Examiners' Report
Principal Examiner Feedback

November 2021

Pearson Edexcel GCSE B in

Geography (1GB0)

Paper 03 - People and Environment Issues:

Making Geographical Decisions

Introduction

The very small cohort of candidates who sat this examination performed well in light of the disruption to teaching and learning they will have experienced throughout 2020 and 2021. Some produced substantial and high-quality answers to the extended writing questions (3c, 3e and 4). They are to be congratulated for showing such resilience during a very difficult period of study.

In line with the previous small-entry November 2020 paper, there was evidence this year of generally good:
* time management (the large majority of candidates completed the entire paper, with most completing satisfactory responses for the extended writing questions 3c, 3e and 4)
* focus on question key words (with some exceptions, which are discussed below)
* use of the resource booklet.

Few candidates sat this examination. As a result, all conclusions reached about individual questions and paper-wide performance are tentative on account of the limited amount of available evidence.

1a
Full marks were awarded to candidates who identified two valid ways in which vegetation affects the movement of water through the hydrological cycle – such as canopy storage and subsequent evaporation or slowing of the movement of rainwater to the soil below.

1bi
The majority of candidates provided a correct answer, the most popular responses being 'taiga' or 'tundra'.

1bii
Most candidates answered this question correctly, thereby demonstrating their understanding of the concept of atmospheric regulation. Candidates gaining both marks were able to support their chosen effect with a process-based explanation, for example by explaining that carbon dioxide levels in the atmosphere are in part dependent on the intake of this gas by vegetation as part of the photosynthesis process. Candidates gaining only one mark typically stated two ways in which vegetation affects atmospheric composition but did not explain the process, for example in the 1-mark response: 'Vegetation helps add oxygen to the atmosphere. Also, vegetation helps to remove carbon dioxide.'

1ci
The majority of candidates completed the task accurately.

1cii
This question required the suggestion of a key evidence-based relationship between economic development and environmental exploitation. The majority of candidates provided a valid and developed statement of how a higher per capita GDP is associated with reduced forest cover. Some candidates quoted the maximum and minimum data in support of their statement; others offered a brief explanation: 'This is because economic growth is

linked with higher demand for fuel, including timber'. Either approach was acceptable for the reward of the second mark. A minority of candidates scoring 1 mark only stated Cambodia's data but did not provide corresponding information for a higher-income country.

2ai
The majority of the cohort correctly identified a valid adaptation shown in Figure 3, such as large green leaves or very tall trees.

2aii
This question required candidates to make use of the resource booklet and not rely on their own understanding. This was clearly signposted by the prefix: "State **one** piece of evidence from Figure 3". Virtually all candidates correctly identified one of the statements / themes shown in the mark scheme.

2aiii
The majority of candidates answered this question correctly.

2b
This 4-mark question invited candidates to apply their own understanding of the concept of biodiversity to the information provided by one or both of the relevant figures in order to create a blend of source evidence and their own knowledge. Most were able to do so, with common themes including: the lack of recent sightings of the tiger as evidence of its possible extinction and thus species loss; the loss of selected tree species meaning possible habitat loss for other forest flora and fauna, and thus potential species loss. Candidates who scored half marks only typically paid insufficient attention to the word 'biodiversity'. They described the issues in Figure 3 and/or Figure 4, such as the lack of recent tiger sightings. However, there was no thoughtful development of the implications of this for biodiversity data. The loss of species remained implied and not explicit.

2c
Few candidates gained both marks because of failure to explain a link with the concept of sustainability (in the form of sustainable forest management). Candidates reproduced information from the resource booklet but added nothing additionally drawn from their own knowledge and understanding. In essence, they answered a different question to the one asked, which might have read: 'Identify the benefits of ecotourism in the Cardamom Mountains'.

This question and its accompanying mark scheme may serve as a useful resource for future teaching and learning, with careful attention paid both to the command term and the phrasing of the question.

3ai
Most candidates answered this question correctly. With only 1 mark available, credit was given for any of a number of hallmarks of fossil fuel which might be included in a more in-

depth explanation of the term. The mark scheme offers a wide selection of possible creditable phrases.

3aii

Some candidates answered this question incorrectly. They lacked the necessary quantitative skills required to complete a relatively simple operation. The data were provided for immediate use (candidates did not need to extract the numbers from Figure 6), yet even so the task remained too challenging for many. This was indicative of under-developed key mathematical skills.

3aiv

Many candidates answered this question correctly and some gained 2 marks. They correctly established an explanatory link between the idea of biofuels and the concept of re-cycling, re-use and/or re-growth.

3bi

Many candidates answered this question correctly and some gained 2 marks. They correctly focused on the evidence presented in Figure 7 (rather than using their own knowledge) and were able to select the information which best explained why effort is made to process wood into charcoal. A minority used the information carelessly, stating that charcoal is 'cheaper to buy than wood' whereas in fact the resource explains that charcoal is cheaper and lighter *to transport*, hence its popularity with homes and businesses.

3bii

The majority of candidates answered this question correctly.

3biii

Some questions on this examination paper require candidates to establish logical connections between two or more separate figures. All available credit is therefore linked with Assessment Objective 3. In this question, the explanation was meant to derive from a synthesis of information from Figures 7 and 8. On this occasion, most candidates were unable to access the full mark range available, mainly on account of their lack of attention to the phrase 'worsening environmental problems'. The story which the resource booklet tells us is that existing environmental pressures in particular places may only worsen further as demographic pressure grows. However, only one candidate scored full marks by creating logical arguments which linked population and economic growth data with other relevant information about (1) forest loss in national parks surrounding urban areas and (2) air quality in cities.

The mark scheme shows what was required for the award of full marks. This question and its accompanying mark scheme may serve as a useful resource for future teaching and learning, with careful attention paid both to the question construction (the requirement to synthesise information from two sources) and the phrasing of the question ('worsening').

3c

The majority of candidates reached the middle or upper mark band, having established a clear focus on the continued use of biofuels. As might be expected, candidates who scored approximately half marks were able to extract and describe a range of reasons from Figures 8 and 9 but offered little in the way of assessment using evaluative language.

In contrast, candidates reaching the upper end of the mark range took a more measured view on the development context of Cambodia which is illustrated by Figure 8 and Figure 9. A few excellent answers assessed the relative importance of the different reasons provided. Some argued that in a relatively low-income developing country, many people may opt for whatever energy source is cheapest, irrespective of its environmental footprint. Others weighed-up the relative importance of governance in a more critical way.

3d

The key idea here is that biofuels can play a role in the energy mix which helps to guarantee a continuous supply of energy for a country's population. Most candidates were able to articulate this understanding, usefully expanded on in one of several ways. Most commonly, the perceived ease and/or scale of biofuel development was seized upon, especially in large countries where precipitation and temperature may be suited to afforestation. Also, some candidates grasped the need to boost domestic supplies in case of geopolitical conflict with external energy suppliers.

3e

In common with question 3c, there was a clear difference in the quality of assessment and evaluative language provided by candidates at the upper end of the mark range and those closer to the middle of the range. Because the question made use of qualitative data, candidates needed to be more selective in their choice of which material to extract and re-purpose as part of their answer. Candidates who copied out most of the text in Figure 10 yet failed to thoughtfully assess and 'add value' to the information were self-limiting in their approach.

In contrast, stronger responses weighed up the relative importance of the work done by different players. Several very good answers arrived at a final assessment that the work done by schools could ultimately be most successful, irrespective of its current small scale, because of the way it will help re-shape the environmental thinking of the next generation of citizens and politicians. Others took the evidence-based view that the ongoing challenges created by organised crime means that all attempts at protection may ultimately be lacking in success.

Q4

As was the case in November 2020, the low entry for this examination makes it hard to generalise about candidate performance on this question. Once again, around half of candidates only provided a very short answer. Of the ten or so substantial answers that were produced, around half chose Option 1 and most produced a short, basic account advocating more replanting schemes in areas which have been deforested for firewood and charcoal. In other words, they opted for a relatively simple 'replacement' strategy. Their

arguments were often narrow and did not take into consideration possible challenges or obstacles to success.

In contrast, a handful of stronger arguments based on Option 2 were produced by candidates nearer the top end of the mark range. These were more maturely focused on political issues and the need for protection of existing forest resources as an essential pre-requisite for improved environmental governance. The best answers were produced by candidates apparently well-versed in the assessment criteria for the task. They referenced the resource booklet ('Figure 5 showed us that….), applied their own specialist terms, concepts and understanding to the task (in line with AO2 requirements) and also maintained a critical and reflective stance throughout their answer (in line with AO3 requirements).

Paper summary

Moving forwards, the following points may help guide future teaching and learning.

- It is important that candidates pay full attention to key words, terms and phrases used by questions, such as 'worsening' (Q 3biii) and 'sustainable' (Q2c). It is highly recommended that question 3biii and its accompanying mark scheme from this year's paper are used to support future teaching and learning.
- It is vital that candidates recognise which questions are asking them to make use of source material in the answer space - and which are not. AO3- targeted short-answer questions require material to be selectively extracted from sources. These questions will always use a phrase such as 'Study the figure' or 'Using the figure'.
- Candidates require clear guidance on how to answer the 2-mark questions which typically ask them to 'explain one way' or 'explain one reason'. It is highly recommended that question 1bii and its accompanying mark scheme from this year's paper are used to support future teaching and learning.
- Candidates require clear guidance on how to answer the 8-mark and 12-mark questions in a way which is fully aligned with the test assessment objectives. Question 4 requires them to blend their own prior knowledge and understanding with evidence gleaned from the resource booklet. The 8-mark questions require analysis and interpretation of resource booklet evidence only.