

Examiners' Report  
June 2013

GCE Geography 6GE04 01

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## Introduction

There was a great deal of excellent work on show this summer. Most candidates were well-trained in how to present their work and paid close attention to the technical nature of a 'report' as opposed to an essay; as a result introductions were usually strong. Most candidates chose an appropriate 'framework' for approaching the topic identified in the pre-released material, although too many dealt with their sources in a rather peremptory style as in: 'this is a text book so it is reliable'; 'this is Wikipedia so it isn't reliable'. Indeed the sources used were a little limited in some cases. There is a great deal of excellent material readily and freely available which is neither credited, in some cases, nor used at all in the majority of cases.

The best candidates did what good candidates always do and answered the question. Perhaps some attention could be given to instruction words so that all candidates know what an answer to a question beginning 'To what extent...' requires in the way of an answer. In almost every case a 'debate' is set up with a 'twist' in the question that does not appear in the pre-released materials. The less successful candidates simply ignore the command word(s) and the 'twist' and simply work their way through the DRACQ often showing excellent case study knowledge but with a much more variable application to the question set, in too many cases one is left asking 'what exactly is the question?'. These answers are 'all I know about the topic' responses and, with a little work, could be very good answers. Success revolves around the candidates' ability to interpret the question.

## Question 1

This was, as is usual, the most popular question in which responses from candidates varied from the very good to the average and rather disappointing. The best structure with the potential of earning good marks came from candidates who defined the key terms in the question, that is, the meaning of a tectonic hazard NOT a tectonic movement, usually featuring Whittow, Degg's and Park's Model depicting the situation before and after the event. Weaker candidates tended to be factual in their approach which also entailed a case-study led answer with little or no attempt to address 'to what extent...'

Higher level candidates were able to cope with the question 'to what extent' and followed through their arguments with reference to other factors, some weaker responses just referred to them as an afterthought or in the conclusion. There were a few candidates who just looked at the level of development as the only factor. Many candidates did not refer to the wording of the question and did not give data to support their concept of level of development. They described general social and economic conditions of the country or area eg 'houses were poorly built' as an example of the level of development. Most candidates were able to quote relevant models and very few gave no evidence of theories or models. However, weaker candidates did not refer to them with reference to case studies. There were some very good answers where candidates were well-organised with thorough research to support well-argued statements.

This response to Question 1 was awarded a total of 34 marks.

Indicate which question you are answering by marking a cross . If you change your mind, put a line through the box  and then indicate your new question with a cross .

Chosen Question Number:

Question 1	<input checked="" type="checkbox"/>	Question 2	<input checked="" type="checkbox"/>	Question 3	<input checked="" type="checkbox"/>
Question 4	<input checked="" type="checkbox"/>	Question 5	<input checked="" type="checkbox"/>	Question 6	<input checked="" type="checkbox"/>

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

Intro - Level of development

Challenges	Case studies
Tectonic hazards	Haiti - LDC poor
Main Factor	management
	Japan Kobe - MEDC poor
	management
	Japan Kobe - poor
	management
	Mexico, 1995 earthquake
	good management NIC

To what extent is the level of development the main factor affecting the challenges posed by tectonic hazards

The development of an area or country is pre-determined by its economy, infrastructure and industry. More importantly, development includes the health of the area and its <sup>well-being</sup> ~~wellbody~~. We measure the level of development by looking what determines development to come up with a conclusion. A country can be described as a less <sup>economically</sup> developed country (LDC) or a more <sup>economically</sup> developed ~~country~~ (MEDC), there are also other ways of describing a country's development.

Challenges can be described as a test of one's abilities or resources. In this case the test of a country's resources in dealing with tectonic hazards. Tectonic hazards are events caused by the movement of the <sup>lithosphere</sup> ~~lithosphere~~. When tectonic plates collide or move apart from one another. Examples of these events are earthquakes and volcanoes. (Dunn ET AL 2008)

When looking for the main factor for the cause of disputes, it is the one thing that cause the most damage. In this essay I will answer this question with a variety of case studies ~~and an article~~ on the management of tectonic events with regard to an area's level of development. I will compare MEDC's, LDC's and ~~the~~ new industrialised

centuries (MLC's), and also with the use of an article.

The ~~1st~~ <sup>1st</sup> century of ~~1st~~ <sup>1st</sup> Japan is a MEDC. It has huge industrial power with many exports of a variety of domestic products. The ~~1st~~ <sup>1st</sup> Kobe earthquake in 2000 was a test of Japan's early warning system, however this did not go off as early as people would need to prepare themselves for an earthquake. When the 9 magnitude earthquake hit, 300,000 buildings and houses were destroyed including 30,000 homeless. Fires had started due to broken gas pipes and electricity cables, but the fire service could reach the fires <sup>in time</sup> due to the blocked roads and lack of resources.

The city's earthquake resistant buildings managed to have less damage but were tilted at an angle due to the ~~1st~~ <sup>1st</sup> liquefaction of the ground. The government became under fire with criticism for not responding earlier to the events and also because they did not accept foreign aid and assistance. As a result ~~2000~~ <sup>2000</sup> died due to Japan the Japanese government's national pride and racism to not accept foreign aid.

The 9 magnitude earthquake came as a wake up call to the government. They improved the response time for emergency services they improved the infrastructure of buildings and roads with ~~the use of technology~~ the use of gas shut off valves to prevent fires from starting. As a result the 2011 earthquake in Christchurch was much faster and had less impacts.

~~Citizens of Japan do not trust the government so~~  
Hence the citizens of Japan do not trust the government  
and have planned their own management. ~~The country's economy~~  
~~is still growing and new buildings are built upon (see geography~~  
~~class)~~

In contrast to this poor management in Japan, Mexico  
is a country which ~~had~~ <sup>has</sup> only just become an NIC.  
It's GDP is growing every year with cities expanding  
attracting TNC's to invest. Mexico is also a country  
with 36 volcanoes and in 2006 Popocatepetl Volcano  
showed signs of eruption, tremors and ash clouds. In order to  
protect its people the government evacuated 10,000 from 3 villages  
around the 25 km exclusion zone. The volcano is situated near  
to Mexico city and officials were prepared to hand out US million  
fines (Artideslatimes.com) ~~Due to the country's recent~~  
~~economic growth, the area around the volcano had not been~~  
~~developed~~ The challenges facing the country were not  
as difficult as the Kobe earthquake. For one the area  
around the volcano have not been developed and remain  
mostly natural with a few villages therefore it is sparsely populated.  
Kobe however is densely populated and therefore had a higher  
vulnerability and need of resources to cope.

It is unfair really to compare this as one is a volcano  
and the other an earthquake. Haiti is an LDC and relies  
on foreign aid for 30% of its GDP. An earthquake of magnitude

7 struck in February 2011. Due to the country's lack of development in coping with earthquakes the impacts were severe. In total 100,000 buildings and houses were destroyed, the worst affected were the half a million living in slums. Haiti makes its money with the use of its artificial port. They export. Two thirds of their exports are clothes made in factories where TNC's use cheap labour to make huge profits. The port was destroyed by the earthquake and due to liquefaction on the ground, therefore there were no exports for 2 months leaving 300,000 people out of their jobs. The lack of coordination of the relief effort did not reduce the impacts, a factor of this is that in 6 weeks of the event 98% of the rubble was left on the main road and so supplies could not reach anyone. ~~With~~ With the government out of resources they turned to the World Bank, and now Haiti has a contract to meet a debt of \$5 billion by 2011. <sup>(slideshare.net)</sup>

The <sup>main</sup> challenges faced here are the same as the Kobe earthquake, ~~As~~ in that aid could not get to those who needed it most. Due to Haiti's lack of financial capabilities and resources it could not cope with the impacts or prepare in any way. Japan on the other hand is a powerful country with its own military. They had planned before the event but their techniques were ~~unsuccessful~~ unsuccessful in taking the buildings <sup>being</sup> able to take the force of the earthquake and ~~issuing~~ <sup>in</sup> issuing warnings before the event happens. With more investment in developing these techniques



### ResultsPlus Examiner Comments

There were very few essay-style answers continuing a declining trend over the last few years.



### ResultsPlus Examiner Tip

Remember that you should follow the structure of the report - this is not an essay paper although the analysis and conclusion should indeed be analytical in the manner of essays.



This is an excellent answer that clearly addresses the question with due consideration given to the key words in the title. It scored 62 marks in total.

Indicate which question you are answering by marking a cross . If you change your mind, put a line through the box  and then indicate your new question with a cross .

Chosen Question Number:

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Question 2

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Question 6

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

Crunch Model

### Introduction:

The level of development of the Country affected by the tectonic hazard is the main reason leading to disaster. While not being completely true for every event, it is nevertheless the most important reason to a large extent.

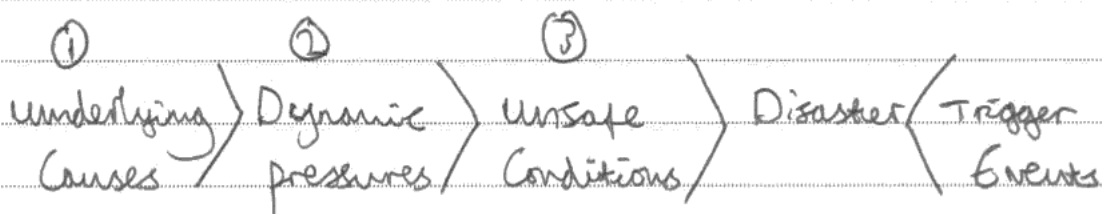
A tectonic hazard can be defined as "a natural event in the environment which poses a threat to human life and property" (Nigel, 1998). Thus, it is necessary for interaction between human life and a tectonic event for it to become a hazard.

A challenge can be defined as "a task or situation that tests someone's or something's abilities" (Oxford Dictionary). This can be applied to tectonic hazards through the social, economic, environmental, and sometimes even political challenges faced.

For the level of development both social and economic factors must be considered. The World Bank defines a country's level of development based upon its GDP per capita, separating all countries into 4 distinct

categories, LIC, LMIC, UMIC and HIC (World Bank). In contrast, the Kofi Annan defines a ~~development~~ developed country as "a country that allows all of its citizens to live a free and healthy life in a safe environment (United Nations). HDI is often used to measure this. Thus, both definitions must be considered when determining the level of development.

### Crouch Model:

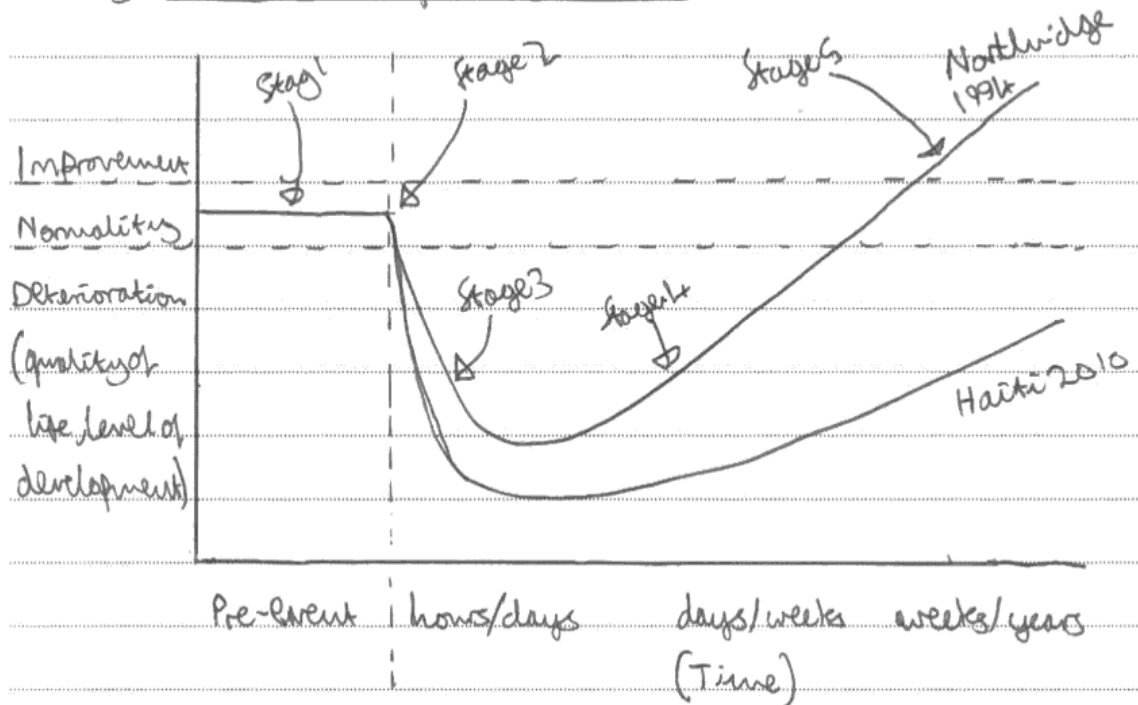


(figure 1, Blaikie et al, 1998)

The Crouch model (figure 1) shows how vulnerability coupled with a tectonic event can lead to disaster. This builds upon Nagel's definition. The Crouch model (figure 1) will be used in this report to assess the role of development in affecting the

Challenges posed by tectonic hazards. As a result it shall provide the framework for the report.

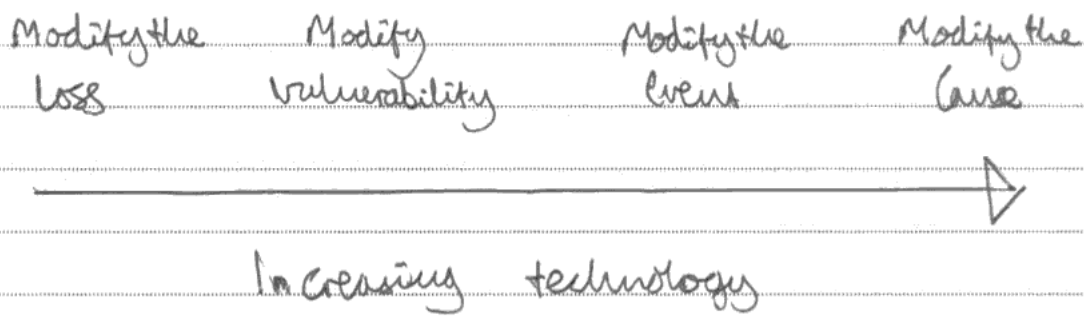
### Parkes Disaster Response Curve:



(figure 2, Parkes, 1991)

The Disaster Response Curve (figure 2) shows a country or area best recovers from disaster. As a result of having "quality of life, level of development" on its axis this model is relevant to the report. This model shall be used to assess the role of development upon a country's ability to recover.

## Technological Response Diagram:



(Figure 3, Dunne et al, 2010)

The technological response diagram (figure 3) shows how increasing levels of development, seen through "technology" can lead to better and more effective responses. This diagram shall be used to assess the role of development in a ~~Country's~~ Country's ability to respond to a hazard.

## Methodology:

The following case studies have been selected for their lack of bias and relevant relevance to the question. All of the case studies shall help this report to assess the role of development in influencing the challenges faced from a tectonic hazard.

Case Study	Rationale	Sources	Bias
Haiti Earthquake 2010	Shows how vulnerability due to poverty, corrupt governance and the effects of multiple hazards influences the impacts	BBC News 'Haiti Earthquake Map' Geoplane, 2011 Geoactive online, 2011	little bias - global media corporation and educational resources
Northridge Earthquake 1994	Shows how high development can minimise social losses and lead to an effective response but with high economic costs.	LA Times, 2011 Access to geography Malcolm Skinner, 2009	little bias - news provider and educational resource
Asia Tsunami 2004	Shows how a powerful event and a lack of preparedness can lead to disaster.	Springer Link Journal, 2006 BBC News 'At a glance Campsites Hit'	little bias - academic work and global news provider
Japan Tsunami 2011	Shows how good preparedness can reduce the impacts in the face of disaster.	Glanz et al, 2011, New York Times, Okinawa, 2011, Guardian	little bias - globally respected news providers.
Eyjafjallajökull Volcano 2010	Shows how a good capacity to cope can minimise local losses but prove ineffectual internationally.	Financial Times 2011 Icelandic Met Office Relief Web	little bias - news provider, government body and global NGO
Montserrat Volcano 1995	Shows how a poor capacity to cope due to poverty can lead to disaster	Deighton et al, 2001 New York Times, 1999	little bias - academic work and news publisher.

## Analysis:

For this report the Crouch model (figure 1) shall be used to provide the framework.

## Underlying Causes:

The most significant underlying cause is poverty (figure 1), which is a result of poor levels of development. Haiti is an example of this. Haiti is the poorest country in the western hemisphere with a GDP per capita of \$1200 (CIA world Factbook, 2013). Before the event in 2010, 86% of the population of Port-au-Prince lived in slum conditions, 50% had access to latrines and 33% had access to clean water (Geopile online, 2011). Out of this poverty only 60% of children went to school. More shockingly, 32% of the nation's GDP consisted of remittances sent home from Haitians working abroad (Geoactive online, 2011). Their vulnerability was greater still. In 2008, Haiti had suffered from a devastating earthquake from which it had not recovered and hence was still in the deterioration stage (figure 2).

In contrast, the USA is the world's richest nation with a GDP of \$15 trillion (CIA World Factbook, 2013). California has a GSP of \$1.9 trillion, 13% of the nation's total, and is the world's 8<sup>th</sup> largest economy if compared worldwide. The average annual wage in Northridge is \$60,000. Thus, the levels of development are very different.

This difference led to great differences in the challenges faced. In Despite the magnitude of the events being very similar, 57 people died in Northridge while 220,000 died in Haiti (BBC News). 22,000 were made homeless in Northridge and 1.5 million were made homeless in Haiti. Therefore, the social losses and ~~chng~~ challenges faced in Haiti, the HC, were far greater than in Northridge. This was because of its far lower level of development.

While this is true of social losses some would argue that the financial losses for the HC are greater. The damage for Northridge was estimated to cost \$17 billion, but more recent estimates show it was closer to \$4 billion (LA Times, 2011). In comparison, the damage

for Haiti was \$8 billion, far lower. However, this is 2/3 of Haiti's annual GDP and thus it could be said that the economic costs are proportionately greater for the LIC also. This can be seen through the damage. 47,000 buildings in Northridge were damaged but 70% of buildings in Port-au-Prince were destroyed (Skinner, 2009). Thus, due to its lower levels of development Haiti's deterioration (figure 2) is far greater than that of Northridge and the challenges are greater.

In Conclusion, through the case studies of Haiti and Northridge it can be seen that the challenges for LICs are greater than for HICs. This is due to their lower levels of development. The social and economic challenges were far greater for Haiti.

### Dynamic Pressures:

Dynamic pressures, such as the role of the government in the capacity to cope (figure 1) also play a considerable role in creating



vulnerability leading to challenges. Montserrat is an example of a poor capacity to cope. The GDP per capita is \$8000 and the total GDP is \$163 million (CIA World Factbook, 2013). As a result, very few measures were put in place that would enable the government to respond effectively. Thus, when the event hit they had no choice but to abandon the area with 2/3 of the population migrating abroad and the southern half of the island including the capital city Plymouth, the airport and the port, was completely abandoned (Digby, 2001). This reflects a modify the loss approach (figure 3), indicative of low levels of development.

In contrast, Iceland is an HIC with a GDP per capita of \$39,600 and an HDI of 0.9, one of the highest in the world (CIA World Factbook). Out of this greater development, the Icelandic authorities were in a far greater state to react. River channels were made larger so that the water would flow much faster away from the volcano so as not to create lahars. ~~the same~~ this reflects a response of far greater development as it

is an example of modifying the event (figure 3). Therefore, ~~as~~ once again the level of development ~~results~~ influences the challenges faced, as the impact on Iceland was far less as only 800 local people were temporarily relocated just as a safety measure (Reliefweb).

However, development cannot control every factor. Importantly, the atmospheric wind patterns blew the ash cloud created over Europe leading to 20 countries to close their airspace (Icelandic Met office). As a result, airlines lost \$200 million a day, totalling \$2 billion and 100,000s of passengers were stranded (Financial Times). Thus, ~~develop~~ development is not totally effective in reducing the severity of the challenges faced.

In conclusion, the level of development often determines the nation's ability to respond to a tectonic hazard (figure 3). Montserrat and Iceland's responses differed greatly and resulted in very different challenges materialising. However, this cannot be totally effective as some factors are uncontrollable.

## Unsafe Conditions:

Unsafe Conditions materialise in the face of an event when there has been a lack of preparedness ~~from the event~~ (Figure 1), which occurs due to a low level of development. The Asian tsunami is an example of this. Indonesia has a GDP per capita of \$5000 and 12.5% of the population live below the poverty line (CIA World Factbook, 2013). Out of this poverty very little had been done in terms of preparedness. Thus, when the event struck it had terrible consequences. 150,000 people died, 130,000 of whom from Indonesia alone (BBC News) and 1.69 million were made homeless. Between Sri Lanka and Indonesia 1 million people lost their jobs and an estimated 2 million extra people were put into poverty due to the event (Springer Link Journal).

In contrast, Japan was very well prepared. As part of the Pacific Ring of fire Japan suffers from frequent tectonic activity, including 7 notable earthquakes in 2009. As a result there had been many

Steps taken to avoid disaster. The east coast is fitted with tsunami warning systems which are tested 3 times a day. The strict building codes mean that many are earthquake proof due to steel bracing, flexiglass, hydraulic shock absorbers and other similar techniques. Thus, when ~~disaster~~ the event occurred 15,000 people died. This demonstrates that the level of development proves to be very significant in determining the challenges faced.

However, in countries some are always vulnerable. While the HDI is 0.9 and the GDP per capita is \$36,000, the elderly are vulnerable. 23.1% of the population is aged over 65 and 65% of the deaths were from people aged over 60 (Okinawa).

In conclusion, development can go a long way to improve preparedness, reducing the severity of the challenges faced. However, vulnerability cannot be totally removed, leading to strong losses.

## Conclusions

In Conclusion it can be seen that the level of development is the most significant reason leading to the challenges faced. The Conrath model (figure 1) separates vulnerability into three sections with poverty and a low level of development acting as the underlying cause leading to disaster. This can be seen through the examples of Haiti, Montserrat and Asia. Specifically, 220,000 people died in Haiti in 2010, compared to 57 people in Northridge even though the tectonic events were similar in magnitude. Likewise 180,000 people died in Asia in 2004 when 15,000 people died in Japan. Both of these events were of a magnitude 9.0, indicative that the difference between the losses was ~~the~~ ~~difference~~ in a result of their difference in preparedness and ~~level~~ of level of development.

However, this cannot always be said to be true as the nature of tectonic events is more complicated than that.

Some factors cannot be ~~be~~ completely controlled, as with the wind patterns following the eruption of Eyjafjallajökull. Similarly, even with high levels of development, vulnerability still remains to some degree. This, as in the case of Japan's elderly population, leads to disaster regardless of the high levels of development.

Overall, while the level of development is the main factor affecting the challenges posed by tectonic hazards to a very large extent, ~~other factors do also play a part~~ it is not the sole reason and other factors do also play a part.



**ResultsPlus**  
Examiner Comments

This is a very well-organised piece of work with especially good analysis and evaluation.



**ResultsPlus**  
Examiner Tip

Keep checking the title - that is why on-going evaluation is useful because it stops you wandering off the point.

## **Question 2**

The question led to a very wide disparity of performance.

Weaker scripts often gave poor quality descriptions of randomly selected (usually) glacial features that were little beyond GCSE, including corries, roche moutonee and drumlins. In such scripts there was often very little attempt to link these descriptions to a distinctive or recognisable process and it was rare for there to be a consideration of the relative importance of these processes. Diagrams, when used, were often very disappointing with no scale and few labels.

Scripts that were around C grade were either competent on processes and landform, but not both, frequently having too much knowledge to apply it to the question, or were rather simple on ice processes but found some sort of framework (usually polar and high altitude glaciers and ice sheets) to attempt distinctiveness. The best scripts came from candidates who developed a good framework and focus usually by location eg upland and lowland and also by process type. They then devised a justified sampling strategy for selected landforms and then went on to answer the question. Equifinality was a useful concept employed by the top candidates. Around 10% of candidates had done useful glacial fieldwork of the look and see type, usually for relict landscapes such as the Lake District or North Wales but sometimes the Alps or even Iceland.

Many candidates used at least one specialist 'Ice' 6th form text but far too many just used the standard A2 books.

This was a very sound response that just needed a little more focus on the question to elevate it by a few vital marks. It was awarded a total of 55 marks.

Indicate which question you are answering by marking a cross . If you change your mind, put a line through the box  and then indicate your new question with a cross .

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Plan

Intro - geomorphological...  
- glaciers  
- framework

Glaciers add as a system

Alps - sub

Lake District - sub

Antarctic - sub

conc. importance varies each landscape  
place.



# Geomorphological processes

Geomorph

Notes

## Introduction

Geomorphology is the study of the nature and origin of landforms in glacial environments for example. Anderson (2004) defines a glacier as 'a mass of land or ice that deforms under its own weight and flows downslope'.

Geomorphological processes form a wide range of landforms which all vary in distinctiveness as there are macro, meso and micro scale landforms.

There are also ~~an~~ ~~area~~ ~~of~~ ~~glac~~ contrasting glacial environments as there are active and relict as well as high altitude or high latitude glacial environments. High latitude environments are 60° north or south of the equator.

In this report I will be focusing on three ~~case~~ contrasting case studies and the landforms found there. The first case study is the Austrian Alps which is an active high altitude environment, the second is the Lake District which is a relict ~~low~~ glacial landscape which I visited on a field trip.

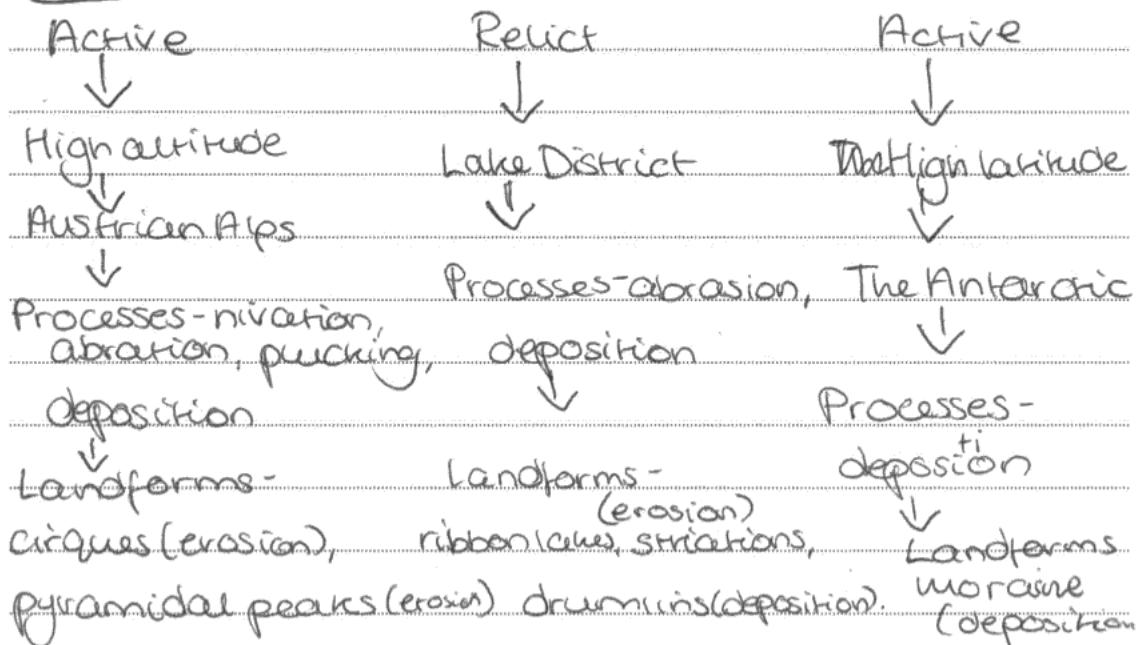
The third is ~~at~~ the Antarctic which is an active high latitude landscape.

In the report I will explain the importance of geomorphological processes in creating distinctive glacial landforms.

The two key processes I will be addressing are erosion and deposition. Erosion is the weathering away of bedrock due to glacial action and deposition is when the glacier loses energy in a ~~new~~ area so deposits material.

However I am aware that there are many ~~more~~ more landforms and process but due to time they can't all be mentioned.

### Framework



## Methodology

For this report, I have used a range of both text book sources and web sources. For example, Glacial Geology Landforms and Ice sheets by Bennett and Glasser, 2009. This is a university ~~textbook~~ textbook so has information at a high level and research for this has been carried out at the University of Bournemouth. Therefore, this source <sup>is</sup> ~~was~~ <sup>valid</sup> objective as it is from a credible scientific source. Also, ~~because~~ the publication date is recent so information on theories will be up to date and correct. I have also used the National Geographic website which is an educational source so information is trustworthy and objective. The source also has key case study facts. I also went on a field trip to the Lake District to view the glacial landforms so this was useful <sup>to</sup> put theory to reality.

## Glaciers as a System

In order to know how a glacier forms such distinctive landforms, first the way a glacier works as a system and how it forms must be understood.

Like any system, a glacier is made up of inputs, outputs and processes. The inputs into the system is accumulation of snow. So this snow has to last the year, therefore ~~temp~~ there must be subzero temperatures. Once layers of snow build up and become more compact this forms firn. Then the glacier flows downslope due to basal slip.

Outputs of the glacier are called ablation so can be evaporation for example so the removal of snow or ice.

Processes occur within the system as the glacier acts like a bulldozer, scouring the landscape

(Anderson 2004).

## Active Glacial Environment

### The Austrian Alps

The Austrian Alps are made ~~up~~<sup>up</sup> of 925 glaciers; five of these are over  $10\text{km}^2$  large. This is a landscape full of distinctive landforms such as cirques and pyramidal peaks and has some snow cover due to the cold climate.

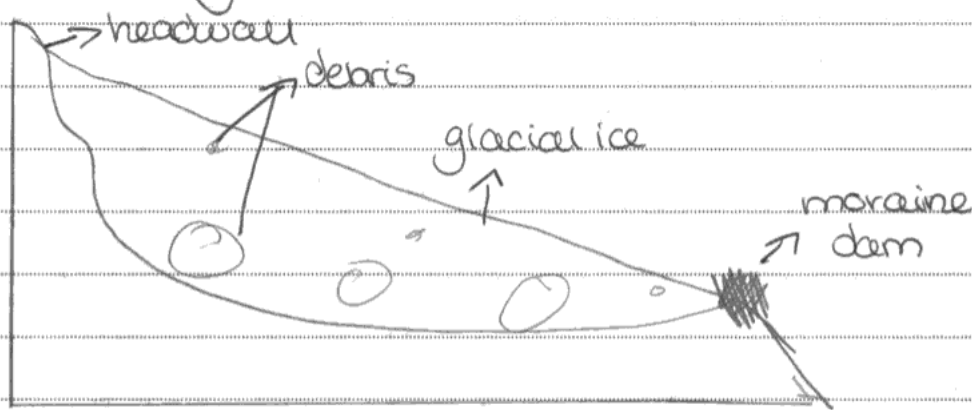
### Cirques

Ern Anderson (2004) defines a cirque glacier as a 'glacier confined to an arm chair or bowl shaped depression'. Cirques are usually found on the north east side of mountains as this is where they are shaded from prevailing winds. They are a macro scale landform and form in areas with high accumulation as this drives the process nivation.

Nivation is the enlargement of a hollow due to freeze thaw ~~process~~ weathering, ~~causing~~ causing rocks to loosen. ~~Also~~ Then meltwater carries away this debris. The larger debris is deposited further downslope forming an erratic and smaller

debris forms a moraine dam at the end of <sup>the</sup> cirque.

Abrasion occurs, <sup>deepening</sup> the hollow which is the erosion between rock fragments in the glacier and the bedrock. Whilst this is happening, plucking takes place which is when the glaciers removes ~~the~~ material from the bedrock. Plucking further steepens the headwall. Then once the ice has melted, this leaves a small lake called a tarn. The diagram below illustrates a cirque glacier.



(Bern 2010).

## Pyramidal Peaks

Similar to a cirque, pyramidal peaks are also a macroscale landform shaped by erosion as a pyramidal peak is an angular shaped mountain top.

Pyramidal peaks are formed when glaciers converge on a central point which ~~then~~ steepens an arête. Then three or more cirque glaciers intersect back form a steep pyramidal peak. (Bennett and Glasser, 2009)

## Sub Conclusion

Both these landforms I have addressed are macroscale landforms so are hugely distinctive and play a great role in forming a distinctive landscape. Both landforms involve the role of erosion which includes plucking, abrasion and nivation as without these processes a cirque glacier could not be formed. ~~Also~~ A cirque glacier also involves the role of deposition so demonstrates that various geomorphological processes can work together to create a distinctive landform. This case study doesn't include much deposition so suggests that here deposition <sup>isn't</sup> important in forming distinctive landforms but erosion is.

## Relict Glacial Environment

Compared to the Alps, the Lake District has no snow cover.

### (Langdale Valley, The Lake District

I visited the Lake District and observed the landscape, ~~to~~ finding it to be full of distinctive landforms found in both upland areas and lowland areas. The Lake District has also been moulded by glacial action, however this would have occurred during the last glacial maximum. This was the Devensian period which was around 20,000 years ago.

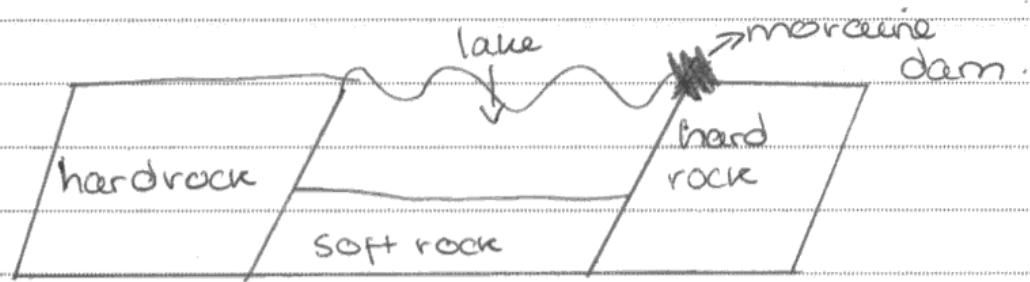
## Ribbon Lakes

Ribbon lakes such as Lake Windermere are macro scale landforms as Lake Windermere is 67 metres deep, therefore is hugely distinctive.

Ribbon lakes are formed as abrasion takes place over alternate bands of hard and soft rock. So the soft rock is eroded, forming a hollow basin. Then, similar to cirques, the glacier deposits till at the end of the basin to form a moraine dam.

The diagram on the next page demonstrates this.





The ice melts, leaving a lake and ribbon lakes are found in deep glacial troughs. (Anderson 2000).

Striations \* Striations are small scratches <sup>in the</sup> bedrock.

Similar to ribbon lakes, striations are also formed by abrasion and are found in upland areas. However, striations are a micro scale landform as sizes range from are up to a few metres long and a few ~~mm~~ millimetres thick. Therefore, this isn't as distinctive as a ribbon lake (Benn, 2010)

Drummins

In contrast to striations and ribbon lakes, drummins are formed completely by deposition and are found in lowland areas.

I measured a drummin in fishcarning near

Arnside which was 243m long and 18m high so this is a mesoscale landform. However, sizes do range greatly from 5-50m m high and 10-3000m long so the distinctiveness of the landform varies. So this suggests that the importance of deposition varies.

Anderson (2004) defines a drumlin as a 'mound of till moulded by the glacier'. There are a number of different theories as to how drumlins form. The most accepted theory is that it is due to subglacial deformation so the moulding of till under the glacier. This is when the glacier flows over resistant rock which causes the glacier to slow down so deposits till here. The till is then moulded along with the bedrock to form a drumlin.

Another theory involves the role of meltwater which causes subglacial floods. These subglacial floods cause irregularities in the ground to form which are then moulded into drumlins by the overlying ice.

(Anderson, 2004)

## Sub conclusion

This case study suggests that the importance of geomorphological processes will vary from place to place in terms of creating distinctive landforms. This is because drumlin sizes vary greatly so in some environments may be considered to be macro scale and in others meso or micro scale.

Also, geomorphological processes create a wide range of landforms which vary in distinctiveness. This is because the same process of abrasion forms both ribbon lakes which are macro scale and striations which are micro scale.

So as striations are less distinctive, this would suggest that the geomorphological process of abrasion isn't very important.

However, it does also contribute to ribbon lakes formation which are distinctive.

## Active Glacial Environment

### The Antarctic

† Compared to the Lake District, which has no snow or ice cover is the Antarctic where 98% of land is covered by ice. So here, most of the distinctive landforms

are covered by ice as ice sheets are around 2,000 metres thick. For example, there are also drumlins found here, however they are not visible under the ice. (Nationalgeographic.com, 2013).

### Moraine

~~However~~ Although a landform that is visible is moraine. Anderson (2004) defines moraine as the 'accumulation of till... due to glacial deposition'. Moraine is found at the margins of glaciers such as at McMurdo Valley which is an ice free dry valley. However, moraine here is thin and patchy so is a micro scale landform. (NationalGeographic.com, 2013)

### Subaqueous Moraine

Subaqueous moraine is also visible at the Antarctic and is also formed by ~~the~~ the geomorphological process of deposition. Subaqueous moraine is found at the grounding line which is where ice begins to float. An example is at the Ross Sea and this is also a micro scale landform. (Bennett and Glasser, 2009).

## Sub Conclusion

Due to the curvature in the Antarctic, it is difficult to see all the distinctive glacial landforms. Therefore, it is difficult to understand the relative importance of geomorphological processes here. The landforms that can be seen such as moraine are ~~not~~ micro scale landforms so suggests that geomorphological processes are less important here compared to other places.

## Conclusion

Here is a diagram to illustrate the range of distinctiveness of the landforms addressed.

Micro scale	Meso scale	Macroscale
- Striations (erosion)	- Drumlins (deposition)	- Ribbon lakes (erosion + deposition)
- Moraine (deposition)		- Cirques (erosion + deposition)
- Subaqueous moraine (deposition)		- Pyramidal peaks (erosion)

## Conclusion

In conclusion, it appears that the relative importance of different geomorphological processes vary from place to place in creating distinctive glacial landforms. This is because in ~~different~~ some areas such as the Austrian Alps, the key geomorphological processes ~~are~~ are erosional processes so this suggests that ~~the~~ erosion is more important here than deposition. On the other hand, in the Antarctic deposition is more apparent so in terms of this case study could ~~not~~ be argued to be <sup>more</sup> of importance.

Whereas, in the Lake District both erosion and deposition form distinctive landforms so in this case both processes are important.

In addition to this, the landforms themselves vary as drumlins can range from being 5-50m high and 10-3000m long so can be macro, meso or micro scale. Therefore, depending on ~~the~~ the size deposition is important or less important.

As well as this, the same process such as abrasion can form a range of landforms. For example, ribbon lakes which are distinctive as they are macro scale compared to

Striations which are less distinctive as they are micro scale landform.

Overall therefore so overall, the relative importance of different geomorphological processes vary in creating distinctive landforms due to the landform itself or the contrasting glacial environment.

And each process is

### Bibliography

- P. Glaciers and Periglacial Environments, Anderson, 2004.
- Glacial Geology Ice sheets and Landforms, Bennett and Glasser, 2009
- Glacier and Glaciation, Benn 2010
- Lake District Field Trip.
- National Geographic.com, 2013



**ResultsPlus**

**Examiner Comments**

Don't lose track of the question. An 'all I know' response' is very easily adapted to the 'debate' style questions. Look at the plan and introduction here and assess how well they address the question.



**ResultsPlus**

**Examiner Tip**

Keep checking the question as you go along. Highlight the command word or phrase and make your plan fit the question and not the pre-release steer.

### **Question 3**

The majority of candidates who chose this topic were quite confident with the material and it had clearly been taught well in many centres. As with the other questions the mark of the best essays was the correct balance between knowledge and case study material and a specific and clear focus on the needs of the title ie strategies to increase security and linking this directly to issues such as trade and aid, development, geopolitics.

There was some very impressive work evident, with some obvious and appropriate use of academic and undergraduate texts and sources rather than a narrower reliance on textbook material. There were strong links made with development theory and the work of NGOs, etc. Integration of this material into a report style was a challenge for some candidates and a relatively high number (approximately 10%) wrote in a completely essay, rather than report, style.

The best candidates created a methodological framework based on scale, development models, development level, case study orientated or they used a combination of these approaches. There was some sophisticated commentary on the role of the IGOs and HGOs and the influence of trade and aid. Improvements to food security came in strategies varying from farming technology (drip irrigation, GMOs, permaculture / hydroponics, and techno-garden ideas like vertical farms); integration with development strategies such as Excellent Development and water supply in east Africa.

Relatively few answers focused on demand-side solutions (such as healthy living campaigns, reduction of food miles, etc) but the politics of food supply were covered in the impact of development and civil unrest or border security such as in Iraq, Gaza, Darfur / Sudan, and the role of China as an increasing player (cf Paper 3, June 13) in the global stage.

Some answers were a pleasure to read – it is really encouraging to see that such work is being undertaken in centres. However, as with all other questions, there was a temptation for some candidates to simply write all they knew about development and food security in LEDCs (for example) rather than strategies specifically.



This is a very well-focused response which keeps the question closely in sight. The introduction makes it clear what the question is which is not always apparent in weaker answers. The answer was awarded 62 marks.

Indicate which question you are answering by marking a cross . If you change your mind, put a line through the box  and then indicate your new question with a cross .

Chosen Question Number:

Question 1	<input checked="" type="checkbox"/>	Question 2	<input checked="" type="checkbox"/>	Question 3	<input type="checkbox"/>
Question 4	<input checked="" type="checkbox"/>	Question 5	<input checked="" type="checkbox"/>	Question 6	<input checked="" type="checkbox"/>

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

Food Banks - UK 2000 NGO TRUSTEES TRUST  
825 → 3  
346, 992

PLAN

Ha Urban Ag → Havana 1989  
57% caloric intake  
1994 relaxed laws  
1998 8,000 gardens → 50% inc. organic v.

Grange Farm B. - 40,000 urban cultivate produce  
- mixed everywhere priv + public  
- 2.5 acres rooftop farm.  
- technically organic.

Kickstart - 1991 NGO  
13,000 pumps - 31,000 Ha.  
100-200  
440,000 farmed out of pvt - 87,000  
agriculture enterprises.

AGRA - 2006 continental, SOIL + SEEDS - PASS - funding +  
2008 pesticides + 130% inc + rotation. Adoption 332 hybrids.

## Introduction

Food security is ~~def~~ when "all people at all times have access to safe, sufficient, nutritious food to maintain an active and healthy lifestyle" as defined by The World Summit 1996. Food security is based on 3 main pillars: food accessibility, affordability and availability. Currently, there is enough food on the planet to feed its 7 billion inhabitants, but it's the distribution that poses an issue and causes global food insecurity. For example, in the UK, there are an estimated 2700 deaths annually on the NHS relating to obesity (Geo factsheet), in comparison to the 840 million undernourished in developing countries (FAO 2009). There are a range of global + local strategies worldwide that aim to increase food security of these areas, but their effectiveness differs from place to place. In this report I shall look at the urban strategies of food banks in the UK, Urban Agriculture in Havana ~~Geo~~ and Grange Farm in Brooklyn. I will also assess the rural strategies of Kickstart irrigation pumps in Sub-Saharan Africa and the Alliance for a Green Revolution in Africa.

## Methodology

Introduction

→ The World Health Organisation website

Reliable due to government website, shows no sign of bias but may be subject to manipulation

The World Food Programme

Used for ~~nutrition~~ <sup>under</sup> nutrition statistics, reliable due to being purely informative + produced by the government.

Geo Factmeet "Obesity: the looming crisis"

UK obesity stat, reliable because produced for the schools, purely educational, although there is no date, and so the information may not be as valid.

Food Banks → for this case study I looked

at the Trussell Trust website, and so the information will be reliable, however due to it being a charity website, some of the information may be slightly bias in order to persuade for donation, and so I cross referenced this with the Guardian article "Food banks: Invaluable yet necessary" ~~to~~ 2018 to make sure my information was reliable, due to it being from a broadsheet newspaper.

Urban Agriculture in Havana → I used an online article "The Greening of the Barrios" which was reliable due to being produced by university lecturers, research in the article has been cross-referenced so it is valid, I also used some statistics from the Climate Institute.

Grange Farm Brooklyn → I used the official website for Grange Farm for information, purely informative although may be somewhat exaggerated in order to look better, however in the FAQ there was honesty in some of the negatives and so the site was judged reliable.

Kickstart Irrigation → I used the money maker pumps website for general information about the pumps, I also used an article from the World Bank entitled "Advantages of pump irrigation in Sub-Sah-

aran Africa" in order to gain reliable information, as it is from a governmental organisation.

Alliance for a Green Revolution in Africa → I used "AGRA" official website to get general information about what the organisation do, generally reliable, but may be somewhat exaggerated in order to show how good they are in many effectiveness.

### Urban Strategies

Predominantly, it is presupposed that food insecurity only occurs in LEDCs, it is not thought as common that MEDCs such as the UK would have this problem. However, governmental changes such as rising living costs, changes to benefits, underemployment and unemployment have caused rising food insecurity for many families.

In 2000 an NGO charity called the Truist Trust opened to try and solve the problem of food insecurity. There is a current total of 525 food banks open and they aim to open 3 more every week.

There has been some positive effectiveness of the strategy, as, in 2012-13, 346,992

people were fed across the nation that would have otherwise gone hungry.

The requirements to the food banks are that, because they are a charity, they rely on funding, donations and volunteers, making them unpredictable, therefore unreliable. Additionally, in order for a food bank to open, they require a council that needs an assessment, the assessment to gain this has been thought to be unreliable. ~~for~~

In conclusion, the effectiveness of food banks varies in the individual area, as they provide food for thousands of hungry people nationwide. However, the food security crisis can not be solved by

food banks alone, because in the UK there would need to be an additional 750-1,000 to feed the thousands of hungry people - therefore only proving effective on a small scale.

### Urban Agriculture in Havana

In 1989 (The Special Period in Time for Cuba) the collapse of the Soviet union had devastating impacts on Cuba's food security. Food imports accounted for 57% of the population's caloric intake.

To respond to the food security crisis, the public started growing their own produce on terraces, balconies and back gardens to provide for themselves. In 1994 a relax in sale laws meant that surplus could be sold for profit and unused land could be cultivated into gardens and seed houses were created alongside educating people on farming methods. In 1998, 8,000 gardens produced 50% of the country's organic vegetables.

Negatives of the Cuban gardens were that

organics and organoponies are expensive to purchase, and that produced goods are often ~~to~~ cost less to sell, than the price of farming, making it difficult for some families.

In conclusion, Cuban popular gardens are effective for individual families as they provided a reliable source of food and surplus income, but the effectiveness of the strategy is assessed when linking to costs. The government was already badly affected when the SU collapsed, so it may not be able to fund as many conventional farming methods.

## Grange Farm Brooklyn

New York is home to the largest 2 roof top gardens, and this solution responds to food security in a large urban settlement. In total the gardens cover 2.5 acres of land, and produce 40,000 lbs. of urban cultivated produce. This is positive effectiveness as it means the city not only imports, but grows its diet, improving reliability, but

also because the gardens have private funding through business and equity loans, but public also through funding and donations.

Negatives of this strategy are that the cost is very high to maintain, and there is a lot of water strain and pressure for the building. Alongside this, leakages pose issues for the rooftops as it is expensive to stop and protect from in the first place. Finally, due to the outdoor setting, the produce is exposed to the pollution of the city, and in winter months, crops have to be switched to ~~stop~~ to care seeds, in order to continue growing.



In conclusion, rooftop gardens in NYC pose a short term mitigation to the problem of food security, but the effectiveness is questioned as the public do not have access to their own gardens, and environment and climate factors may hinder the productivity of growing, due to being in such an

exposed urban settlement - therefore making it not as effective, however they do have access to technology to help.

## RURAL STRATEGIES

### Kickstart Irrigation Pumps

Sub-Saharan Africa has the world's lowest agricultural productivity rate on a global scale, due to climatic and technological reasons. For example, in ~~Africa~~ productivity rates declined from ~~97%~~ 97% to 82%, from 1960 → 1990.

In 1991 an NGO called Kickstart produced pedal pump irrigation systems that retrieve water from 7m below the ground, to help farmers irrigate their fields. 13,000 pumps have been sold which has irrigated over 31,000 ha of land. These pumps take families from the poverty line up to middle class.

with the amount of productivity they produce. Annual income and yields also increase by 100-200%. Furthermore 440,000 farmers plan across the region have created 87,000 agricultural

enterprises or attempts to answer the food insecurity crisis. The pump cost \$3995.

However, the negatives of these pumps are so that they are not always reliably successful. The reliability depends on the crop, and the water quality.

Furthermore, very poor families may not be able to afford these in the first place, and maintenance of the pumps is expensive, therefore meaning that longterm use may be more expensive maintaining the equipment than the profit gained from the commodities produced.

In conclusion, Kickstart Money Make pumps are effective in solving the majority of sub-Saharan Africa's food insecurity, as they put forward a relatively cheap, simple method to maintain growing. However the effectiveness is later questioned when assessing reliability of the methods, and

can't actually help farmers that can't afford the conventional.

method in the first place.

the Alliance for a Green Revolution in Africa

In 2006 the continental ideology of improving Africa's food accessibility crisis was put into place. The Alliance for a Green Revolution in Africa (AGRA) focuses on 4 main areas, but 2 specifically link to the food crisis. There are ~~two~~ improving seeds and soil.

AGRA's seed policy (PASS) educates farmers on crops they can grow, and gives further information on how to grow them. The Fund and Adoption for Africa's seeds invested 6 million, and has produced 332 hybrid crops. Within this there are some negatives, such as hybrid crops have ~~become~~ <sup>are not</sup> immune and resistant to disease and pests → for example the amount of hybrids surviving in 2012 declined by 40%. Furthermore, PASS does not address Africa's issue with

## land degradation

AGRA's soil policies attempt to restore land and make it more fertile and fruitful for growing. In 2008, they implemented the ideology of using fertilisers on the land, and this, combined with farming methods of crop rotation, caused a 130% increase in produce, obviously showing strong effectiveness. However, like no other, there are pitfalls with this solution.

For example, fertilisers are costly and leakages of chemicals can be very dangerous. Furthermore, these leakages can lead to eutrophication of lakes and water sources, therefore having a multiplier effect and reducing fish supplies, which can, in turn, hinder food security further.

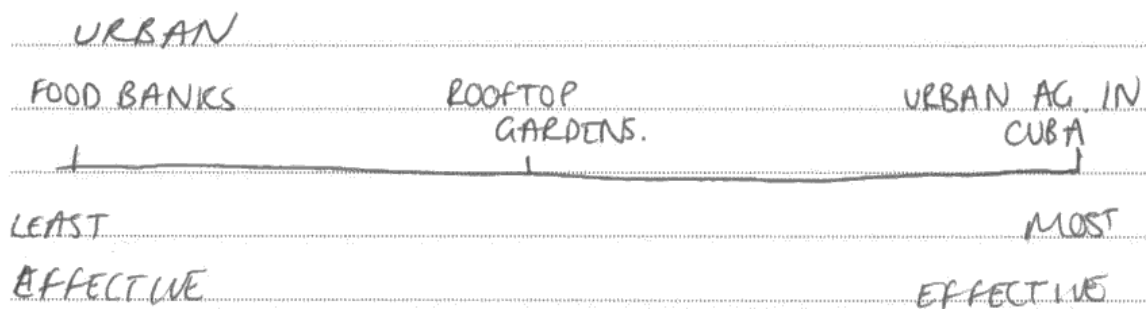
In conclusion, AGRA maintains to set out firm grounds in which to help Africa gain and maintain

higher growing levels of commodities but when looking at the possible side effects from this process, the

negatives could possibly hinder food security further because the farmers and governments could not have the capacity to deal with such a large scale issue → therefore ~~the~~ debating and doubting AGR's effectiveness.

### Conclusion

There are many worldwide-implemented strategies that aim to solve the problem of food insecurity worldwide on a global scale. From the case studies I have used, I have looked at several urban strategies and their effectiveness, and rural strategies that occur on local levels and continental levels.



I feel that ~~rooftop~~ food banks are the least effective because they only operate in small scale areas and therefore don't affect too many people. The popular gardens in Cuba were placed at most effective because they offer more of a long term

solution to the 'food crisis' because it has happened so much on a local scale, that it has turned into a national strategy, and Cuban officials even thought it could be an answer to the food crisis ~~at a~~ for the whole country.

RURAL

AGRA

KICKSTART  
IRRIGATION.

LEAST

MOST

EFFECTIVE

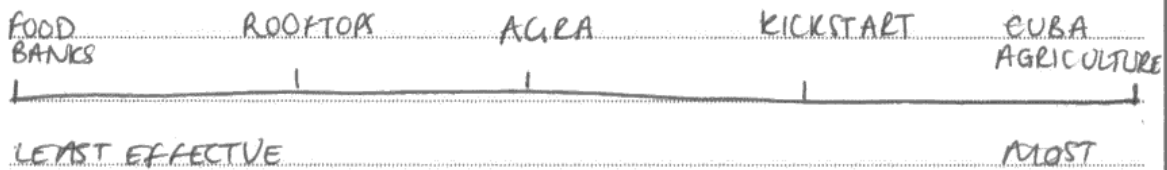
EFFECTIVE

My reasons for labelling Kickstart irrigation the most effective 'rural strategy', is because it benefits locals on a larger scale. Although there can be issues with the pumps, it will only affect small scale (e.g. families) whereas AGRA would

affect on a much larger scale and could potentially have more devastating effects in the long term. Additionally, irrigation pumps are more effective because, if they help locals on a grand scale, the more money they profit, the more money will go into communities and will very gradually create a bottom-up strategy in making the area wealthier.

Overall, as the effectiveness of each strategy has its pitfalls and negatives, having rural and urban strategies collaborating would prove more beneficial in affecting the population and food crisis.

RURAL + URBAN



If government and locals all worked together on small and large scales the effectiveness of strategies would be far greater + there could be a potential answer to the food crisis.

**TOTAL FOR PAPER = 70 MARKS**



**ResultsPlus**  
Examiner Comments

The keyword in this question is 'effectiveness'. The best answers addressed the obvious question about how one can measure 'effectiveness'.



**ResultsPlus**  
Examiner Tip

If the keyword is 'effectiveness' then you should use it both in the analysis and evaluation/conclusion.

## Question 4

As has become traditional this option produced the smallest entry but some of the best responses. There are four lines of argument to be pursued in order to address this question. The best answers had a range of 'different players' with identifiably different (and contrasting) attitudes to **both** specific and identifiable cultures and to the general concept of cultural diversity. As with the other questions, not only do the keywords and phrases need careful attention but also the command phrase. 'To what extent..', needs to be carefully dissected although, in essence, it is simply a question of addressing the degree to which there are discernible differences in attitudes. Less able candidates simply substituted their own questions, generally along the lines of, 'Write all that you know about different attitudes to cultural diversity'.

This report takes a sophisticated approach to the question and offers a very wide range of well-researched evidence that is directly focused on answering the question. The candidate uses different scales to provide a framework but resists the temptation of suggesting that different scales are the cause of that variation in attitudes. The conclusion is full of keywords in the title and involves both argument and counter-argument concerning the 'extent' of variation in attitudes. It was awarded a mark of 66.

Indicate which question you are answering by marking a cross . If you change your mind, put a line through the box  and then indicate your new question with a cross .

Chosen Question Number:

Question 1	<input checked="" type="checkbox"/>	Question 2	<input checked="" type="checkbox"/>	Question 3	<input checked="" type="checkbox"/>
Question 4	<input checked="" type="checkbox"/>	Question 5	<input checked="" type="checkbox"/>	Question 6	<input checked="" type="checkbox"/>

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

Introduction

global scale - TNCs, language, soft power, unesco  
 national scale - Japan, India, UK  
~~attitudes~~ regional, Taiwan, Hogi, Yoruba Fuji, China Tibet

Introduction

Globally, the sustaining of cultural diversity is an issue that involves a variety of players and parties and requires an exploration of the numerous cultures of the world and the <sup>existing</sup> attitudes and threats to them. 'Culture' is defined by Raymond Williams in his 1983 academic work as "a noun denoting a particular way of life associated with a group of people, time period <sup>or</sup> humanity in general" and so the question follows whether there is room in an increasingly interconnected globalised world for ~~these~~ such diversity and the exact nature of the varying attitudes to these different ways of life in the world. Certainly the value of cultural diversity is underlined by UNESCO (The United Nations ~~State~~



an Educational, Scientific and cultural organisation which is equally a reliable source given the organisation's longevity since its establishment in 1945 and the fact it is supported by 195 member states with varying viewpoints preventing a political bias) as a "source of innovation and exchange" and "the common heritage of humanity" on its website [www.unesco.org](http://www.unesco.org). ~~It is~~ suggesting a positive attitude that sees cultural diversity as a source of knowledge. However this common heritage of humanity could be threatened by what Thomas McPhail

considers in his 2007 book "~~Electronic Globalisation~~ <sup>Global Communication</sup>", to be "electronic colonialism that denotes the "dependant relationship of the poorer nations established by the importation of communication hardware and foreign software that alters domestic cultures and habits." (Thomas McPhail is equally a reliable source given his academic credentials as a professor at the University of Missouri St. Louis and his experience at UNESCO). And so it seems that as television and the internet are spread around the world by TNCs originating from core, super-power nations like the US that are motivated by a consumerist attitude to the globalised inter-connected world; it will have repercussions at all scales from the global to the local. This report will examine the attitudes and responses to cultural diversity to players on the global level, then the attitude of national players to the cultural diversity and identity of their nation and finally the attitudes of specific cultural groups and players to diversity on the regional level.

### Attitudes to Cultural diversity by players on the global scale

The attitude and responses to the world's cultural diversity by global players such as TNCs with a global reach appears to be particularly ambivalent when one considers how some players may have an ignorant attitude to the value of cultural diversity and may instead be eroding it and facilitating 'cultural imperialism'.

'Cultural Imperialism' is defined by Sussex university lecturer Sossanthe Gounatilake as "the imposition of a cultural package against the informed will

of its recipients and this neglecting attitude to sustaining cultural diversity appears true when one considers how McPhail's statement that "new foreign information will cause the displacement, rejection and alteration or forgetting of native and indigenous customs (Global Communication, 2007) is demonstrated by the

global decline of language diversity in the world. Currently 78% of the world's population speaks the world's 85 largest languages whilst the 3500 smallest languages share a mere 8.25 million people and some languages are confined to small or declining indigenous cultural groups such as the language of the Seri people of Mexico's Sonoran desert which is spoken by only 650-1000 indicating that as global languages <sup>are</sup> spread around the world by business and communication networks dominated by MNCs and promoted by TNCs (with an attitude focused not on cultural diversity but on profiting in foreign markets, such as English and Mandarin) it has eroded the linguistic customs of indigenous cultures whose younger generations choose to leave behind their mother tongues for business opportunities. (The above information on language diversity is sourced from Russ Rhymer's article in National Geographic 'Vanishing Voices' <sup>(July 2012)</sup> and is likely to be accurate given that it is from the leading publication of one of the world's largest scientific communities, the National Geographic Society established in 1888.) Additionally the championing of 'soft power' by US TNCs Disney and Viacom with a commercial attitude to foreign markets rather than other cultures may have eroded cultural diversity further. 'Soft power' is defined as "movies, television, fast food, fashion and theme parks that spread, validate and reinforce cultural norms" by Matthew Fraser in his 2003 book 'Weapons of Mass Distraction' and certainly the prevalence of US TNCs Viacom's promotional attitude to US culture at the cost of others can be seen in the fact the US music industry accounts for over 50% of global music sales (McPhail, 2007). However other global players have more positive attitudes to cultural diversity and have played an active role in sustaining and valuing it as seen with

UNESCO: UNESCO has ~~has~~ funded the protection of 962 properties it recognises as 'important cultural landscapes' as part of its World Heritage Site

list including the historic centre of Prague, indicating that some players have taken a more positive attitude to cultural diversity on the global scale and ~~such~~ the existence of the World Heritage list indicates such diversity is being valued and sustained globally.

### The attitudes of players to cultural diversity on the national scale

Consequently players on the national scale ~~have~~ exhibit a huge variety of attitudes to cultural diversity within specific nations usually motivated by arguments based around cultural identity. For example Japan has taken a largely dismissive attitude to ~~retain~~ its own cultural diversity through the preservation of its homogenous society and discouragement of diversity nationally to sustain its unique cultural identity. ~~Japan~~ This can be seen with the country's population which is 98.5% Japanese and only contains two major ethnic groups Korean and Chinese which only make up 0.5% and 0.4% of the population respectively whilst ~~Japan~~ Japan's main religion is Shintoism which originated in Asia demonstrating how the Japanese government has taken a dismissive attitude to outside cultural influences such as Christianity from the west as the above statistics from the CIA worldfactbook ([www.cia.gov](http://www.cia.gov)) show. Arguably though by maintaining such a discouraging attitude to cultural diversity nationally, Japan may have helped to maintain it on the global scale by maintaining its cultural identity to remain distinct and combat the cultural imperialism of the US and has even been able to maintain cultural exchanges through the global exports of Japanese soft power such as sushi, anime and video games. Indeed other nations have taken a pro-active attitude to sustaining cultural diversity and a national cultural identity through

soft power exports as seen with the rapid expansion of India's Bollywood film industry. Shashi Tharoor argues in his online TED lecture "why nations should pursue soft power" (arguably a reliable source given that Shashi Tharoor is the Indian Minister of State and Human Resource Development and worked for the UN giving him experience on India's global position) that "Bollywood is taking a certain aspect of Indian culture around the globe" and points to how an Indian Soap opera became the most popular television programme ever in Afghanistan, demonstrating how a pro-active attitude to cultural diversity by a nation that regards its culture as a creative opportunity may help to sustain cultural diversity. However other national players have taken different attitudes to cultural diversity within a nation as seen with the UK government's promotion of its diverse cultural heritage with its multiculturalism policy to reflect the diverse cultural mix of the UK stemming from the migration of workers to the UK from the former colonies of the British Empire like Jamaica and India in the latter half of the 20th century. Indeed the success of this positive attitude to cultural diversity can be seen with the continued occurrence of the Notting Hill Carnival in London since 1966 which celebrates the Caribbean cultural group of the UK as part of Europe's largest street festival. ([www.thenottinghillcarnival.co.uk](http://www.thenottinghillcarnival.co.uk)) However many have pointed to the failures of this national policy and attitude as seen with David Cameron's statement in a BBC sandbite that "multiculturalism has failed" (the before-hand statement is sourced from the online BBC news article "State multicultural has failed says PM" (Feb 2011) which is arguably a reliable source as it contains a sandbite from David Cameron himself and is produced by the BBC which is accountable to the UK public in terms of accuracy through the payment of TV license fees) and "we have allowed the weakening of our collective identity" indicating that such a positive attitude by national players is

not without its critics and failures and may have negatively impact the UK's cultural identity.

## Attitudes to Cultural Diversity by players on the regional scale.

Furthermore specific, indigenous cultural groups usually confined to one region display a variety of attitudes to cultural diversity. Some indigenous groups ~~so~~ again display a proactive attitude to the sustaining of it and have used the global spread of soft power and communication software to better promote and preserve their heritage in the modern world as seen with the development of a regional newspaper and iPhone dictionary app by the Turan cultural group of Mongolia and Siberian Russia to better preserve and ~~share~~ <sup>capture</sup> the language of the Turan people which is now spoken by 235,000 people (Russ Rhymer, 'Vanishing Voices', July 2012). Additionally other isolated cultural groups have been equally proactive ~~and~~ valuing of cultural diversity as an important part of heritage and have used the technological developments such as video recording equipment spread around the world by TNCs, <sup>and media organisations</sup> to their own advantage as seen with the Troggi people. The Troggi people are an isolated indigenous group in the Sierra Nevada de Santa Marta mountain range of Colombia who have collaborated with BBC documentary filmmaker Alan ~~A~~ Greira to record their unique way of life and worldview as the Troggi people believe they are the 'elder brothers' tasked with safeguarding the world through film to promote their culture to a wide audience in the film 'Aluna' ([www.alunafilm.com](http://www.alunafilm.com)). Once again indicating that players who see cultural diversity with a creative attitude as something to value may aid the sustaining of it. Furthermore other cultural groups have viewed cultural diversity with a similar creatively-driven opportunistic attitude to create new unique hybridized cultures <sup>as a process</sup> ~~as a result~~.

to some as 'cultural appropriation'. For example the Yoruba cultural group of Nigeria have used the flow of US soft power in the form of pop music to their own advantage and have combined western music exports with traditional Yoruba customs of 'Oriki' praise poetry to create the new unique "Fuji" music genre indicating that ~~these~~ regional players that view culture ~~as~~ as dynamic and a 'source of innovation and exchange' may find new and in this

case commercial opportunities in the world's cultural diversity. (The above information on the creation of Fiji music is sourced from Karin Barber's <sup>journal</sup> report "traversing the global and the local: Fiji music and praise poetry in the production of contemporary Vanuatu ~~pop~~ popular music (1995) which is generally reliable as Karin Barber is a professor of African cultural anthropology and so has experience in this field.) However not all attitudes to cultural diversity by regional players are positive as seen with the mass alterations of the Tibetan 'cultural landscape' defined by Carl Sauer as "an area made up of <sup>the</sup> distinct association of forms both physical and cultural" by China after its occupation of the area since 1951 as it has invested in mining infrastructure and transport links on the plateau displacing the Tibetan people and their cultural customs centred around nomadic herding on the plateau's grassland, due to China's attitude to regional cultural diversity as a threat to its sovereignty and political ideals as a unified communist state focused on economic development as opposed to traditional indigenous cultures.

### Conclusion

There is a huge variety of attitudes to cultural diversity at all scales. Globally there appears to be a divide between the neglect of cultural diversity by US TNCs motivated by commercial attitudes as seen with the rise of cultural imperialism

and decline of language diversity worldwide, whilst UNESCO displays a more positive attitude to the world's cultural diversity and has taken to <sup>actively</sup> sustaining it with its world heritage site list. On the national scale, ~~Japan~~ <sup>there are</sup> also numerous attitudes to cultural diversity as seen with Japan which has ~~disregarded~~ <sup>dismissed</sup> it within its own country in favour of a strong cultural identity whilst India has taken to encapsulating cultural diversity through Bollywood films and the ~~UK~~ <sup>UK</sup> is currently dealing with issues regarding its attitude towards multiculturalism and its own cultural identity. Additionally on the local scale indigenous cultural groups have displayed a positive attitude to cultural diversity as seen with the roles of the Tiwan and Kogi peoples who have sustained it through film and

music, whilst regional players such as the Yoruba people have regarded cultural diversity as a creative opportunity of exchange as seen with its creation of hybridized Fuji music. Consequently China has taken a negative attitude to cultural diversity regarding it as a threat to national sovereignty as seen with its displacement of the Tibetan cultural group. Arguably however, ~~the~~ a positive, creative attitude to cultural diversity as a source of exchange, innovation and art as seen with the Yoruba and Kogi people and the Bollywood ~~industry~~ industry of India appear to be most effective at combatting cultural imperialism."



### ResultsPlus Examiner Comments

The best answers address the question directly rather than simply rehearse well-learned case study material.



### ResultsPlus Examiner Tip

Using different scales can help candidates focus on the question and to identify differences in attitudes.

## **Question 5**

As with the other questions the differences between the question posed and the parameters suggested by the pre-release material caused some problems for weaker candidates, and consequently too few gave thought to structuring an answer. The focus of this question is the relationship between health risks and the management strategy chosen to reduce/eradicate them. There are many economic, social, political and physical factors determining strategy, not just the actual health risk.

Too many candidates simply re-wrote the case studies, which were often impressively detailed but these answers couldn't access the higher marks automatically unless the 'case-studies' were made to 'work' by being applied to the question posed. Many candidates wanted to simply link management and development – thereby writing a different answer to the one required. There was a lack of recognition of the words 'type' and 'degree'. Although candidates did define words such as health risk (many health risk equations), only the minority gave thought to these words and yet this was the basis of the question. Those who used the type of health risk as their framework were able to identify other factors and so get to grips with the question. Weaker candidates who used factors affecting management strategies as their framework could not answer the question 'to what extent...'. Some answered different questions eg relating management strategies to levels of development or gave a very descriptive answer of case studies with no reference to type or degree of health risk, eg this is the health risk, this is the strategy used with no evaluation.



This is an example drawn from the top end of the mark range. As with other stronger responses it is the focus on the question that is impressive and the number of occasions when the candidate returns to it to make a point that ties together the evidence presented with the argument that they are trying to construct. This is best exemplified in the conclusion which addresses the question directly. This response was awarded 62 marks.

Indicate which question you are answering by marking a cross . If you change your mind, put a line through the box  and then indicate your new question with a cross .

Chosen Question Number:

Question 1

Question 2

Question 3

Question 4

Question 5

Question 6

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

Plan - Intro - definitions - Management strategies  
 - Health  
 - Health risk equation  
 - Types of health risks  
 - Management continuum  
 case studies - models - environmental  
 risk  
 risk transition model  
 Epidemiological model.  
 main section - Hainan & China air pollution -  
 degenerative / pollution - delayed, over  
 factors - development, political - genetic &  
 behavioural risks - point & diffuse - local  
 - cholera & HIV - infectious, cholera  
 immediate symptoms, hospital, HIV  
 delayed - chronic - No cure, development.  
 Preventive measures - HIV, treatment  
 cholera.  
 - Montreal & asthma - asthma  
 degenerative / chronic, development -  
 Health type & degree loss  
 important Montreal - more asthma - chronic

## Introduction 1.1.1

### Definitions 1.1.2

In order to evaluate what extent health risks impact choice of development we must first define key terms to enable us to understand no question. The WHO defines health as 'the complete physical, social and mental wellbeing and not merely 'just the absence of disease or infirmity'. This allows us to define health risks, to

define health risks I have used the ~~equation~~ health risk equation shown in figure 1.1 This shows us influential factors that

cause figure 1.1  
health risks = exposure x vulnerability - management

Health risks can be further sub-divided into chronic, infectious, pollution and degenerative.

In order to understand no question we must also define what is meant by management, a broad definition is 'any measures taken to reduce the impacts of a specific health risk'. Due to this broad definition I have sub-categorised management into prevention and treatment of effects. I have also presented case studies on a scale of this

shown in figure 1.2. allowing presentation of the values  
1.2

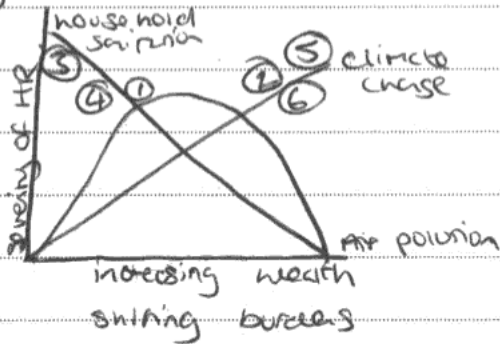
prevention/reduce ⑤ ② ④ ① ③ ⑥ → treatment  
exposure of effects

of management examples.

### case studies 1.1.3

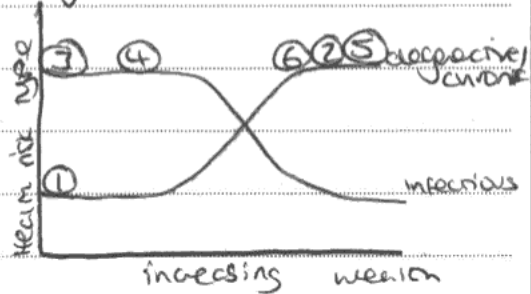
In order to fully evaluate the question it must be recognised that a range of case studies must be used, ~~not~~ furthermore a range of development, scale and health risk examples must be used to recognise ~~the~~ contributing factors of choice of management. ~~Not~~ have used the environmental risk transition model (Figure 1.3) and the epidemiological model (Figure 1.4) to present my case studies

Figure 1.3



local → global  
immediate → delayed  
impact on health risk → impact on ecosystem

Figure 1.4



### key:

- ① Haina
- ② china - Air pollution
- ③ cholera
- ④ MIV
- ⑤ Montreal agreement
- ⑥ Asthma

Therefore my case studies show a range of scales from local pollution incident Haiti to global Montreal agreement. From figure 1.2 you can see I have used a range of management strategies. ~~and a range~~ I have also use a range of health risks and development ~~and the~~ seen on figure 1.4 from LED Haiti to BRIC China. My range of health risks include degenerative ~~risks~~ to infectious HIV.

### Methodology 1.14

In order to have a vast number of sources I have used a range of ~~the~~ sources from blogs such as no omnib. com to global organisations such as the FAO in Haiti. I have also included a range of reliable and bias sources as this allows identification of unreliable sources. ~~In answering the question, I did used a~~ ~~page below~~ shows a sample of case studies and sources used. Including NGOs such as Black Stripes. I have considered the influence of bias in my table.

case study	scale	source	recycling 1-5 (5 being best)
Huainan	Local	① BBC News ② WITD	① 1 ② 1
China air pollution	Regional	① China Daily ② US Embassy	① 5 ② 2
Hainan children	National	① Harvard ② FAO ③ BBC	① 2 ② 1 ③ 1
HIV - Uganda	National	① UNDP ② FAO ③ WITD	① 1 ② 1 ③ 1

### Huainan 2.1.1

### Background Info & Effects 2.1.2

Huainan is located in the Dominican Republic in the Caribbean, it is south of the Dominican Republic and is an industrial park. Battery acid recycling plants burnt toxic chemicals leading to release of lead into the atmosphere, they also dumped industrial waste in unlined pits causing lead to leach into the ground water.

The effects of this included increased blood lead levels of the population ~~was~~

having a 90% ~~lead~~ ~~level~~ elevation in blood lead levels. It also caused birth defects, neurological damage, severe headaches and infertility according to

The ~~to~~ Blacksmiths' Institute initiative. ✓

### Management 2.1.2.

Management was a two year plan, run by Blacksmiths' Institute. They removed the lead from mine pits and disposed of it properly, they closed down the poisoning factories, they built a park where the factories used to be to prevent children playing here, ~~and~~ they also educated people about how to clean their food to remove lead, they also gave vitamins to pregnant women to prevent lead being passed on to the baby.

### China - Beijing Air pollution 2.2.1

#### Background Info / Effects 2.2.2.

Due to China's ~~being~~ industrialisation and being a rising economy they are heavily dependent on fossil fuels, they their main industry is toxic manufacturing thus they have vast amounts of factories producing toxic gases. The effects are vast, the US Embassy recorded

polluter levels in the air at 800 mg per cubic meter, when the WHO recommends safe levels at 25 mg per cubic meter. There has been an increase in ~~ing~~ respiratory diseases such as asthma and the ~~is~~ according to the European Union only 1% of city dwellers breath what is considered safe

air. Lung cancer is 2-3 times more likely in cities, hence it has huge effects  
management 2.2.2

The main cause of action has been led by Chinese government and has a 3 strategy plan. To ~~manage~~ manage the problem. These include 1) improving car technologies and improving energy efficiency. 2) enforcing vehicle pollution control and 3) tightening laws of SO<sub>2</sub> emissions, according to chinanews daily.com.

### sub conclusion of India & China air pollution.

2.2.3, In the case of both China and India pollution is the cause of health risks and these health risks are degenerative. For this reason management in China may be less efficient due to the delayed symptoms of the health risk. In comparison the health risk is

from pollution in both, in India the source is point source thus highly governing the choice to remove the pollutant and reducing exposure to the pollutant a factor as seen by figure 1.1, being very important in reducing health risks. The nature of the source of pollution is also important on choice of management in China as the source is diffuse meaning it is difficult to contain pollution, thus preventive strategies must

be employed is shown by figure 1.2. Although none of them is important in both these cases, other factors also impact management choice such as development, China is a KE located in an LDC thus has lack of capacity to deal with the problem thus it must rely on NGOs and international gives no store the problem. In comparison China is a rising super-power thus has a larger capacity to develop new technologies to deal with the problem. Under their management their management is focused on preventive, technological fix.

### Cholera - Haiti 2.3.1

#### Background info / Effects 2.3.2

Haiti is located in the Caribbean and is affected by hurricanes. The cholera was brought to Haiti after the 2010 earthquake when UN peacekeeping troops came to give the response according to the BBC.

The cholera had huge effects such as 7,000+ deaths according to the BBC. There was also food insecurity as farmers started to use fertilizer to irrigate their crops according to the FAO, they also suffered from outbreaks of violence towards NGOs according to Harvard University report.



### management 2.3.3

management was mainly created, it included temporary clinics in rural areas, and distribution of oral rehydration therapy.

Preventive measures were also taken as body bags were distributed for the UN aims at improving sewage disposal. People were also educated on how to improve sanitation.

### Uganda - HIV 2.4.1

#### Background info 2.4.2

Uganda is an LDC that has a

prevalence of 7.3% of HIV. HIV affects the immune system and is an incurable sexually transmitted disease.

It has had vast effects on Uganda's economy including an ~~1.7%~~ 1.7% increase in poverty due to HIV according to the FAO. Other effects include 80% of sufferers are between the ages of 15-40 the working age and having economic impacts. The cost of AIDS per person per year is \$5,000 and impacting Uganda's capacity to deal with the problem.

### management 2.4.3

Uganda's management is both government run but also relies on AIDs from the USA. In the 1990's management was widely prevention based as condoms were distributed thanks to the US funding, this increased

condom use by 7% nationally and 30% nationally and 85% in urban areas. They also ~~also~~ provided some day results on cost, self treatment kits and circumcision.

But the US change in government meant funding for condoms was cut resulting in a increase in prevalence. The ABC approach was encouraged people to ~~use~~ abstain, be faithful and use a condom.

### Subconclusion 2.4.4 - Health & Economic HIV.

In both cases the type of health risk and the nature of health risk has influenced choice of management greatly. Both cases the health risk type is infectious and in both cases the degree of the health risk is severe. In the case of cholera the effects are immediate meaning the response and management need to be rapid and effective. In comparison the effects of HIV are delayed meaning response it's difficult to detect & treat immediately, thus the choice of some day results being required.

The nature of HIV is infectious and chronic as it cannot be cured this nature lead to a more preventative approach than HIV as cholera can be cured. Therefore nature of the health risk and severity of the health risk impacted choice of management greatly.

Although health risk type was mainly influenced by management choice, other factors should be recognised such as development, both countries are lacking in economic development shown on figure 1.3 and 1.4, this ~~the~~ ~~low~~ development must also be considered a factor as it

both cases the type of health risk is typical of an low developed country thus 'healthcare capacity to deal with the problem is low thus in both cases there was high reliance on foreign aid to help reduce health risk, when applying to figure 1.1 you can see healthcare vulnerability is high resulting in severe health risks.

Population affected is also a factor in both as the more population was most affected resulting in a focus on more areas in both cases.

Therefore health risks & severity are the most influential factors by which factors can also be considered attractive and shouldn't be ignored.

### Montreal agreement 2.5.1

### Background/effects 2.5.2

~~The Montreal agreement was to~~

The release of CFC's resulted in destruction of ozone molecules as, no ~~other~~ CFC is broken by UV light, releasing a free chlorine atom which destroys ozone. This could result in increased skin cancer rates, was a problem

already present in Australia with 80-95% of ~~the~~ skin cancers due to ~~the~~ over exposure to UV according to the Sun smart website.

### Montreal 2.5.3

Montreal includes the Montreal agreement, every UN nation signed up and the aims were binding according to ozone hole. They also developed a Multilateral Fund to help the underdeveloped countries achieve their goals, it was funded by developed nations according to the UN ~~bank~~. They agreed to eradicate CFC's completely.

## asthma 2.6.1

### Background & effects 2.6.2

asthma is a degenerative / chronic ~~respiratory~~ respiratory disease not caused by stress of breath, wheezing and coughing. The WHO suggest 1 in 250 children in the world are due to asthma and its economic costs exceed that of TB & AIDS. The NHS suggests British spend \$1.8 billion a year on asthma. It mostly effect developed nations and there's no known cause.

### management 2.6.3

management is largely based on educating people about symptoms to promote diagnosis and research into the cause to allow better understanding.

### subconclusion 2.6.4

In the case of both case studies the health risks associated are both degenerative and chronic, thus in no ~~cases~~ example of managed greatest management is largely focused on preventing health risks as seen on figure 1.1. Whereas due to the nature of asthma being chronic and there being no known cause ~~there~~ management is largely treatment based.

Both health risks and severity are typical of both figure 1.3 & 1.4 they're highly developed but the diseases suffered are chronic & degenerative. The fact that the impacts aren't that severe than are immediate means management can be continuous.

But in the case of the non-renal agreement health risk severity & type of health risk is a less important factor than in NSMAs. There is a cure to such cancer. In comparison

development plays a larger role. A more effective or developed nations such as Australia receive very high more incentive to produce a multifaceted and therefore development made this management strategy possible. However in the case of NSMAs development plays a smaller role as the nature of health risk is also chronic, development though has governed the ability to research into the cause of cancer this could lead to a cure. But without the economic funds this couldn't happen.

Rather in NSMAs health risk type & severity play a larger role compared to the non-renal agreement.

### conclusion 3.1.1

Recent case studies show that in the case of infectious and chronic disease the symptoms are immediate and severe and are largely governed by choice of management as seen in the case of HIV and cholera and Ebola but it must be considered that other factors also influence choice of management especially development as in many emerging case studies

development has influenced choice and type of management, other human factors such as population affected have also influenced choice of management as it allows a focus on areas most affected.

When applying from the models shown in figure 1.3 and 1.4 you can see that development is an influential factor in the type of health risk and the severity therefore it could be considered a main factor in choice of management as development rightly governs how severe the impacts are and what type of health risks are contracted.

Therefore no concrete type of health risk and severity of health risk are extremely influential factors but, in order to manage health risks other factors severely influence choice of management. Which physical factors such as the river in this being the most influential.



**ResultsPlus**

**Examiner Comments**

Stronger answers such as this are not necessarily longer but they are often full because, as well as presenting evidence, they also evaluate the relevance of that evidence using terms from the question.



**ResultsPlus**

**Examiner Tip**

Remember to use the words in the question in your answer. You need to 'come to a view' about the question that you have been asked and try to avoid sitting on the fence.



## **Question 6**

This was a fairly popular question in which responses from candidates varied from the very good to the poor with rather a long tail of weaker answers. There was a wide variety of case studies used but not always effectively in addressing the issues of 'increased and changed'. The weakest answers tended to list information about the chosen case studies, which were predominantly drawn from tourism rather than 'leisure'. Although these answers defined rural in the context of the question and, indeed, other terms like threats and tourism, there remained a tendency to neglect 'leisure'. Another key problem of the content was the lack of variety in the case studies selected making the reports degenerate into a 'wallpaper' situation where everything was repetitive. Many candidates could have chosen from a wider array of case studies although this all depends on preparation in the classroom.

Stronger responses addressed current problems featuring the increasing number of tourists at selected attractions and the consequential environmental issues. However, relatively few cited the impact on existing ecosystems and the long-term effects and very few saw the threats as being anything other than environmental. The focus on 'change' was limited to the very best answers and explored both negative slants where 'tourism kills tourism' and positive ones entailing steps being taken to resolve the threats from small-scale examples, such as 'stone pitching' and 'sub soiling' to avert footpath erosion, to the much larger-scale resolution of carrying capacity being exceeded both locally and more widely at a national level. These candidates sometimes addressed threats such as an over-dependence on tourist income and the impact on the wider economy; for example the Maldivian economy is obviously very exposed to global economic crises and there are also interesting comments to be made about its attempts to develop a 'sustainable' model despite its complete reliance on long-haul air transport.

In this question the correct answer should have been - 'Yes the threats have increased and "yes" they have changed' as well as 'both tourism and leisure have changed both spatially and temporally'. Candidates who stuck to that did very well.

This was a stronger answer than most. Case studies are 'fit for purpose' - change and increase are both explicitly addressed in both the introduction and beyond. There is room for a more direct focus on the question in places and both the conclusion and the analysis could use the key words with greater regularity. This response was awarded 58 marks.

Indicate which question you are answering by marking a cross in the box ☒. If you change your mind, put a line through the box ☒ and then indicate your new question with a cross ☒.

Chosen Question Number:

Question 1 ☒

Question 2 ☒

Question 3 ☒

Question 4 ☒

Question 5 ☒

Question 6 ☒

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

Plan

Intro - definitions  
 - Models  
 - Threats  
 - Changing nature + level leads a  
 increase/ changing threats

Quote - "remote locations now, it's  
 (Geography course)

Formby - BBC.CO.UK Dunn et al 2009  
 - Environmental threats  
 - no cultural

Lake District - lakelidistrict.gov.uk  
 Warn, 2010, National census  
 - Second homes

Berndorf - no longer rural (Butler) Digby et al

Hawaii - Cultural positioning  
 National Geographic (Road), Property or  
 Practice

? Machu Picchu - machupicchu.org, BBC News  
 - Landscape + Settlements

Amazon - threats posed have decreased Digby et al  
 "Quote" Adam and Holmes

Conclusion - Evaluate each case study  
 - Complex issue = complex answer.  
 - uses environment now culture

## Introduction

"remote locations which used to have no tourist facilities are now being used by tourists. Although this has brought prosperity it has also led to a decline in ~~the~~ often fragile rural landscapes" (Geography Review, 2017)

This guide highlights that as tourism has increased in rural locations the threats posed by tourism has also increased overtime. In order to answer the question it is important to recognise that tourism has changed both in nature and in level. The nature of tourism has changed in two ways: in scales, through the pleasure periphery we are now travelling to more locations; and in type, no longer is passive leisure seen as acceptable by tourists, they now wish to experience cultures and have also demanded ~~for~~ more activities such as extreme sports. The level of tourism has also changed from small-scale tourism to mass tourism which is placing increasing threats on landscapes and settlements.

The threats of tourism have changed primarily due <sup>to a range</sup> ~~to~~ of locations being opened up, but they have also changed within resorts as the Butler Model and Dorey's Index of Irritation highlight.

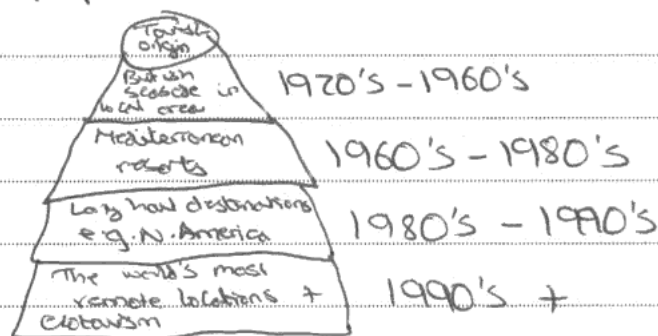
It is important to know that the threats posed are

felt by the landscape (environmental) as well as increasingly by settlement (sociocultural). Nagle, 1999 states that - tourism is ~~travel and~~ <sup>travel and</sup> ~~activities~~ taking place away from the home for at least 24 hours, while leisure encompasses all ~~leisure~~ activities and tourism taken either at home or not, therefore they are often used interchangeably.

The models used throughout my essay will be the Butler Model (to highlight changing ~~aspects~~ <sup>threats</sup> within a resort), Dacey's Index of Imitation (to show the cultural impacts of goods from increasing tourism) and the pleasure periphery (to show how the changing nature of tourism due to barriers being broken has also changed the treats posed).

### The Pleasure Periphery (Figure 1)

(from a UK perspective)

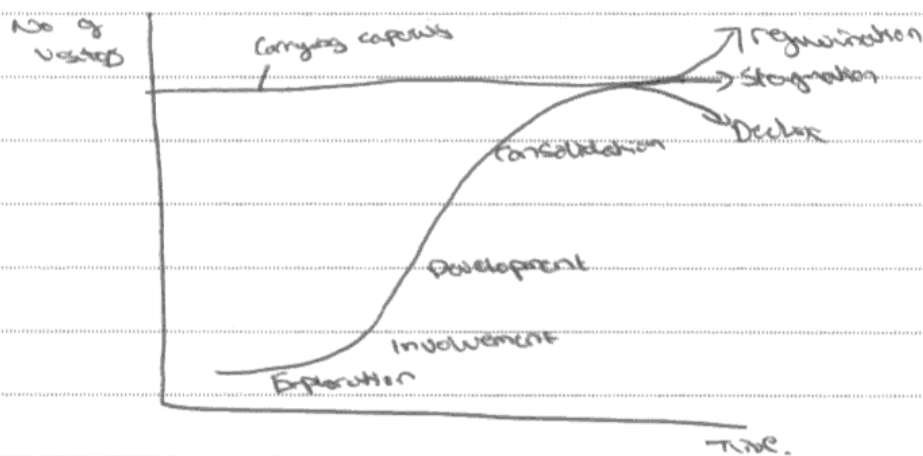


(adapted from Bryne et al 2009 and Duret al, 2009)

## Doxey's Irritation (Figure 2)

1. Euphoria - unprepared, visitors welcome
  2. Apathy - commercial relationships
  3. Annoyance - Misgivings towards tourism
  4. Antagonism & Artagonism - Tourists seen as cause of all problems
- (Nigla, 1999)

## Butler Model (Figure 3)



(Dixon et al, 2009)

## Local tourism

The first stage of the pleasure periphery for most people was the local seaside resort. Farnley in Merseyside developed in the 1960's as leisure became more important.

~~Further~~ Increasing tourism led to a ~~decrease~~ the destruction of <sup>granular</sup> sand dunes as they were eroded by trampling and ~~was~~ <sup>management</sup> were <sup>often</sup> used on the sand dunes leading to the large scale destruction of vegetation. As a result, it can be concluded

(Barnett et al, 2009)  
(BBC.co.uk)

More increasing tourism and a ~~changing~~ change in tourist activities lead to a decline in the environmental quality.

### Regional Scale

The Lake District was granted National Park status in 1951 and attracts 17 million tourists per year (lakedistrict.gov.uk). As a result of its national park designation, only limited changes are permitted to the landscape, however this status also attracts more visitors. Initially, ~~the~~ tourist impacts were purely environmental as visitors caused footpath erosion, left litter and also contributed to an increase in noise and air pollution through the increasing use of cars. However, as disposable incomes have increased, more people have the ability to purchase second homes and many to choose the Lake District, leading to an increase in the occurrence of holiday homes - it stands at 17% in the Lake District region and as high as 40% in some villages (according to the 2001 National Census) - not only because of an increase in popularity but also because strict planning laws ~~that~~ mean few new homes can be built.

Demand for homes in the area exceeds supply so house prices increase dramatically, leading to many local people especially the young being priced out of the market.

Warr, 2010 also reports that where second homes are common, ghost towns or villages are created because they are not used all the time so the village lacks community. Furthermore, they do not ~~support~~ use local shops and services meaning that they go into decline. Cultural differences also become present as seen in the Welsh Valleys which has seen an influx of second home owners from England. It is evident that Dorey's Index a limitation can be applied here as tourists are now seen as the root cause of most problems so antagonism has been reached.

The Lake District shows that threats posed by tourism have changed from purely environment ~~to~~ <sup>to</sup> now include social and cultural aspects due to the use of second homes.

### Mediterranean

Digby et al, 2009 uses the Butler Model (figure 3) to demonstrate that initially in the involvement and exploration stages there were little threats posed by tourism as the local infrastructure could cope. However, the arrival of the masses during development has meant that the infrastructure <sup>as a rural landscape</sup> could not cope, leading to a decline in the area ~~because~~ because it was associated with 'excess and tackiness'. The ~~Forecast~~ <sup>Guardian</sup> also reported in 2013, that the resort went into decline because the water infrastructure, although now satisfactory did not cope in its boom phase causing

The carrying capacity to be reached, and leading to environmental problems of saltwater intrusion of aquifers and the pollution of many water resources.

### Long-haul

Hawaii has attracted tourists for over 50 years but its isolation is its problem (National Geographic, 2007) due to its ~~isolation~~ both from most other places and in terms of its ~~isolation~~ inaccessibility of most of the islands. This inaccessibility had led to waste (including ~~but~~ <sup>litter</sup> discarded tents and human <sup>waste</sup> ~~waste~~) being strewn throughout the islands leading to the decline of its environmental ~~quality~~ <sup>quality</sup> and putting off summer tourists. The only way to remove much of this waste is by helicopter, which also causes problems of noise and air pollution.

Although tourism has posed increasing threats to the environment of Hawaii, it has also increased the threats faced by the locals. Jonathan Croall in 'Paradise or Paradise?' expressed his concern that tourists have a "damaging stereotype" of the local cultural and that there is an issue of "cultural prostitution". Most people visit Hawaii with a pre-conceived idea of a romantic atmosphere in an idyllic setting surrounded by sun-bathing, hula skirt-wearing locals. However, this is simply not the case and locals have become so annoyed that they are now leaving the islands (according to the Daily Telegraph only 6% of its population are now native) at an alarming rate. This



once again indicates ~~the~~ Doxey's Index of Irritation which  
after the locals have gone from Euphoria of earning a higher  
wage to antagonism due to rising prices and cultural prostitution.

## Ecotourism

"It is generally assumed that increasing tourist numbers lead to decline  
of a landscape, but this is not always the case" (Adam and  
Holmes, 2010). This quote is important in recognising that the threats  
posed by leisure and tourism <sup>on natural areas</sup> has not necessarily always been  
true. The Parados Amazonas ~~Resort~~ Lodge in the Amazon  
Rainforest is adopting ecotourism as a means to actually decreasing  
the threats posed by other industries such as mining and logging.

The Inyerno Tribe will own 100% of the lodge by 2016 and  
Digby et al, 2009 claims that the environment and landscape is  
enhanced by the presence of tourism because the locals no longer  
hunt for animals because tourists demand to see the unique wildlife.

Also an alternative income is provided so that the locals can  
purchase food from more sustainable resources. ~~Firewood~~ Firewood is  
not needed for electricity as solar panels create all the electricity  
meaning the forest can be left in its natural state. Most  
argue that this tourism should be encouraged because the threats  
posed by it are much less than those posed by traditional  
tourism. Yet the opening up of the forest will inevitably increase  
human activity in one of the last remote locations on earth  
and ~~thus~~ thus the threats posed may start to increase over time  
as the industry develops. Mudslides are common in the Amazon

On roads which are unsuitable for use which causes a loss of vegetation. ~~It~~ ~~Henry~~ ~~Zak~~ ~~argu~~ The <sup>Daily Mail</sup> ~~Amazon~~ ~~Amazon~~ ~~Amazon~~ also states that "the unthinking use of the Amazon Rainforest for personal gain, whether that is through extraction of resources, research or tourism will lead to the ultimate decline of this precious resource and its unique cultures".

### Conclusion.

It has become evident from my case studies that the threats posed by leisure and tourism in rural areas has increased ~~over~~ and changed over time. The pleasure periphery highlights the changing nature of tourism (indicating that we are willing to travel further afield for leisure and as a result demand a ~~the~~ higher use of the landscape). The nature of tourism has also changed from simply using the environment to demanding that we integrate with the cultures in which we are visiting. The level of tourism has also changed from small scale (such as in Farmby) to Mass tourism as seen in ~~the~~ the Mediterranean and Hawaii.

Farmby shows the initial stages of the pleasure periphery and that as tourists use consumed the landscape but posed little threat to the culture. This may be because tourism was

So local, meaning that cultures of the hosts and tourists are very similar so there was no resultant conflict. The Lake District shows that as we move through the pleasure peninsula the environmental damage gets increased because there was a wider range of impacts from footpaths erosion which primarily changed the landscape to congestion and pollution as a result of increasing tourist numbers and little infrastructure. However, the Lake District also shows that as our relationship with tourism changed so to has the threats posed: we now cause ~~in~~ pressures on the local housing market, causing ghost towns and locals to become annoyed that there are no services and they cannot get on the property ladder.

Benidorm is a prime example of the forecast in tourism which causes more threats to ~~the~~ rural areas and has now meant that it can no longer be considered rural, while the environment went into decline. Hawaii highlights that as our interaction with the areas in which we visit changes the threats become much worse. The media has portrayed an idyllic idea of the islands and caused pre-conceived ideas on the local culture which has caused many locals to become angry indicating Dorsey's index of irritation.

However, ecotourism which is defined as travel which uses the environment in a sustainable manner (see Passer, 1994) has allowed tourism threats to actually ~~at~~ be reduced and provide the area as a place to look after.

"The educated traveller—in the best policemen of the environment" is used by David Lowson in the 'Orient Lines' video to express his view that if people do not experience new locations they will be less likely to want to take action to protect it, thus promoting tourism in the Amazon.

It is clear that ~~these~~ tourism has caused changing and increasing pressures on rural areas, leading to ~~a~~ complex issues which now require a complex range of solutions. 'The one size fits all' model no longer works and we need to be prepared to ~~limit~~ change our attitudes to travel.



## ResultsPlus

### Examiner Comments

This answer again demonstrates that stronger answers are not necessarily longer but they are often full because, as well as presenting evidence, they also evaluate the relevance of that evidence using terms in the question.



## ResultsPlus

### Examiner Tip

It is a very good idea to include the broad direction of your answer in the plan - in this case 'yes they have changed and increased'.

## Paper Summary

The best reports are a pleasure to read. They show both thoughtful teaching and real engagement on the part of candidates. Whichever option is chosen the mark of the more able candidates is their ability to adapt what they know when they enter the examination hall to the constraints that the question places on them. These come in the form of what is usually a contentious statement that requires a critical engagement on the part of the candidates who need to address the title directly, rather than present more and more case study material because that is what they prepared. It requires a certain intellectual confidence to take on a question but that is the key to top level reports.

Based on their performance on this paper, candidates are offered the following advice:

- It would help enormously if the introduction makes clear what the general view is - the best reports make the perspective clear from the outset which helps candidates stay 'on track' throughout.
- It would be very pleasing to see the 'answer' feature in plan or, indeed, explicitly in the introduction.
- Remember to write a report, not an essay.
- Focus very clearly on the wording of the question so that you don't just write all you know about a particular subject/issue but address the issue raised.

## **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>



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