> ~~the~~  
 The capitalist attitudes cause lots of conflict over time at  
 both local and ~~global~~ <sup>global</sup> scale, but the ~~is~~ balanced  
 view of cultural ecology, if fully adopted, as in  
 Scandinavia, can ~~be~~ not only reduce conflict, but can  
 improve economy, happiness and standard of living of  
 humans.



### ResultsPlus Examiner Comments

In the conclusion the candidate returned to most of the case studies, and weighed them up.



### ResultsPlus Examiner Tip

There is no need for new information in the conclusion, but ensure you can clearly understand what the title was just by reading the end statement.

## Question 5

**Assess the complex relationship between health risk and quality of life at a variety of scales.**

**Explore** the nature, and development of, the relationship between health risks and quality of life.

**Research** the patterns of health risk and quality of life at different scales and in contrasting locations.

A vast range of health risks were identified, with most candidates able to identify the relationship between health and quality of life, and many identified a two way relationship with some using anomalies for their counter arguments to the title.

Many candidates identified the impact of poor health on family life, local and national economies and their associated consequences e.g. stress, loss of earnings, poverty, spiral of decline, further poor health. Research using WHO and NHS figures supported good answers, and it was pleasing to see criteria attempted to be used to quantify risk and QoL such as HDI, DALYs and HALE.

There was a good use of models including Kuznet, DTM, health risk equation, Rostow and Dahlgren and Whitehead's lifestyle model with the most successful and popular choice being Omran's epidemiology model as a framework.

Many candidates addressed scale and better ones were able to discuss regional and localised variations within a wider context, although global scale was not tackled so well as national and local.

### Frameworks

- Those candidates that performed better structured the report in two parts – health risks affecting quality of life and then quality of life affecting health risks – this allowed the candidates to illustrate a range of examples which supported each section, and also allowed them to grasp the complexity of the relationship between the two.
- Some candidates approached the report from a scale point of view with a three part report – looking at global, national and local and, although information was good, it prevented them grasping the ability to discuss the complex nature of the relationship as they tended to either focus in on quality of life affecting health risk or vice versa. In some cases inappropriate examples were selected to support the scale being discussed.
- Many candidates chose the route of more random disease case study by case study which wasn't always successful in teasing out the relationship unless it was categorised into infectious, degenerative etc or global/local.
- Some candidates wrote essays and did not approach the response in a report style format – these essays tended to be everything the candidate knew about health risks and quality of life – lacking detailed focus on the question and often dominated by economic development.

### Case studies

Popular case studies which came up were HIV/AIDS in both LICs and HICs, the pollution issue of some Chinese cities, malaria, and then degenerative illnesses in HICs. A minority mentioned issues such as accidents/incidents e.g. car crashes.

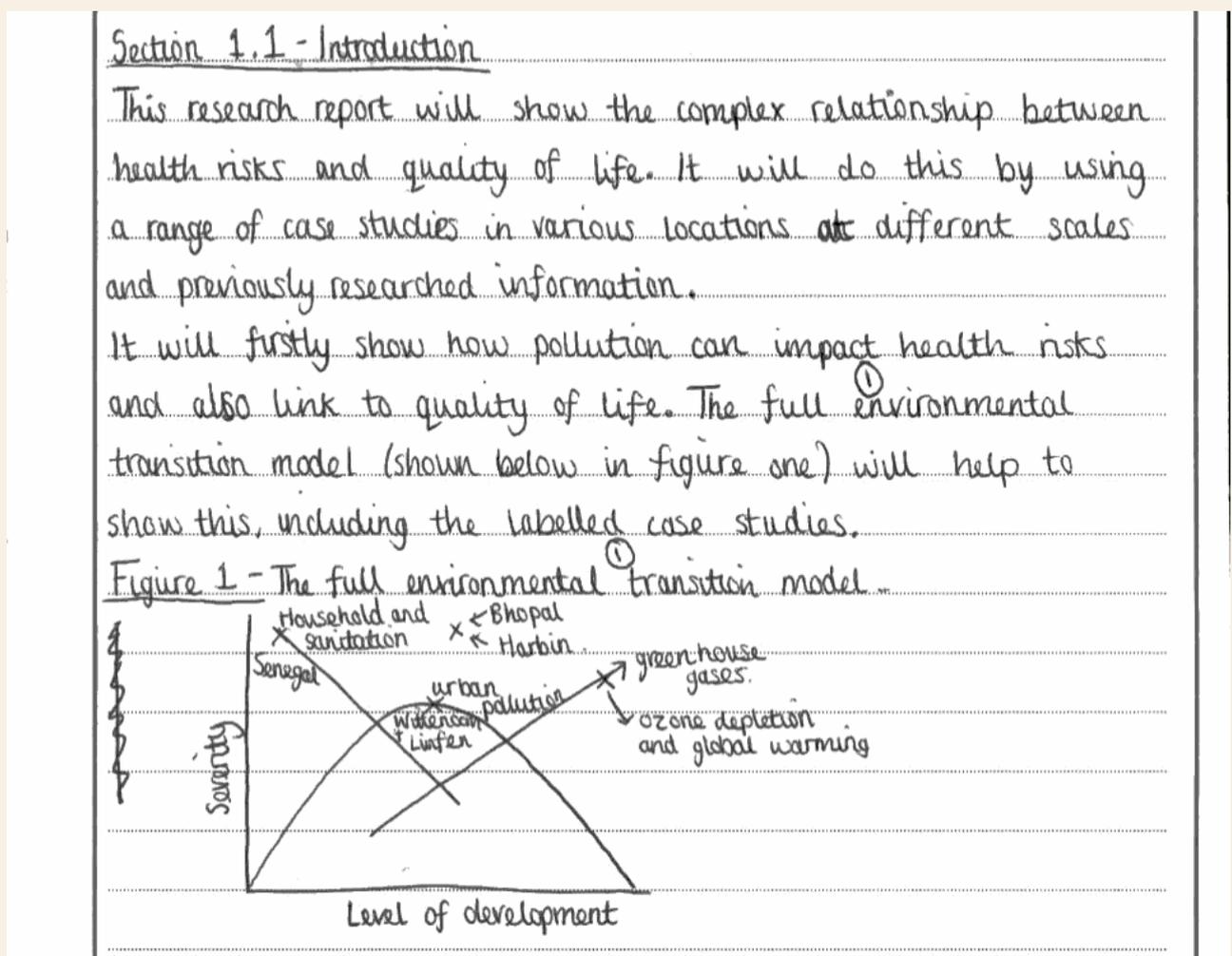
The best candidates went beyond the textbook examples with good research this series on Zimbabwe, Kenya, R Malri in Pakistan. There were good efforts to include GIS/Census data, although sometimes with a focus on two parts of Liverpool or London without relating to the specific question. Obesity in the UK and USA and also China was a popular choice for considering the Omran model's applicability, although it was often used inaccurately as a standalone disease rather than reference being made to the health problems it creates e.g. heart problems, strokes etc. Those who used skin cancer in Australia were often distracted by the causes rather than trying to make a link with QoL.

At a local scale there was evidence of good use of a pollution focus: asbestosis and the cancer mesothelioma in Wittenoom, cancer villages like Xinglong in China and slum dwelling health issues in Kibera and Dharavi. Greenpeace and the Blacksmith Institute were effectively used as sources. Cuba and the double health burden of BRICs (mainly China, a few used Brazil) was quoted effectively as an anomaly to the general pattern, and showed the complexity of the relationship between health risk and quality of life well.

In their conclusions, better candidates looked at both directions of the relationship, rather than concluding simply 'there was a link'.

A final point to note is putting huge amounts of prose into tables is not the best way to use it effectively in a report and it also creates difficulties for the examiners marking it.

This answer achieved 9/10 for its introduction.

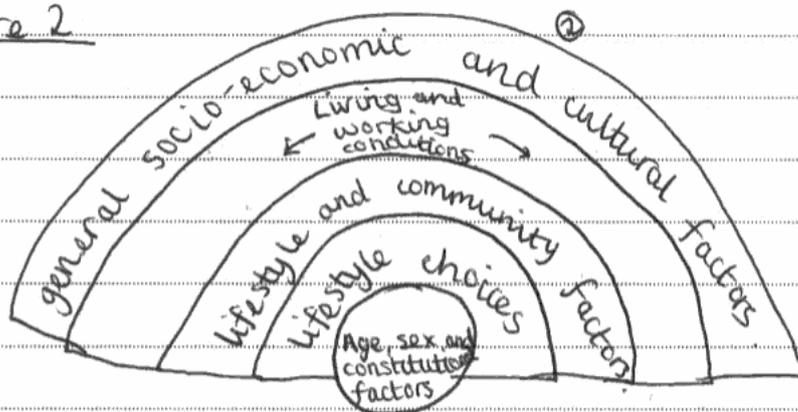


Secondly, this research report will show that it is not only pollution linking quality of life and health risks, but it can be more complex and lifestyle factors also have an impact. This can be linked to many case studies especially obesity in the USA and how this health risk affects quality of life. Figure 2 shows the Barton and Grant model to show ~~so~~ lifestyle factors.

#### Footnotes:

① [www.who.co.uk](http://www.who.co.uk)

Figure 2



Thirdly, this research report will show the social <sup>③</sup>Gradient of Health which looks at varying scales and locations of health risks. Northampton will be used as a case study to show this.

Finally, level of development will be shown as how this can be both a positive and negative way of linking health risks to quality of life.

This will lead to an overall conclusion assessing the complex relationship between health risk and quality of life at a variety of scales.

## Section 1.2 - Keywords ④+⑤

These are a list of keywords and definitions which will be used throughout the research report.

Human health - the physical, social and mental well being of a person.

Quality of life - how content a person is with all aspects of life.

### Footnotes:

⑤ Edexcel geography A2 textbook.

② Barton and Grant based on Dahlgren and Whitehead model.

③ Wilkinson report ④ Dictionary of human geography by Wetherick et al.

Development - how far the country has grown and industrialised.

⑥ HALE - health adjusted life expectancy to show the <sup>average</sup> life expectancy of a population to live healthily.

Vector-borne - Malaria is an example and it is when something e.g. mosquito carries the disease to different people.

Health risk equation:  $\text{Risk} = \text{health risk} + \text{vulnerability} - \text{management exposure}$

Pollution - particles in the air that can build up and cause health risks.

Atmospheric - pollution in the air

PQLI - physical quality of life index

HDI - human development index.



**ResultsPlus**

**Examiner Comments**

The clarity of this introduction is obvious, and it has relevant detailed models applied to the title. The footnotes are an easy way of showcasing ongoing sourcing.



**ResultsPlus**

**Examiner Tip**

Try not to list definitions but weave them into a focus.

## Question 6

### To what extent does leisure and tourism have negative impacts on rural areas?

**Explore** the positive and negative impacts of leisure and tourism on contrasting rural landscapes and settlements.

**Research** contrasting types and locations of rural landscapes and settlements showing the varying consequences of leisure and tourism activities.

A pleasing range of impacts were showcased, with many candidates appreciating both the negative (the root of question) and the positives, or that management might reduce the worst effects of leisure and tourism. Weaker candidates focused entirely on just negatives or, more rarely, just the positives. Tourism and Leisure were often defined in the introduction, but from then on treated as one and the same. This option lends itself to fieldwork relatively easily, and some candidates provided a Fieldwork Methodology Table alongside a Secondary Data Methodology Table to support their answer and gained marks in 'Methodology and Research'. A real sense of place was established: notably Flatford Mill, Studland, Slapton, Lickey Hills and the New Forest but also more far flung locations: Barcelona, Iceland and Sri Lanka. Popular **frameworks** were:

- The Wilderness continuum – going from a local park often with fieldwork quoted, or a National Park to other global locations - Machu Picchu and Bryce Canyon were popular, and onto Antarctica. There was poor research evident for Antarctica- including polar bears and Inuits.
- A descriptive plod through case studies, often only three which reduced their range in Research and Methodology marks. It tended to be the weaker candidates who looked at just the negative impacts. A more balanced response with 'however', 'despite', and 'although' linkages tended to score higher marks.
- A social/economic/environmental focus – looking separately at positives and negatives of the three elements, which, when combined with ongoing sub conclusions, worked well.
- A few used a Bipolar graph/spectrum diagram to place players along a range from 'exploit to conserve'.

Able candidates used **models** effectively to support their assertions, weaving them into the answers, sometimes customising them such as by combining Doxey's Irritation Spectrum with Butlers Model. These candidates engaged with the Resilience Model and applied the fragility of ecosystems to impacts. A few introduced the wider impacts of ecological footprints and multiplier effect successfully and used various versions of a sustainability model, for example in assessing the impacts of the Eden Project.

Weaker candidates often included at least one or two models, often the Wilderness Continuum or Butler, but struggled, if at all, to apply the models to the case studies.

The pleasure periphery and carrying capacity model was used generically rather than focused on physical/ecological/social etc issues. Bland comments about 'erosion, litter, pollution' often repeated for most case studies selected scored very low marks.

**Case studies** used apart from those quoted above in frameworks included:

- Galapagos, although as with Antarctica the concept of fragility was not often stressed.
- Amazonian ecotourism to show less negative impacts, but not always understood as naturally having a low carrying capacity and not geared up for mass tourism.
- Kenya Game Reserves with concepts of leakage and impact on rural communities as well as the physical environment proved successful.

- Yellowstone, Yosemite and the issue of the Skywalk in the Grand Canyon were often well analysed.
- The Alps was particularly vague. Those who focused on a ski region/resort tended to score more highly. Fieldwork was sometimes showcased here.
- A few **peripheral even inappropriate case studies** were still provided, some with a lot of detail – Ibiza clubs, Dubai, Benidorm, Marine Reserves, coral reefs and even Las Vegas - despite previous Principal Examiners' Reports explaining that such areas would not gain marks as rural examples.

It must be stressed that quoting Wikipedia, or The Sun, or Carl Pilkington's Idiot Abroad didn't impress as much as The Economist and candidates are encouraged to use higher level sources for this option especially.

This response achieved 9/10 for its introduction.

Introduction

In this essay I will explore impacts on rural areas due to leisure and tourism, and the extent those areas are negatively impacted. Leisure is all the activities related to non-work time e.g. fishing or cycling. Tourism occurs when a person is away from home for more than 24 hours. Leisure and tourism impact rural landscapes because of the activities and visitor numbers taken part in here. The rurality of an area is affected by population, development and land use (often agricultural). The rurality of an area depends on the ~~impact~~ factors impacting it. I chose to study 3 core case studies they are: Loch Lomond and the Trossachs National Park located in Scotland a High Income Country (HIC), The Phi Phi Islands in Thailand a Middle Income Country (MIC) and Lake Nakuru National Park located in Kenya a Low Income Country (LIC). I chose to research these three locations because of their differing economic status and also because they are all highly ecologically and physically valuable. To research these places I undertook primary and secondary data. I did primary research in the Trossachs and Criants Causeway which involved guided tours, interviews with National Park Authority (NPA) and photographs. I did secondary research in Lake Nakuru, the

Phi Phi Islands and the Trassachs, which involved watching documentaries, official websites, ~~and~~ and reading guide books and articles.

## Models and Theories - CC, R, Irrever

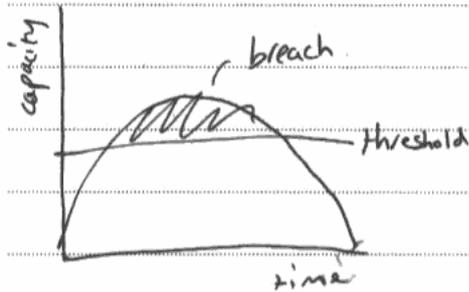


Figure 1 - Carrying Capacity (CC)

The CC shows how ~~over~~ the ~~break of threshold of~~ capacity can break the threshold of an area. This can be due to social, environmental and economic ~~f~~ impacts.

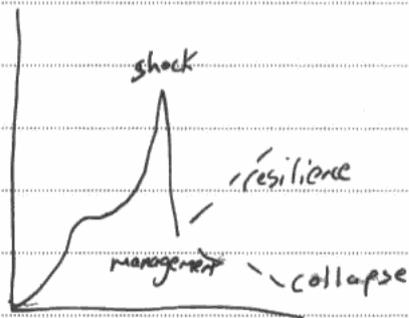


Figure 2 - Resilience (R)

The R model shows how an area can recover if it is managed. This can reduce the impacts of leisure and tourism

Euphoria  
Apathy  
Annoyance  
Antagonism

Figure 3 - Doxey's Irridex (Irridex)



The irridex shows the social impacts as tourism grows.



**ResultsPlus**

**Examiner Comments**

It demonstrated the trilogy of focus, definitions and framework.



**ResultsPlus**

**Examiner Tip**

Try not to split the introduction up with a methodology stuck into it. Combining the models may have shown customisation to the title - for example adding Doxey's irritation index to carrying capacity.

This response was given 12/15 for its conclusion.

### Conclusion:

Overall, this report concludes that the extent to which leisure and tourism has negative impacts on rural areas differs according to the level of wilderness (see figure 1), fragility, type of activity, management, number of visitors and level of economic development.

Machu Picchu, being a developing country, feels experiences more positive economic impacts, as it earns foreign income, yet in the LDNP (developed <sup>country</sup> rural areas) the economic impacts are predominantly negative as tourism is a comparatively low paying industry - they are felt to a greater extent particularly in settlements and homestay sites. As most tourists are currently from western countries, as shown by WTO data, rural areas used for tourism where the culture is non-western (such as Machu Picchu) are more likely to experience negative social impacts than western rural areas, due to a clash of cultures.

The LDNP shows that management can negate <sup>some</sup> and reduce the extent of negative impacts, but not completely. Fragile rural areas, as exemplified by Antarctica, do feel negative environmental impacts to a much greater extent than less fragile rural areas, such as the LDNP.

Throughout the research phase an all positive impacts case study was sought but none found - the ~~closest~~ closest found was the CFS. This shows that all rural areas used for leisure and tourism feel negative impacts to some extent, as by the impacts not being evenly distributed winners and losers are always created; causing conflict and changing players perspectives as to what is a negative impact. Reintroducing Red Kites to Wales is a positive impact for RSPB Gwynedd but a negative for Song Bird Survival. Similarly, the fact that foreign companies can benefit from Machu Picchu's tourism is a positive impact to overseas business, such as Orient Express, but a negative impact to local people who lose out.

Negative impacts are always felt to some extent but this increases with visitor numbers and fragility and reduces with management.

Evaluation: and backed up by  
This report is based on a much wider range of research, not included here due to time constraints, say. So, whilst it is acknowledged that anomalies do exist and that every single such site hasn't been explored, the conclusions drawn above should generally hold true. (see figure!)  
As a range of case studies, <sup>based on reliable research and information</sup> covering all aspects of types of rural areas, negative impacts and the characteristics which affect them, have been used this report has adequately address the question. It is recognised through that impacts are a matter of perspective and therefore that this presents challenges for assessing their extent and that other conclusion are still valid.



### ResultsPlus

#### Examiner Comments

It returns to the main case studies chosen earlier and has elements of complexity - it was supported by good ongoing evaluation earlier in the report.



### ResultsPlus

#### Examiner Tip

There is no need to evaluate your own work, you only have marks awarded for evaluating the case studies, concepts and models.

## Paper Summary

The **pre-release statements** were used with variable effectiveness to establish a framework in the final exam. There was increasing evidence of a centre-based response, which worked well when the individual teacher had practiced flexibility in approach and the possible frameworks which might work best not just for the title but for the individual student, but there was evidence of inappropriate case studies being used especially in Option 6. The **introduction** is key for getting the right focus, and throwing everything at the introduction and writing 3 or 4 sides is excessive and not likely to gain high marks, it also leaves little time for analysis and conclusions. **Conceptual ideas and models** were used in all options, but were still often mentioned in the introduction, or early on in the analysis, and not referred to again or effectively applied to the case studies.

**Methodologies** are often over done with far too much detail and too many sources discussed, or they are underdone with some general statements about source selection. The best candidates name 3 or 4 specific sources and make a positive comment on why they are reliable/or not as the case may be and how they are used in the report. Some candidates told a mini-story effectively: 'Research was started by using....then progressed to ... cross referencing with...' etc.

A table is often used by candidates but often this isn't the most effective way as it can turn into a repetitive list. Weaker candidates did not provide a methodology at all or put it at the end, as almost an afterthought, and basically wrote two lines stating 'I used many books and articles for this report and I considered these to be reliable'. The concept of reliability is better known, but a naivety was shown by some by using rote learning of critical terms, such as peer reviewed, without really understanding the meaning. There were also many outstanding reports that didn't have a methodology at all which means they cannot access more than 11/15 for Research and methodology. Many candidates seemed to have completed minimum **research**, as references were limited to the textbook and the odd website - this was particularly the case with definitions. Using dictionary.com is not a substitute for geographically based websites, journals or textbooks.

**Conclusions** are still the weakest section – many candidates still do not leave enough time and few recall case studies/concepts/models thoroughly. Candidates need to recap their case studies or main report sections for their conclusions to be credible and NOT introduce new material. Many candidates continue to make general or broad statements such as 'physical factors are most significant' without any attempt to justify or relate back to their main body of text. Very few candidates evaluated as they went, those that did stood out and it was clearer to see that they understood the question and the importance of what they were saying.

An extra point to note is that some candidates write very casually, often in the 1st person. **Spelling and basic grammar** is an increasing issue, and candidates might benefit from not word processing practice reports in the lead-up to the pre-release and examination. There were also many throw away comments such as 'only' 5000 deaths in Kobe. One or two used tables to summarise data rather than writing in prose, not just for the methodology, and this detracted from any flow of argument in the report.

## **Grade Boundaries**

Grade boundaries for this, and all other papers, can be found on the website on this link:

<http://www.edexcel.com/iwantto/Pages/grade-boundaries.aspx>



