Examiners' Report

January 2012

GCE Geography 6GE04 01

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Introduction

The fifth examination for Unit 4 showed continuing positive developments but also some continuing weaknesses which still need addressing by centres. The central messages to concentrate on improving are:

1.   **Using the pre release effectively**

2.   **Focus - on the title set and use of command and key words**

3.   **Introductions and methodologies**

4.   **Choices of case studies**

5.   **Getting to a useful conclusion**

Question popularity, as scanned into ePen, was as below (there were also a number of unscanned papers).

Question	
1	2188
2	375
3	459
4	190
5	333
6	405
Un named choices	71

General points

- The majority of answers are now in report style, and those still writing essays lose out on marks in QWC.

- It was pleasing to see a lot of **recent /topical case study material** being showcased, so for example, the 2011 Sendai earthquake and resulting Fukushima incident featured in both Q1 and Q5 and the Arab Spring in Q4.

- Most candidates had a **plan** to work from, although no credit is given to this in the generic mark scheme.

- Most also had some sort of **methodology** – allowing access to the top level of the generic mark scheme band named Research and Methodology.

- A minority of students were disadvantaged in their QWC marks if they did not write a report style product with obvious sections and ongoing references.

- **Diagrams** were seen in all options, often well labelled and with scales or customised to a particular case study. Please note that it is best to avoid using the exam booklet landscape style.

- **Vocabulary and models** were seen in all scripts to varying degrees**; but** just name-dropping doesn't show high level understanding.

- The majority included **ongoing evaluation**- sometimes under very obvious sub-headings. Some unfortunately evaluated their own research and report and gained no marks for this.

- **Timing** affected a significant number of candidates, usually because of too much time spent on the plan, introduction and methodology.

Use of command and key words

Below is a summary of the command and key words that need to be unpicked.

These need to be continuously used in the answer and returned to in the final conclusion.

Question	Command words	Key words
1	Discuss	Disastrous
2	Explain why	Landscapes
3	Evaluate the importance of	Sustainable strategies
4	Assess the extent to which	Survive
5	Discuss	Changed and increased
6	Assess the extent to which	Contrasting attitudes

There was some evidence of centres second-guessing the question so candidates gave their prepared answers and therefore didn't score well, particularly under Analysis and Application. The key thing in any preparation is to enable students to be **adaptive and flexible** in the actual exam room and not prepare for just one type of focus hoped for.

Introductions and methodologies

There are 3 critical elements in an introduction: **focus, definitions, framework**. Many answers had incomplete coverage and lost out on easy marks. The better candidates referenced these, often giving quotes and incorporating definitions in a clear focus using words from the title. Where a justification of the inclusion of particular case studies was carried out the rest of the report usually flowed more successfully, remaining true to its original aims.

This will lead on naturally to a methodology- either short prose paragraphs or a table is essential, using the critical concepts such as peer reviewed, reliability, topicality, cross referenced **specifically** to the pre release/title set. This may be successfully carried out as an ongoing methodology or put at the end of the report, whichever suits a student. NB: there is a cap of 11/15 for Research and Methodology if there is no methodology at all.

Best methodologies evaluated individual sources and identified more reliable data as having been peer reviewed, written by academic institutions, not sponsored etc. Nearly all of them commented on Wikipedia and how it is open to anybody to make contributions, unfortunately so many of them clearly rely on this heavily still. A Level textbooks are obviously a starting point, but should be better referenced than – 'the one with the parrot or green cover.....'! YouTube is not good enough as a quoted source, it's really just categorised as a medium and it would be best to quote the source that posted the video, which may be highly biased! Where viewpoints are important, especially in options 4 and 6, it may be a valuable source of information. From the start of their research on this module students would benefit from creating a reference trail such as this:

Information needed	Source	Evaluation of source

Sourcing and referencing could still be further improved. Too often the candidates would start off with references but by the end of the report they had forgotten to continue to do it, which will reduce their marks in QWC.

Choosing case studies

This needs even more practice: there was a good range of case studies shown across the exam but it is important to ensure that within each report there is a balance between breadth and depth. If this is not achieved then the candidate is limiting their ability to answer the question well. The best candidates would have accurate case study data that was relevant to the question posed. There was a tendency amongst some to simply write all they knew about particular case studies and this detracted from the arguments that they were trying to create in the report.

If a pre release is set on temporal trends, it is unlikely that current discrete examples dotted across the world or a region are likely to be enough.

Conclusions

Making evaluative comments and spotting the complexity in a question allows access to the highest levels in the generic mark scheme. Most candidates showed some sort of ongoing evaluation, at the end of each case study or discussion on a factor/reason/concept, and then an end statement. It is the latter in particular which is still not given enough emphasis - yet potentially can get more marks than the introduction. Grouping of examples and ideas, teasing out main points and possibly anomalies, and referring specifically back to the case studies/models etc used in the report is essential to access highest levels of the generic mark scheme, the concept of complexity is referred to:

Question	Spotting the complexity in the title to help final conclusions
1	Impacts are not just disastrous in MEDCs for their economies but also in NICs/LDCs with less reserves to draw on - it is not good enough to say Haiti was poor therefore the 2010 earthquake didn't matter economically! Some wealthier countries have been very badly affected by a disaster - with the Sendai earthquake and tsunami in 2011 a classic example.
2	Landscapes depend on not just relict or semi-active processes but static variables of geology, altitude, aspect and indeed the influence of humans. Repeated ice advances and retreats have modified/destroyed many older features, especially periglacial. Some areas of the UK have been affected more by valley glaciers than ice sheets, and not all the UK has been affected by glaciations!
3	Sustainable strategies are important, if they really exist! However, there is a place for less sustainable strategies too, e.g. emergency food aid. The smaller scale strategies of appropriate technology like zeer fridges must be directly linked to food security and weighed up against more global schemes involving GM and Fair Trade, and not all strategies fit a certain location or time.
4	Culture naturally changes so it is the extent and rate of change which is critical.
5	Health risks have seen a global shift in terms of water and land pollution from MEDC to NIC and LEDC countries, but air pollution especially still plays a large part in MEDC morbidity and mortality. Incidental pollution may have reduced in MEDCs but has not in NICs and LEDCs. All areas are affected by sustained air pollution even if they haven't caused it originally.
6	Not all players do have contrasting attitudes especially to conservation of landscape, so have examples of these as well as areas/locations with great differences. Some players have more power than others which may affect their attitude. Players may be both local and external to a locality, even global.

A good test of a good conclusion is whether you can identify the title and format of the preceding report from it 'blind'!

Question 1

The number of tectonic hazards is not increasing but their impact has become more disastrous. Discuss.

Pre release: Explore the range of factors that make tectonic activity increasingly hazardous to humans and how the impact of disasters varies over time.

Research a range of social and economic impacts, resulting from seismic and volcanic hazards in contrasting locations and how these may have varied over time.

Aspects which went well and stronger answers	Less successful aspects and weaker answers
• **Considered the two elements to this question, i.e. the time element and them becoming more disastrous.**	• **Only addressed the first part of the question properly ' The number of hazards is increasing ......' and concentrated only on these factors.**
• Most gave definitions for tectonic hazard and / or disaster.	• Did not consider 'Time' and use trend data.
• Included references for their definitions.	• Some were unclear on the difference between hazard and disaster and reverted to sub GCSE case studies in terms of explanations.
• Defined impact then sub-divided into social, economic and environmental impacts.	• Many described tectonic processes and the different plate boundaries in detail and drew quite complex diagrams which were not focused on this pre release or question.
• Used relevant models, incorporated into answers and customised including Degg's model, Parks model and hazard profiles.	
• Differentiated primary, secondary and tertiary aspects of the disaster.	• Chose a framework which had only a simple LEDC/MEDC approach.
• Went beyond the simplistic view that developed countries suffer economic impacts and developing nations are hit by social impacts (Japan 2011 being a good example of this).	• Some drifted into recovery and response.
	• Only mentioned and did not really use models.
• Chose tectonically affected areas with data collected over time.	• Quoted inaccurate information from their case studies, either providing inaccurate magnitudes to events or incorrect dates.
	• Did not cover all of the 3 tectonic types.
	• Used inappropriate case studies, e.g. Kobe even with a high death toll was a good example of management.

The most common examples were:

- Earthquakes: Kobe and the 2011 earthquake and tsunami in Japan; Loma Prieta, Northridge and San Francisco earthquakes in California, Sichuan, Christchurch 2011 and Haiti 2010

- Volcanoes: Mount St Helens, Mount Pinatubo, Montserrat

- Tsunamis : 2004 Indian Ocean and 2011

- More unusual examples that were used to good effect included: Arenal in Costa Rica, Mount Merapi, Nyiragongo and some older Japanese examples of tsunamis in Sanriku and those in Alaska. These were more successful because they included a time element.

Most effective were those who picked an area such as Iceland or Christchurch and showed how tectonic events had altered in their impacts over time. A simple search on google 'history of earthquakes haiti' brings up a wealth of information, but few seemed to have looked at this aspect of the pre release. Indeed, in many answers the case studies had not been well-chosen and did not provide the evidence to back up the points being made. Many candidates would explain why a hazard event had high social or economic costs and then say this was evidence of an increasing trend. They often chose two unconnected disasters which occurred some years apart and concluded that impacts were more disastrous because the more recent disaster had more fatalities etc.

The better candidates were able to cope with the complexity of the statement. They used lots of short examples of case studies to make their arguments but most importantly included a range of accurate statistics on trends. Not all differentiated the types of disasters reported by USGS and EMDAT however, since there is a critical difference between hydro-meteorological and tectonic trends.

Basic, but very effective versions of the graphs seen in the main textbooks, or quoted directly from USGS and EMDAT, gained valuable marks in Research and Methodology. More able candidates considered why it is difficult to be sure whether the number of hazards is increasing or not, and mentioned improvements in recording and increase in media interest. They balanced this with consideration of social and economic effects and why this is not straightforward either.

The importance of graphs and real data on trends.

Analysis

Trends

Graph Reliable statistics from EM·DAT show clearly that there has been no increase in the amount of hazard events in the last century 1990-2008. See figure 3:
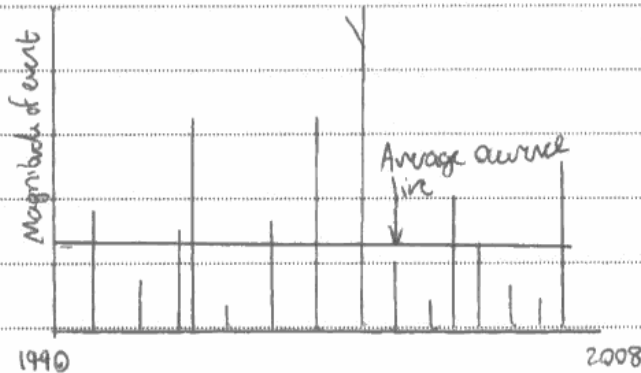

Figure 3: EMDAT

The graph shows natural fluctuation in magnitude, and slightly in the frequency of events. However, the horizontal 'average line' shows there has been no increase in overall frequency of events. The fluctuation is natural due to violent event periods at disaster hot ~~spots~~ spots. However, there may be percieved to have been an increase in tectonic hazards, because there has been an increase in the number of events reported to people, as shown in figure 4, another graph from EM·DAT.
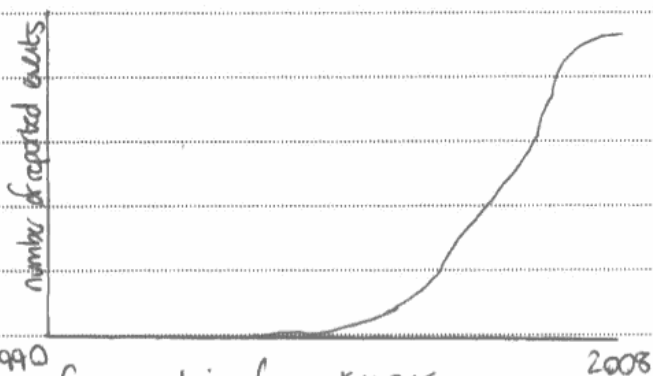
Figure 4: from EMDAT

The graph shows that the number of report events has increased. This is because of the advances in the media, as a result of advances in technology.

This is an example of a good conclusion.

Main conclusion

In conclusion, it can be seen that the number of tectonic hazards are not increasing in number. However, there is a strong argument that the impacts of tectonic hazards are becoming more ~~hazar~~ disastrous (as seen in the example of the Haiti earthquake ~~& their aftershock~~ and Japanese tsunami) but also a strong argument they are not which can be seen in the case study of the Chilean earthquake. ~~The report has found that just as d~~ It can be concluded depending on which sources and examples are used that the impacts are or are not becoming more or less disastrous. In the opinion of this report the impacts depend on where you are and therefore to some such as those living in Haiti where urban population growth and a low HDI of 0.454 (⑤ taken from the UN world development summary: a reputable and fairly analysed source) the impacts are becoming more disastrous as the ~~pep~~ population becomes more vulnerable and the capacity to cope decreases. However, for other populations such as Chile where the HDI is

constantly improving (from 0.639 in 1960 to 0.805(0) in 2010) the population is becoming less vulnerable and capacity to cope is increasing. Therefore, no clear final answer can be given on whether the impacts of tectonic hazards have become more disastrous. However, in the future it could be argued that the impacts (in particular death toll) may become more disastrous. This is because the exposure time of an increasingly vulnerable population is due to increasing population growth has been short and so has not been exposed to very large magnitude events, than the impa which also will cause disastrous impacts (© taken from 'Urban earthquake fatalities' 2003 by R. Bilham 'www.cires.colorado.edu/~bilham' an a useful source written by an expert however slightly outdated as it was written in 2003). The impact of large magnitude events can be seen in the example of the March 2011 Japan earthquake which caused tsunami waves of 40+ metres and killed over 15,700 despite Japan's preparation. This is for

Question 2

Explain why glacial and periglacial processes produced a range of landscapes within a region such as the British Isles.

Pre release: Explore the processes which shaped the landscape during the Pleistocene within a region such as the British Isles.

Research the wide variety of landscapes and landforms created at different scales by glacial and periglacial processes within a chosen region.

The chosen region was invariably that of the British Isles, although the wording of the question allowed another location in case, for example, fieldwork had been carried out elsewhere. However, there was no need to use another area to contrast with the British Isles such as Canada or the Alps.

Most candidates gave some sort of definition of glacial and periglacial environments, but relatively few candidates went on to give definitions of processes and landscapes. The lack of clarity regarding 'landscape' as opposed to 'landform' often had a negative knock-on effect for the whole of the report. This was disappointing given the lessons hopefully learned after the last exam, in 2011, where the focus was again on landscapes.

The framework varied, with the most popular being glacial versus periglacial, others being upland versus lowland and some being glacial erosion then deposition then periglacial. Some of the best used Anderson's classification of scale of feature and then focused on one particular area, seeking to link the various processes and landforms to make an overall distinctive landscape. These were the candidates that realised you didn't have to include every single glacial/periglacial landform that you had learnt and could remember. Particularly well done was a focus on Nant Ffrancon, using the facets of u-shaped valleys, truncated spurs, corries, hanging valleys and arêtes. They by no means discussed every possible landform but by careful selection, by linking process and landform, clearly developed the concept of landscape. Glacial deposition and periglacial proved more of a challenge, but those candidates who did not try and cover everything, did develop the landscape concept. They struck the balance using the trinity of *processes, landforms* and *landscapes*. They used phrases such as 'the rolling basket of eggs topography of the drumlins in .... as compared to the jagged pyramidal peaks in ...'. Many used the idea of equifinality successfully, although some had obviously heard of the concept and used it in the hope it was useful.

Periglacial landscapes proved more of a challenge generally to candidates in terms of process and outcome, but, again, those who identified a few landforms in one area did well rather than the 'Cook's Tour of the UK' approach, trying to get in as many landforms as possible. Most candidates used glacial erosion examples from the Cairngorms or Snowdonia and periglacial from the Cairngorms (active) and Dartmoor and the South Downs (relict) although some unfortunately seemed to think glacial processes were still in operation in the UK!

Fieldwork tended to be the 'I went to Snowdonia and saw Cwm Idwal' type of reference rather than simple sketches of features in an area they had witnessed which would have gained marks.

Diagrams were of varying use and quality. There were some very basic ones which added nothing, most notably of cirques. The best ones were those that gave a flavour of landscape. Some had clearly learnt a diagram for upland areas which showed a range of landforms in one landscape, although only stronger candidates appreciated the differences in scale between a u-shaped trough and an ice-wedge cast!
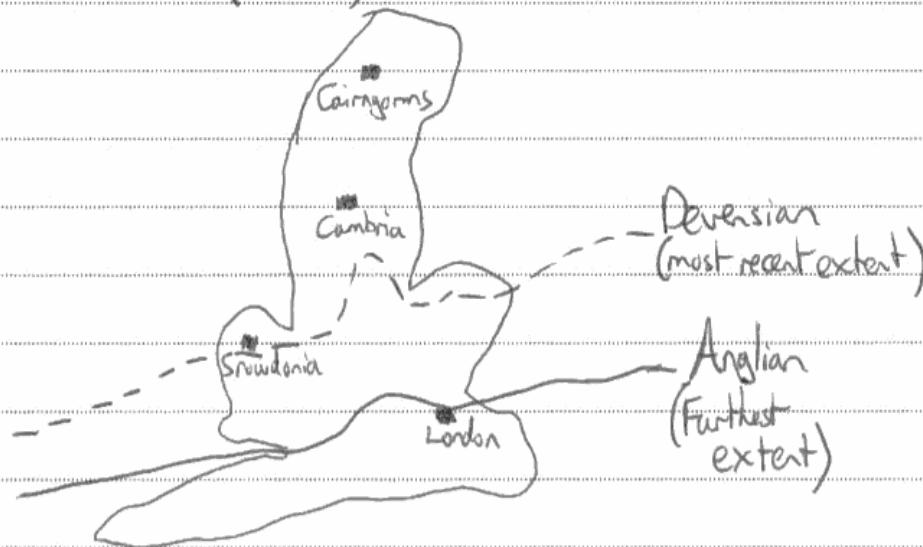
More able candidates were sometimes able to consider other factors e.g. tectonics, geology, time, even human influence on landscapes and very importantly that repeated ice advances and retreats may mask initial features, especially periglacial ones.

Many introductions included information on the location of glacial and periglacial features in the British Isles. This one achieved 7/10.

Introduction

Glacial and periglacial processes are responsible for most of the landscape and landforms seen today in the British Isles. The last cold period experienced in this region was the Pleistocene (2,000,000 years BP – 10,000 years BP) and many landforms date back to this time. During this period, much of the British Isles were covered by ice (see figure 1) which would account for the many glacial landscapes seen today, whilst the periglacial processes would have taken place where this the ice had not covered.

These are seen Figure 1: Extent of ice coverage during the Pleistocene. (Edexcel)

Cairngorms

Cambria

Snowdonia

London

Devensian (most recent extent)

Anglian (Furthest extent)

These are some key terms that will be used in my report:

- Abrasion — the wearing down of rock surfaces by rubbing and impact of debris-rich ice. (Bishop + Prosser)
- Plucking — the mechanism by which glaciers detach and remove chunks of rocks from their beds by freezing around them and 'plucking' them from the surface.
- Freeze-thaw — a form of chemical weathering where water enters cracks in a rock and freezes, causing it to expand. The build in pressure causes the rock to fracture.
- Periglacial — non-glacial cold climate processes and landforms regardless of proximity to glacial ice.
- Crelifluction — the mass movement of material of a frozen surface.

(All definitions adapted from Anderson unless otherwise stated)

Framework

I will layout my report by the following table (see table 1), starting by each system and then explaining the landforms and locations within these systems.

Table 1:

System	Landforms	Locations
Glacial	U-shaped valley, Corrie	Nant Ffrancon valley, Snowdonia, N. Wales
Depositional	Drumlin	Vale of Eden, Cumbria, N. England
Periglacial	Patterned ground, Tor	Cairngorms National Park, Scotland

This is an example of an introduction to Q2.

Introduction

1.1 Focus.

When attempting to ascertain the effects of glaciation and periglaciation upon the relict British landscape, the cyclical nature of the numerous ice ages it experienced during the Pleistocene - the precedent to our current inter stadial, the Holocene - have added to the complexity of the question, and the landforms produced have either been re-shaped or destroyed by those subsequent to it. The Anglian glaciation, occurring 478-424,000 years ago (Anderson) marked the furthest extent of ice seen within the UK, imposing glacial processes on what would have been periglacial areas, such as within East Anglia. The Devensian glaciation, approx 70-10,000 years ago (www. physical geog. org) marks the last expansion of glacial ice within the UK, and arguably as having the greatest impact upon its landscape.

1.2 Define

A glacial area is one which contains glaciers or ice caps (integrated geography) and differs from a periglacial environment. Periglaciation occurs in areas experiencing cold temperatures of below 0°C and or areas with continuous permafrost

(geoactive 21 - periglacial processes). They impact upon landscapes - an area displaying similar geomorphological characteristics differently - yet their processes interact to exaggerate the effects of each.

1.3 Framework.

In order to assess the extent of the range of processes produced, I will be sub dividing my report into upland and lowland categories. In respect of glaciation, this will allow the effects of erosion and deposition to be viewed seperately, to assess the extent to which they contribute to the formation of micro/meso/macro landforms. This framework will also allow the effect of periglaciation to be assessed on a more current scale, as areas of high altitude and latitude can still support their processes, affecting the relict British landscape. This report will also assess temporal change, the case study of East Anglia will show the prevalence of these processes within the Anglian, and how the landforms have had more time to be modified by humans and weathering, in comparison to the Lake District, which will show the polygenic nature of the dimension. The Scottish Highlands will show the effects of the most recent glacial advance, and this report will attempt to find which area was affected the greatest.

Question 3

Evaluate the importance of developing sustainable strategies to manage food security.

Pre release: Explore the need for, and effectiveness of, different strategies that are designed to improve food security.

Research a range of food security strategies, including 'sustainable ones', at differing scales and locations.

The key to this title was to establish criteria on sustainability and to then test any strategies by these. For the majority of candidates, sustainability was taken as a long-term, as opposed to a quick-fix, solution. Some also emphasised that strategies should not damage the environment. Occasional, very good candidates, looked at equity, especially changes in the role of women in society. Better candidates overall understood the more complex nature of sustainability and not only quoted the sustainability quadrant /3 legged stool or pillar model of Brundtland, or the Venn Diagram model suggested by Witherick, but went on to use these during the rest of the discussion, and returned to them in the conclusion.

Most had clear definitions of food security, better candidates referencing the FAO or similar organisation. Many used the theories of Malthus and Boserup, the better ones quoting 'neomalthusian' concepts, but although population policies are relevant they should not have dominated a discussion.

Both sustainable and unsustainable strategies were chosen by the majority. Better candidates used scale to select case studies: local-national-international. Very few used level of development. Most worked through a list of strategies weighing them up to varying degrees, but many used one reference, especially popular being a topical video, and became rather anecdotal. Another popular framework was by 'top-down', 'intermediate' and 'bottom- up' schemes. All approaches were valid and all produced some good scripts and some less successful ones, all depending on the quality of data used as evidence and the depth of the analysis.

Case studies which worked well	Less understood case studies, or those less well related by candidates to food security
• Cuba and organoponics	• Great Green Wall of China
• Old Green Revolution and newer one in Africa- AGRA	• GM – still often confused with Green Revolution
• Food Aid	• Fair Trade
• LEAF	• Practical Action and zeers
• CAP	• Land grabbing

Better candidates identified the strengths of sustainable strategies in their conclusions, but also talked about the importance of less sustainable strategies. This helped them access top band marks. For example, volume production from monocultures and the role of national politics in ensuring domestic food security, at the expense of food security elsewhere. This level of complexity escaped many candidates who just wanted to focus on the importance of sustainable strategies.

This is an example of an introduction which reached the top level of the D part of the generic mark scheme.

1. Introduction

Food security exists when "all people at all time have sufficient, safe, ~~too~~ nutritious food to a healthy and active life." (The World Food Summit 1996). And Sustainable Strategies are the tactics that meet the need of present generations without comprosing the need of ~~food~~ future generations. Although it is argue that the Earth have enough resources to support a population of 10 - 12 billion, there are 850 million ~~for~~ people continually suffer from malnutrition due to inequalities in distribution (Edexcel A2 Geography). As a result, there are contrasting views on the relationship between food security and population numbers. Malthus believed that a rise in population number will eventually lead to famine and even civil war whilst neo-malthusians believed that ~~th~~ it will lead to crisis of energy, water, land and food. For Esther Boserup, she believed that increase in population will raise the demand for food but will also act as an incentive to alter agrarian technology and to meet the rise in demand.

In this report, it will examine the need to develop sustainable strategies to manage food security. And to evaluate the success and limitations of different strategies. Points will ~~be~~ be backed up by a range of case studies. Case studies to be used is

shown in the table below.

Table 1 — Case Studies

Scale	Example	Location
Local	~~Fairtrade Coo~~ Kuppa Kokou Fairtrade Cooperative	Ghana
National	Organoponicos	Cuba
NGO	Zeers	North Darfur
International	Land grabbing	Worldwide
International	GM Food	World wide
Broad Approach	Population Control	Kerala

These case studies were used as they cover strategies at different scales, from local to international, involving both MEDCs and LEDCs. Most importantly, they include both sustainable and unsustainable options.

Fig. 1 Sustainability diagram
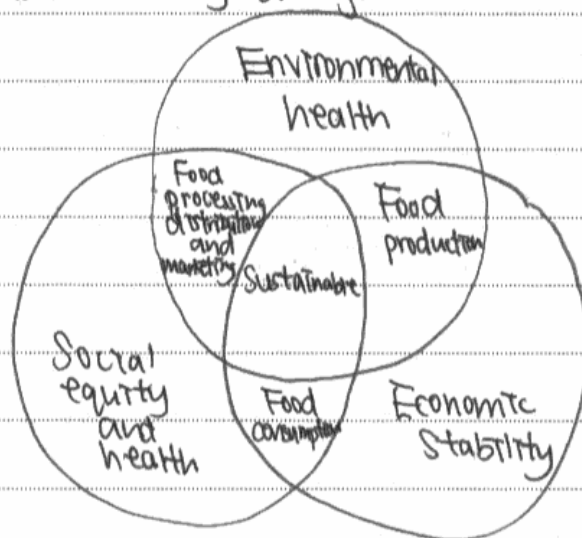
The diagram shows the food system linked to the basic criteria for sustainability. A well-functioning food system should be able to balance all three aspects.

Methodologies are critical in accessing the top band of the Research and Methodology section of the generic mark scheme.

2. Methodology

In this report, a range of sources have been used including books, journals and websites. Sources were cross-referenced to remove bias and to improve reliability of the research. Books such as the "Edexcel A2 Geography", Dunn et al, 2009 and the "Food and Famine", Sue Warn, 2010 were used. These sources are likely to be acurate and unbiased since they were written for educational purposes. Academic Journals Geofiles and Geofactsheets were also used. For example, Geofile no. 497 "Food security In Ethiopia", 2005 and Geofact sheet no. 228 "Still hungry, and getting worse?", Sue Warn. These are again a reliable source of information since they have been peer-reviewed.

For online research, information were take from organisations such as the FAO (www.fao.org) — Feeding the world in 2050, its sources are ~~togeth~~ likely to be objective since it is an authoritative organisation. Articles were also chosen from ~~thefore~~ the Guardian but their news must be used carefully since it has a political bias towards to left wing.

3.1 Case study — Organoponicos

Organoponicos is a system of sustainable urban farming in Cuba. It is pubically functioning in terms of ownership but heavily subsidised by the Cuban government.

During the ~~G~~ Cold War, the Cuban economy relied heavily on the support from the Soviet Union, approximately 50% of Cuba's food was imported. However, when the USSR collapsed

Question 4

Assess the extent to which cultures need to change in order to survive.

Pre release: Explore how far cultures need to change and adapt when threatened by a range of environmental, socio-economic and political pressures.

Research a range of human cultures showing different rates of change, degrees of cultural evolution and survival.

This proved a very accessible question that quickly differentiated the top and middle candidates due to the 'assess' command statement. Weaker candidates quite happily described/explained 4-6 cultures (all at the same scale) and assessed their survival, whilst better candidates looked at rates of change and scale of different cultures. The best candidates went beyond the simple idea that either all cultures change or that they don't, realising that change evolves at different rates depending on context. They clearly identified areas of culture at risk - traditions, language, landscape as opposed to just stating that 'culture was affected'.

Most candidates were able to define culture clearly, and there were a wide range of interesting and sourced definitions. Some also made good use of a simple spider diagram to summarise the various strands of culture. A variety of frameworks were used, the most popular being to structure the report by range of threats: environmental, socio-economic and political pressures. A more unusual approach was by viewpoint: hyperglobalists, transformationalists, sceptics etc.

A wide range of sources were used, from Geography Review articles on hip hop to My Big Fat Gyspy Wedding and Bruce Parry's Arctic. Some were solely reliant on the Geography A Level text books. Others used a really wide range of quality newspaper articles from the *Guardian*, *Times* and *Independent*. Many candidates had excellent methodologies showing a wide range of research sources. There was evidence of fieldwork carried out in a variety of locations, particularly in London.

Those who examined a number of case studies in detail and supplemented these with references to less detailed place studies were able to show the range of their research. An overview of the range of locations seen:

- endangered communities under environmental stress: Inuit, Gwich'in, Bushmen

- endangered communities under socio-economic threats e.g. Aborigines, Yanomani

- endangered national cultures: France, Japan contrasted with more vulnerable Tibet

- endangered regional cultures: Wales, Basque country

- more resilient cultures - from the USA and globalisation and imperialism to the Amish

- more unusual examples included gentrification threatening local cultures and hip hop, Barbie dolls in Iran as a threat to culture and a way of changing to support culture, various American Indian tribes.

A good number of candidates showed a really good understanding of the issues affecting cultures, and the dynamic nature of most cultures, and the ideas of cultures slowly evolving over time, or being forced to change rapidly due to external pressures, whether they were political or environmental. Good understanding was shown about cultural globalisation and cultural imperialism. Generally reports made excellent use of the specialist vocabulary, and there were many examples of effective ongoing referencing. Many reports also had good ongoing evaluations.

The weaker responses centred their arguments/ideas on how cultures have **adapted** or how people have **adopted** different cultures. The problem with this analysis is that it ignores the survival point in the title of the question. Better responses however, used case studies to explain how cultures have changed and survived as a result of these changes. The emphasis here is on how the changes preserved the culture rather than simply how the culture changed.

This is an example of an introduction which was awarded full marks.
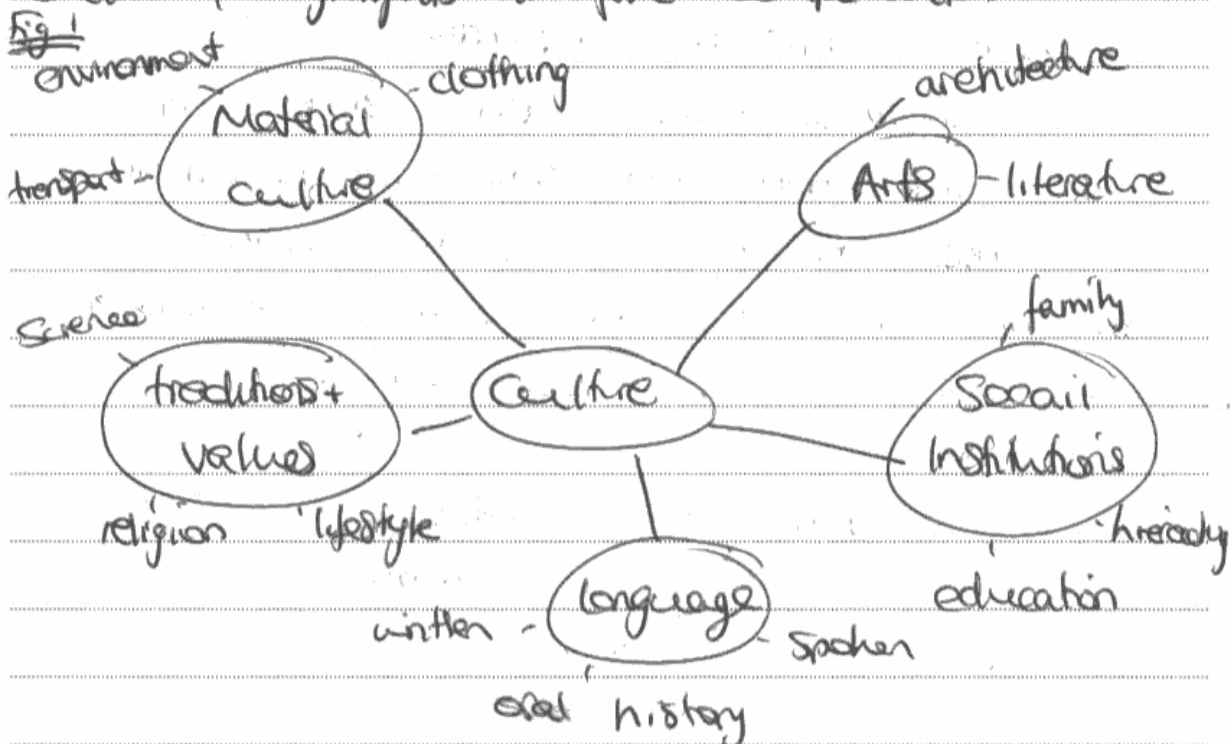
This report will address how cultures adapt the extent to which cultures need to adapt and change when presented by a number of pressures. There are a multitude of cultural pressures from communism, deforestation and Mcdonaldization of which this report will group into three sections; environmental, socio-economic and political pressures. Pressures such as these can induce both positive and negative changes from cultural evolution, the process whereby a cultures develops gradually and positively, to dilution and assimilation. Cultural change can also have a range of scales from long to short term, minimal to significant and gradual to sudden.

This report's main body with be

Figure 2 highlights how cultural threats can often fall into more than one category. Whilst this report has recognised this, the main body will be seperated into three sections, environmental socio-economic and political threats.
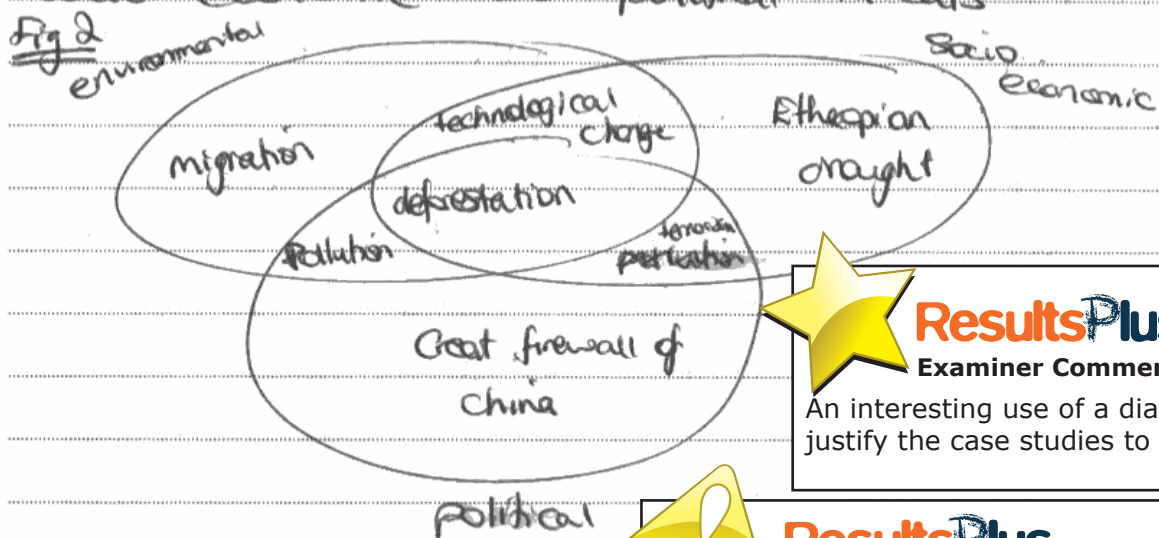
Fig 2

Sub-conclusions and final conclusions are often a difficult skill to master. This extract shows the difference between the two.

Summary of S.3 Summary of section five.
Political pressures are very rare in an age of global politics as unethical to conduct is not tolerated by the world community. However, terrorism has dampered our day to day life whilst potentially effecting the way in which cultures are constructed in the future. However, 89% of Northern Americans say they are more patriotic after to 9/11 which suggests their culture is stronger as a result. America has changed a huge amount ~~in comparison~~ in order for their ~~shake~~ culture to survive whereas the Chinese are not. The Chinese government has restricted their opportunity to change and therefore their 'need to change' is very minimal. Just two years ago, only 5% of the Chinese population were aware of the censorship, highlighting the extent to which china is restricted in their cultural evolution. However their cultural survival is not under threat by the outside world, yet it could be argued that their threat is in fact their government.

6. Conclusion.
~~The extent to which cultures need to cho~~
The extent to which cultures need to change in order to survive is dependent on a number of factors. The term 'need to change' it a very dynamic. The type of pressure categorized into

environmental, socio-economic and political in this report, has a huge bearing on a culture's need to change for in order to survive. Environmental pressures are often the greatest pressure to cultures as change is very difficult in a hostile and unfamiliar environment. This being said, environmental pressures also require the greatest change as a cultures environment plays a huge part in their cultural identity, heritage and lifestyle. Conversely, socio economic threats far present a less severe threat as they can often be open to management, as seen by the Bhutanese and Inuit. Political threats however may be rare yet present a substantial threat. The need to change between of the Chinese and Americans is very similar yet the threat is very different, internal and external respectively. The scales of change, as referred to in Section 1, can be very diverse. The immediate cultural change of the Inuit is very different to the gradual opposition to that of the Persian. Also, the Inuit case study is an example of true cultural evolution as their change is down to natural and positive. in reference to global warming. However the rest of the case studies in this report are classed as cultural adaptation as they are induced by largely, human conflict, such as terrorism and deforestation. It is of paramount importance that culture

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continue to be adapt or evolve as those who
dont, face the likelyhood of fossilisation and
extinction. Such as the Boran.

Question 5

Health risks from pollution have changed location and increased over time. Discuss.

Pre release: Explore the relative health risks from incidental and sustained pollution, and how and why these vary both spatially and over time.

Research locations at varying scales and levels of development, experiencing health risks, both past and present, from different types of pollution.

Most candidates managed a framework and key term definitions on pollution in their introductory section, however, definitions were often not fully referenced and some were poor in terms of accuracy. Better candidates gave a justification for the case studies to be used and offered the Kuznet curve/epidemiological model/Health Risk Equation/externality field as a frame. Only better candidates went on to really use these in the rest of the report.

Many candidates struggled to grasp the complexity of addressing both the 'changing location' and 'increased over time', many opting to just address 'increased over time' at the expense of 'changing location'. Those that did well linked 'changing location' to development, and how incidental pollution can actually spread over a vast area, be transboundary and cause a wide range of health issues.

Common structures included different levels of development, both past and present incidents and different types of pollution: incidental and sustained. Many candidates wanted to simply describe how and why health risks and pollution vary, but many found their case studies were inadequate. Popular case studies were London's air quality from the 1950s to present day, global warming and related risks, then incidental examples of Bhopal, Chernobyl, Harbin, Fukushima, Camelford. However, many had no real idea of the actual health risk involved, or that there is a difference between morbidity and mortality. Some tried to use the BP Gulf oil spill as an example of an incident managed to varying success without acknowledging there was very minimal human health risk involved.

The global shift in pollution as manufacturing has shifted to transition economies was a theme developed by the majority of candidates, however apart from Bhopal and 'cancer villages' in China, few had real evidence of this. Chernobyl was poorly researched and the ex USSR often described as a developing country. There was little understanding of the role of the EU in cleaning up this incident, or that more sustained pollution resulted from radiation sickness. They researched individually researched case studies, often from the Blacksmith Institute, such as Linfen, and the Ivory Coast toxic waste scandal. Others included interesting research on air pollution in the Czech republic and the Canadian Tar Sand Athabasca river pollution issue.

There is still a worrying confusion about the differences and links between global warming and ozone depletion with resultant health risks- a good source might be the BMJ and Lancet which have recent reports on this. Some discussed Kenya and Italy having increased malaria risks but most were more vague and confused polluted water with malaria spread. Many talked about the 'big hole over Australia' saying that 'until something is done about CFCs – the problem will continue to get worse' demonstrating a lack of knowledge on the Montreal Protocol. This could have been used more effectively as a health risk reducing in time because of management.

The response below is a good example of ongoing referencing right from the introduction and two well chosen models followed by a detailed methodology. The Definition section got 9/10 because it was a little list-like rather than a complete focus on this specific title.

1 - Introduction

1.1 Focus - According to the NGO Blacksmith Institutes report in 2009, pollution affects over a billion people globally, with millions each year being poisoned or killed by it. The health risks from pollution vary and are complex as they depend on the interaction of many factors. The main factor that causes health risks to differ with location and over time is often development as it highlights the countries vulnerability and low capacity to cope with the health risks from pollution.

1.2 Definitions

Pollution - A substance that enters the environment that adversely affects the usefulness of a resource (Hill 2007 - Understanding environmental pollution)
There are 2 main types:
↳ Incidental — often an accidental release of toxic substances
↳ Sustained - Pollution taking place over a long time period

Health - The state of complete social, physical and mental well being, not merely the absence of disease or infirmity (WHO)

Health risk - The degree of likelihood that a substance will damage ones health

Development - The process by which the social, political

and particularly economic structures of a community
are improved to benefit the well-being of the population
(T Fisher - A world regional approach to Geography and
Development)

HDI - A human development indicator which takes it
account 3 things:
    ↳ Adult literacy rate
    ↳ life expectancy
    ↳ GNP per capita
A figure closer to 1 represents a high level of development.

1.3 Models

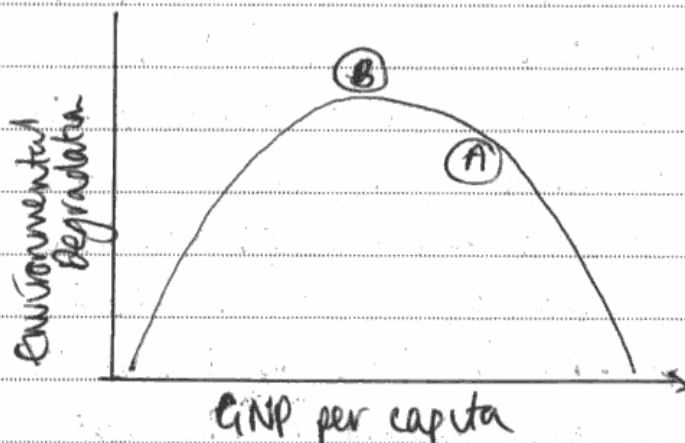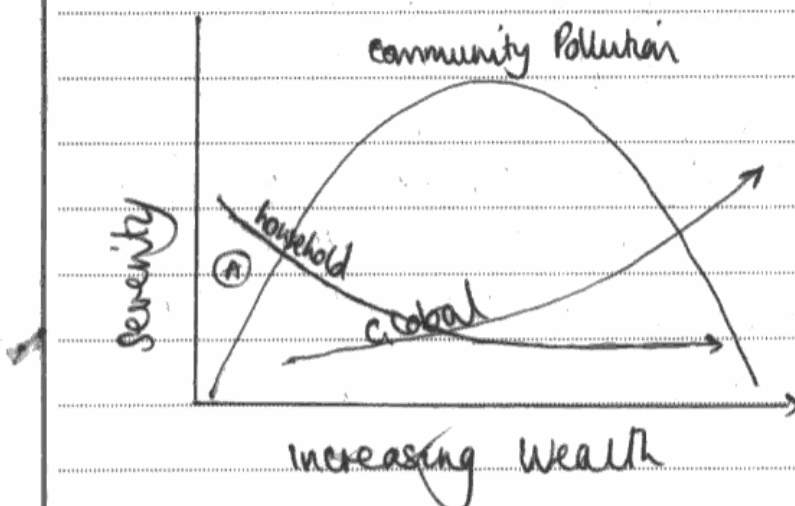figure 1: Environmental Degradation: Kuznets Curve

figure 2: Environmental Risk transition model

1.4 Framework

The health risks from both types of pollution (incidental and sustained) are complex and vary due to numerous factors. To assess whether health risks have 'changed location' over time I will use case studies from different geographical locations and at different levels of development. To illustrate health risks 'over time' I will refer to how a country 'develops' over time so therefore where possible, throughout my report I will use HDI figures alongside my examples to show their level of development. In addition to this, to assess whether risks have 'increased' I will examine how the health risks vary spatially – whether the health risks affect people at a local or global scale. I have chosen a wide range of case studies and 2 appropriate models to use alongside my ideas to support the conclusion I make about whether health risks have changed location and increased over time.

2 - Methodology

I have chosen a wide range of sources to avoid bias and reach a balance to obtain the most reliable information. I used the UN website for all my HDI data (hdr.undp.org/en/statistics) and many statistics about health risks from the World Health Organisation (WHO). These websites provided me with well founded, up to date information and reliable data as they are governed by non bias organisations. Newspapers and online news websites (BBCnews.com, CNN.com) provided me with some data, mainly on incidental pollution events as these

attract more media coverage. However, some data had to be questioned as long term effects e.g deaths were not known. To obtain more information on sustained pollution, videos from blogging websites and Youtube were useful, however many were produced for environmental organisation such as Greenpeace and so figures were often exaggerated to suit their bias motives. Journals such as New Scientist and Geofiles contained useful, topical information as the authors were specialised in that particular field.

An example of a well annotated relevant model.
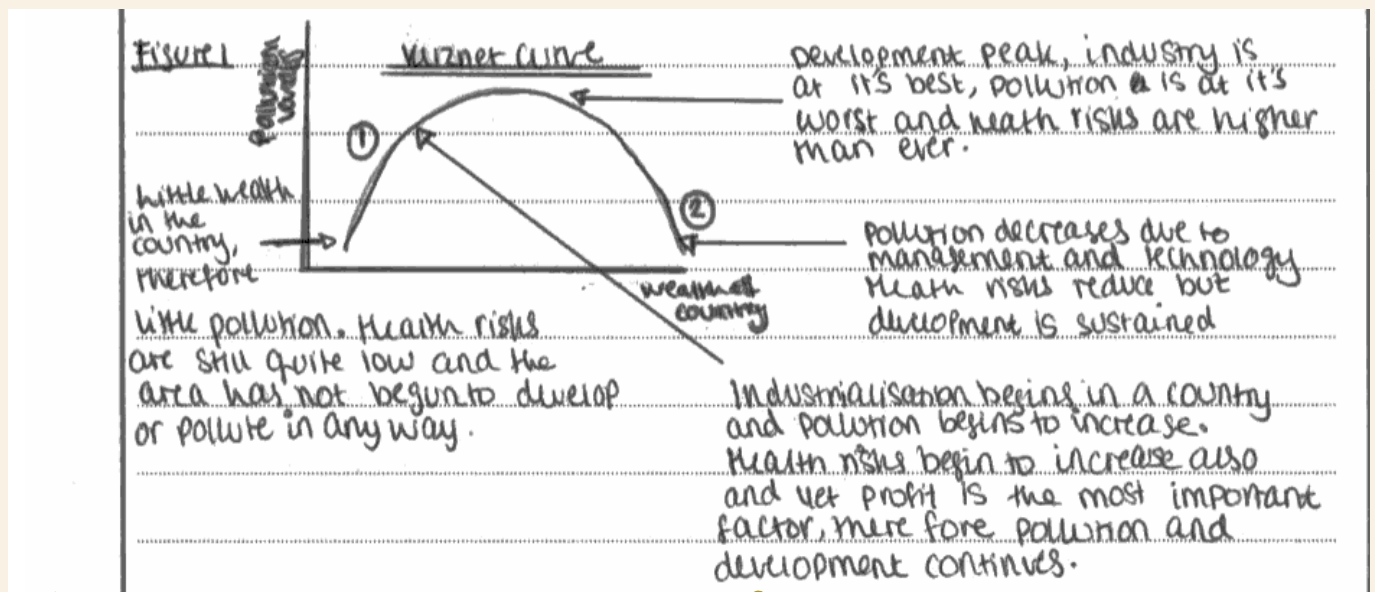
Question 6

Assess the extent to which players have contrasting attitudes about the use of rural areas for leisure and tourism.

Pre release: Explore the range of people and organisations involved with leisure and tourism in rural areas, and the reasons for the differing values and attitudes they may hold.

Research a range of rural areas used for leisure and tourism to demonstrate the contrasting views and opinions of players involved.

Weaker students found it hard to get to grips with the concept of different players holding possibly conflicting views. Some did not get beyond description and simplistic opinions and plodded through their case studies showing the range of views in each. Some candidates drifted to general management issues in their chosen areas rather than on the players, and ended up discussing other activities like mining rather than leisure and tourism. They often showed generalised simplistic statement, such as governments are all assumed to support only more exploitation. A significant number of students opted to write about all they knew on conflict or management and then try to adapt this to the question of attitudes at the end.

Some became very anecdotal in their coverage because of video sources concentrating on specific characters rather than groups.

Better candidates went on from such stimulus videos and researched into them more to show a wider knowledge base and context. They were able to pick out subtleties between different opinions and found examples where players actually have similar attitudes. They demonstrated that some groups of players may have different attitudes within, i.e. locals may have different viewpoints and so may tourists, local government officials etc. They often used a structure based on differing groups of stakeholders and their power or level of influence rather than by location.

Some were able to see how views and values would change through time.

There was a good use of models generally, especially Doxey, pleasure periphery, carrying capacity and Butler, although few thought of using a conflict matrix, or differentiated clearly between leisure and tourism, although local fieldwork gave good examples for the former.

Fieldwork was often used but rarely developed fully, and often just mentioned that 'we visited' the Giant's Causeway, the Lake District, Loch Lomond etc without any localised information. Better were those who conducted questionnaires and interviewed stakeholders in, for example, Cheddar and Ditchling County Park and could quote some specific evidence.

Useful case studies chosen showing a range of leisure and tourist sites	Weaker or irrelevant case studies
Antarctica, Macchu Picchu, Glastonbury festival, specific rural areas in Majorca and Morocco such as Imlil, and Donald Trump's golf course in Scotland. Newer ones this series included Svalbard, Glastonbury festival site (using rebranding from Unit 2) and ski resorts in the Alps.	Benidorm, Great Barrier Reef, Dubai city.

A typical plan.

Introduction - define rural areas, players
            - spectrum of perspectives
            - List locations
Research Methods - Methods used

& Business, local govt + Community - contrasts
                                    between users eg
                                    locals vs business

International locations - management
         ↓   ↓   attitudes to users
     MEDC vs LEDC   and conservationists

Conclusion - make a judgement on extent.

ResultsPlus
Examiner Comments

A useful plan picks apart the title then gives
a suggestion as to the format of the following
discussion. This one shows structure and
sequencing, and jots down which case studies
are useful without all the facts and statistics
needed later - a sensible use of 5 mins or so
planning at the start of the exam.

ResultsPlus
Examiner Tip

In conclusion add the word complexity -
what might you include to show this? In
this example a comment - not all players
differ -would have helped the final
product reach full marks.

Primary work is often used in this option, as in Options 2 and 4. However, it must be obvious what has been surveyed in the field rather than vague references to 'I went to.... and saw....'.

Local Government, Community and Businesses views on the Brighton Rural urban Fringe—

Leisure and tourism in the Uk really soared after the end of WW2. Due to peoples increase in disposable income ~~and economy~~ meant that more and more people were taking holidays and using the rural areas for recreation purposes. Furthermore increased geographical mobility through car ownership meant that people were in search of tourist destinations home and abroad. This is termed the expanding leisure periphery (edexcel textbook 2009). Essentially this describes the movement outwards in search of new tourist destinations. The expanding leisure periphery has been a ~~cause~~ cause of increased players involved in rural leisure areas.

At the Brighton rural urban fringe the different governmental organisations try to mediate between the contrasts that different uses have. For example at Ditchling Common Country Park dog walkers often conflict with bird watchers, consequently the East Sussex County council and South Downs National Parks Authority have tried to

seperate their activites by having different walking trails fer each. (Primary observation from fieldwork and research in the area).

Furthermore it is the view of both these organisations that rural areas should try and include as many different user groups as possible. This was observed by the level pathway s that they had at Ditchling Common Country Park, so that wheel chair users and young families would be able to enjoy the area (Primary fieldwork (Primary fieldwork likert scale data on accessibility).

On the other hand the attitudes of different players in Ditchling village are slightly different. The local businessess in the area feel that the area should be used fer leisure and tourism, they often lobby the parish council fer more free parking spaces & so to encourage more visiters. Whereas much of the local community see the leisure and tourist activites as an annoyance and disruption to their lives, who believe that rural areas shouldn't be very busy with people. (observed from primary fieldwork.)

Paper Summary

In order to improve performance centres and candidates should think about the following:

- using the pre release in detail to create different questions that the candidates can practice to ensure flexibility in the real examination, so reducing formulaic responses

- practice grouping case studies in conceptual framworks e.g. not just economic but in, for example, scale

- remember that case study accuracy is essential so regular testing of content and spellings is recommended

- a major weakness is conclusions so practice in grouping ideas and case studies under timed conditions would help the final product

- the product is a report so it should show obvious headings, possibly mini questions, a distinct methodology, sub-conclusions as well as a main final conclusion and ongoing referencing, not a vague end biography.

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

Ofqual

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