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Examiners' Report
Principal Examiner Feedback

Summer 2019

Pearson Edexcel International Advanced Level In Geography (WGE03) Paper 3: Contested Planet

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Introduction

This was the fourth examination series for **WGEO3 Contested Planet.**

Overall the standard of answers was good, and it has improved over the last few years. The vast majority of candidates wrote full answers to all questions and there was very limited evidence of timing problems impacting on the exam paper.

In terms of the questions that are optional:

- **Question 4 Energy Security** was more popular than **Question 5 Water Conflicts.**
- **Question 6 Superpower Geographies** was more popular than **Question 7 Bridging the Development Gap**.
- The difference in quality of answers between optional questions was very small.

Some overall observations:

- **Question 1a, Question 2, Question 4a** and **Question 5a** were data stimulus questions which directed candidates to a figure in the resource booklet. These questions test the skill of interpreting geographical data, so answers must refer directly to the data provided. A small number of answers described the information rather than explained it or suggested reasons for it.
- It was noticeable in **Question 1a** that a number of candidates spent some time early on in their answers describing the three climate graphs, with explanations only appearing after quite a bit of wasted writing.
- **Question 3** is a Synoptic Question that seeks to encourage candidates to link two or more topics; answers that focus on only one of the indicated topics are not likely to score well.
- Mark schemes refer to **'evidence'**: this can come in the form of examples, case studies, data, facts, detailed reference to places, concepts and geographical theory. This is important in terms of overall mark.
- 15 and 20 mark questions that use the command words **'assess', 'to what extent'** or **'evaluate'** benefit from a conclusion which is still not included in a minority of answers.

Country classification

Centres should note that the country classifications used in the Specification **(see page 75 of the Specification)** are:

- Developed
- Emerging
- Developing

These divisions are based on the Human Development Index. Many candidates use the terms MEDC and LEDC, or HIC and LIC. These are perfectly acceptable terms to use in answers, but centres need to be aware that they will ***not*** be used in examination questions, or mark schemes. The term 'emerging country' was not always fully understood.

Q1(a)

Atmosphere and Weather Systems

Figure 1 provided data in the form of three rainfall graphs for places at different latitudes in Africa. There was a tendency to describe this data before moving on to possible explanations of it, and this does not gain marks. There was a widespread understanding that Kisangani's high annual rainfall is caused by persistent low pressure close to the equator, and this was often explained in terms of high solar insolation levels leading to convectional rainfall.

Most, but by no means all, candidates recognised that the role of the ITCZ was important in explaining why N'Djamena and Agadez get seasonal rainfall i.e. that in the northern hemisphere summer the ICTZ moves north bringing seasonal rains (the monsoon) to these places.

It was rare for candidates to recognise the **'double peak'** of rainfall in Kisangani and explain that this was caused by the ITCZ moving north early in the year and then passing south later in the year. Weaker answers tended to mention the ICTZ as a factor without explaining its role in causing rainfall variations. Stronger answers recognised that for Agadez the influence of the ITCZ was slight as the city lies at the extreme edge of the northward seasonal movement: some candidates explained that in some year's rainfall here would be lower if the ICTZ 'failed'.

Many recognised that Agadez is usually influenced by high-pressure as it lies in a zone of subsiding air where the Hadley and Ferrel cells meet, and some answers also used the idea of continentality to explain the very dry climate.

Atmospheric cells and their role were sometimes confused. A small number of answers referred the Polar Cell and Polar air, and the Ferrel / Polar boundary which is not relevant to Agadez or N'Djamena. A small number based their explanations of mid-latitude processes such as seasonal depressions, fronts and Rossby Waves.

In addition, a small number of answers focussed only on El Nino and Global Warming and thus lacked the basics reasoning for the rainfall differences. This approach was rare. Other factors, such as climate change and El Nino / ENSO cycles were sometimes used as additional factors within a detailed explanation of the ICTZ and atmospheric cells and this approach often worked very well in terms of explanation.

Q1(b)

Atmosphere and Weather Systems

This question focussed on the role of aid as a response to weather disasters. It was successfully answered by many, but there were some recurring issues:

- Some answers wasted time with extended descriptions of what droughts and tropical cyclones are; they were answering the question **"explain the occurrence of droughts and tropical cyclones"** rather than focussing on the role of aid as a response.
- A small number of answers were very generalised answers about types of aid (multi-, bi-lateral etc.) which would have been more appropriate to a topic C2 question than a topic A1 question: these answers usually only mentioned weather disasters in passing.
- A number of answers considered all responses to weather disasters to be **'aid'** and failed to identify as a specific type of response.
- The concepts of drought and aridity are often confused.

There was no restriction of the types of countries that could be discussed, and many answers referred to the USA and Australia as well as developing / emerging countries. Sometimes the use of developed world examples led to answers that were not about aid at all, but were about long-term planning for resilience and mitigation e.g. the construction of desalination plants.

The best answers took a comparative approach and examined the need for aid, usually foreign aid, is developing countries struck by disaster versus the more limited role it plays in developed countries. In addition, useful contrasts were made between the value of short- and long-term aid: many argued convincingly that short-term aid is important but other strategies are needed to reduce vulnerability.

In fact, the most successful answers broadened the debate out to consider preparation, prediction, evacuation and education as being responses that had greater value long term because they reduced vulnerability and increased capacity to cope. This was the key, in many cases, to a successful **'evaluation'** of the contribution of aid i.e. how important is it in terms of overall **'response'.**

Good answers tended to consider the value of aid in terms of drought versus tropical cyclones and came to different conclusions about its value in each case. These answers, usefully, recognised the very different nature of the two hazards and the need for different responses to each.

It is worth mentioning that in some cases the data quoted for deaths, the monetary value of aid received and many other metrics associated with named disasters bore little relation to reality.

Factual accuracy is important.

Q2
Biodiversity under Threat
Figure 2 showed a conflict matrix between players within a national park in Africa. Candidates had a good understanding of the nature of the different players, their roles and motivations. In addition, there was a good understanding of what the conflict matrix indicated in terms of conflict.

Answers were generally good. Issues tended to arise if:

- Conflicts were listed: this led to answers that stated the conflict, but lacked an explanation of what lay behind it i.e. a descriptive answer.
- Candidates drifted away from the focus of Figure 2 and into their own case study of a national park: these answers often ended up with a limited explanation of the information on Figure 2.

It is worth noting that while examples can be used to support explanations in data stimulus questions such as **Q1a and Q2**, the use of case studies usually does not work.

Good answers usually contrasted motivations i.e. conservation motives of national park managers and tourist guides, alongside the idea that these groups used tourism / ecotourism as a source of income for both their livelihood and the long-term success of the NP due to the money tourism generates.

The motives of hunting tourists and illegal poachers were seen to be different and in some cases conflicting. Better answers recognised that some conflicts were complex e.g. the hunting tourists could be tolerated by some consecration minded groups because they could generate income, but might conflict with others (safari tourists) because of their vastly different attitudes to wildlife.

Farmers and herders were often discussed in detail, as they conflict in terms of space with some other groups. Very good answers recognised that spatial and attitudinal conflicts were the key to a detailed explanation.

A minority of weak answers focussed in a very narrow way on the serious conflict with illegal poachers and failed to consider the other conflicts shown.

Q3

Synoptic

This question has proved challenging in the past, as it quite deliberately seeks to make candidates link different ideas, concepts and topics. However, there was evidence of stronger answers than in the past and many answers gained Level 3, or higher, marks.

There was, from many candidates, a good understanding of global population trends at least at a global level. Many stated with reasonably accuracy the expected global population in 2050 or 2100.
Some candidates recognised that population was not expected to increase everywhere and might in fact fall in some developed countries. A small minority considered population trends in different global regions but this was rare.

A very common argument was to consider that population growth per se was not the main threat, and in fact affluence was the real issue. Many answers referred to rising wealth in emerging countries and the growth of the middle-class as a key reason for increased resource consumption – and that this was the main driver of both direct destruction of biodiversity and pollution that was degrading biodiversity.

In addition, reference to the Environmental Kuznets concept was often seen, with candidates arguing that over time environmental threats might diminish as more countries moved towards environmental awareness and protection because of increasing social and economic development. It was very common for candidates to argue that in fact, global warming was a more serious threat than population growth and many argued this quite convincingly. Fewer closed the loop by making the link between rising emissions, further climate change, and rising population / affluence. Other threats to biodiversity were sometimes considered such as alien species.

Most answers included a conclusion, although some were more bland summaries rather than a confident, supported judgement. Compared to past questions, answers this time included greater use of supporting examples such as biofuel driven deforestation in Indonesia or coral bleaching.

A very small minority of answers almost completely ignored population trends and just outlined a wide range of threats to biodiversity in the form of an extended list. Another type of unsuccessful answer were those that used a case study (Daintree was frequently seen) and explained why biodiversity there was under threat. Neither approach answered the question set.

Q4a
Energy Security
An issue with **Question 4(a),** and also with the parallel **Question 5(a)** was to only see one trend on **Figure 3**, whereas in fact there are several:

- An overall increase over the whole time period
- Basically no growth / flat between 1991 and 2001
- Slower / variable growth in the 2009-2016 period

If only the overall increase is considered, the reasons provided tend to be very similar and relate to increased demand for biofuels (economic growth, population growth, energy demand). Weaker answers tended to do this, and provide repetitious reasons. Stronger answers were a little more analytical and recognised, for instance, that recent concerns over deforestation might have slowed biofuel demand. Some answers argued that in the earlier period low fossil fuel prices and abundant oil supply meant that biofuels were just not needed. A very small minority did not understand what biofuels were, or confused them with biomass i.e. fuel wood or similar. Explanations do need to be in the form of extended points, clearly linked to trend shown on the Figure.

Q4(b)
Energy Security
It is worth mentioning that a minority of answers to this question did not have a clear understanding of what is meant by **'unconventional fossil fuels'**. The Specification states that these include tar sands, deep water oil and shale gas. Shale oil, heavy oil from Venezuela and some others would also be relevant. However, answers that only considered **'fossil fuels'** or in a small number of case biofuels and even nuclear power were drifting from the focus of the question and were usually Level 1 answers.

The majority of answers were on topic, and most used several different examples. As in other questions factual accuracy about the impacts of Canada's tar sands and other examples was sometimes quite weak. A number of answers only considered one case study and fell into the '***everything I know about…***' category and usually contained minimal if any assessment. The question does contain two parts, economic and environmental impacts. Most answers dealt with both although many were unbalanced in favour of environmental impacts and in some cases, these were rather extreme. Better answers considered both local and global impacts, and were not entirely positive about the economic impacts arguing (in a small number of cases) that some places were too economically dependent on one source of income, or that the focus on developing shale gas or tar sands was preventing the development of renewable energy that would be economically and environmentally more sustainable.
Overall, the **'average'** answer was sound, with good support and often a clear conclusion.

Q5(a)
Water Conflicts
This parallel question to **Question 4(a)** suffered from similar issues to its partner. Although there is an overall increase shown on **Figure 4**, it is not constant. Desalination barely increased at all between 1970 and 1980, then there was a period of steady growth followed by a more recent dramatic increase. The reasons behind the different trends are not the same. Good answers argued that in the most recent period falling costs have combined with rapidly rising demand (and in some places, shrinking water supply) to push desalination into the mainstream of water supply.

Q5(b)
Water Conflicts
This is a less popular option than Energy Security, although the standard of answers is comparable. In **Question 4(b) 'unconventional fossil fuels'** was not always fully understood, and in **Question 5(b) 'water insecurity'** was also not always clearly understood. There was a tendency, perhaps more so than in **Question 4(b),** to rely on some well-worn case studies that in many cases did not 'fit' the question very well. These included the Aral Sea, and the Nile. Some answers that used these case studies tended to be answering a question about conflict over water supply rather than one about the impacts of water insecurity.

Overall, the impacts on human health were dealt with much more successfully than the impacts on economic development. In the case of human health, it was widely understood that a shortage of water could have serious implications for food supply, disease, life expectancy and ability to work. Some very good answers argued that, these issues could be overcome quite easily in many cases and that many NGOs worked in this field to improve water supply in locations such as the Sahel. These answers were much more of an assessment of impacts, rather than simpler answers which were more tales of doom and gloom. Economic development was often skimmed over and there were few answers that explained how a very poor water supply might hold a country or region back from development, and even fewer that argued that water supply can be improved in a variety of ways and that this might promote economic development.

Question 6
Superpower Geographies
This was a popular question, generally answered successfully. There were few issues it is worth mentioning up-front:

- The question is focussed on economic challenges, but as the command is 'to what extent' other factors and issues are relevant.
- Answering the question only with reference to the USA produces a narrow, case-study focussed answer.

- The USA and EU are very different: one a sovereign state and the other an economic and political grouping, and they should be considered as different.

The conceptual understanding of what is a superpower is generally good, and many candidates provided a definition as well as alluding to the **'pillars'** of superpower status. This, perhaps, allowed answers to relatively easily begin to consider factors beyond economic and so many answers were evaluative. Economic challenges were dealt with successfully by many candidates. A small number only considered the rise of China as a manufacturing and export powerhouse as the **'challenge'**: these answers proved narrow, and tended to quickly become more about the strengths and weaknesses of China, rather than threats to the USA/EU status. Stronger answers considered a number of threats which were internal rather than external. These included:

- Deindustrialisation and the subsequent global shift, and the social and economic challenges for some parts of the USA and EU.
- Debt, and the issue of economic crisis in 2007-2008 and subsequently.
- The ageing population of the EU and its costs, and / or healthcare costs in the USA.

In some cases, there was detailed knowledge of these economic challenges, and from the best a recognition that the issues were some the same e.g. ageing in the EU, versus social issues and inequality in the USA. Many answers, pleasingly moved on to argue that despite economic issues the military, cultural and political influence of the USA (in particular) was still very powerful and that economic challenges had had less on an impact on status that might be first thought. This style of answer does fit the command **'to what extent'** very well especially if it includes a convincing overall judgement.

Q7
Bridging the Development Gap
This question was less popular than **Question 6**, but there were many successful answers to it. There are few points worth mentioning initially:

- Answers did need to focus on emerging countries i.e. China, India and other BRICS / MINTs; a small number of answer focussed on developing countries such as Ghana or developed countries such as Japan.
- A case study of China – of which there were a few examples – produced a descriptive answer that failed the 'to what extent' test.
- There are two aspects to the question, people and environment: the latter tended to be dealt with in a more detailed way.

There were a few answers that, having considered the benefits and costs of rapid economic development for people moved on to consider environmental costs – and then environmental benefits: there are very few, if any, of the latter and in some answers the supposed environmental benefits were spurious. Nevertheless, there were many good answers that considered several different emerging countries and used examples to support their argument. These included deforestations in Brazil and Indonesia, various aspects pollution caused by urbanisation and industrialisation in India and China, as well as issues with working conditions and the growth of urban slums. Many answers were reasonably balanced and well supported. An overall conclusion was important in terms of the question command word, and this does need to be more than a summary of what has been previously said: a supported judgment of the balance of benefits was needed.

Summary

- Overall, there continues to be an improvement in both exam technique and the demonstrating of relevant knowledge and understanding, and higher order thinking skills in response to high-demand command words.
- Detailed knowledge of the key terminology used in the Specification is important, so that phrases such as 'unconventional fossil fuels' used in questions do not surprise some candidates.
- There are no marks for describing data stimulus figures: answers need to move toward providing reasons / explanations as soon as possible.
- Be aware that answers that focus on one major case study are likely to be presenting a large chuck of AO1 knowledge and understanding, whereas mark schemes in 15 and 20 mark questions are heavily weighted towards AO2 interpretation, analysis and evaluation.