Please check the examination details bel	ow before ente	ering your candidate information
Candidate surname		Other names
Centre Number Candidate No	umber	
Pearson Edexcel Inter	nation	nal GCSE (9-1)
<b>Time</b> 1 hour 45 minutes	Paper reference	4GE1/02R
Geography PAPER 2: Human geograph	phy	•
You must have: Resource Booklet (enclosed), calculat	or	Total Marks

#### **Instructions**

- Use **black** ink or ball-point pen.
- **Fill in the boxes** at the top of this page with your name, centre number and candidate number.
- In Section A answer one question from Questions 1, 2 and 3.
   In Section B answer one question from Questions 4, 5 and 6.
   In Section C answer one question from Questions 7, 8 and 9.
- Answer the questions in the spaces provided
   there may be more space than you need.
- Calculators may be used.
- Where asked you must show all your working out with your answer clearly identified at the end of your solution.

### Information

- The total mark for this paper is 72.
- The marks for **each** question are shown in brackets
  - use this as a guide as to how much time to spend on each question.

## **Advice**

- Read each question carefully before you start to answer it.
- Check your answers if you have time at the end.

Turn over ▶



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#### **SECTION A**

## Answer ONE question from this section.

Some questions must be answered with a cross in a box ⋈. If you change your mind about an answer, put a line through the box  $\boxtimes$  and then mark your new answer with a cross  $\boxtimes$ . If you answer Question 1 put a cross in the box  $\square$ . **Economic activity and energy** (a) (i) Identify **one** disadvantage of using natural gas as a source of energy. (1) **A** There is an infinite supply. X **B** It is easy to export. **C** It is a renewable energy source. **D** Burning it releases CO<sub>2</sub>. (ii) Define the term **non-renewable energy**. (1) (b) Identify **one** way to make a factory more sustainable. (1) X A Increase the factory size. X Increase the number of vehicles used to transport goods. X **C** Use more packaging for goods produced.

**D** Use more renewable energy.



(c) (i) Study Figure 1a in the Resource Booklet.	
Suggest <b>one</b> reason why this might be considered primary sector employment.	
Sector employment.	(2)
(ii) Name <b>one</b> raw material produced in the primary sector.	
	(1)
(d) Explain <b>two</b> factors that affect global energy production.	(4)



	(e) Study Figure 1b in the Resource Booklet.	
	Explain the relationship shown between population growth and food supply.	(3)
	(f) Explain <b>two</b> factors that affect the location of secondary sector industries.	
		(4)
1		(4)
1		(4)
		(4)
		(4)
		(4)





Analyse the reasons for the differences in the percenthe tertiary sector.	tage of people employed in
· · · · <b>/</b> · · · · · ·	(8)



Rural environments	
(a) (i) Identify <b>one</b> characteristic of the savanna biome.	(1)
■ A daily rainfall	
■ B grassland	
C dense forest	
☑ D permafrost	
(ii) Define the term <b>natural ecosystem</b> .	(1)
(b) Identify the meaning of the term <b>genetically-modified (GM) crops</b> .	(1)
■ A Plants with root systems that have been changed to increase size.	
■ B Plants with DNA that have been changed to increase yield.	
C Animals with DNA that have been changed to increase size.	
■ D Livestock that have greater resistance to disease.	
(c) Study Figure 2a in the Resource Booklet.	
Suggest how this natural ecosystem might provide services.	(2)



d) State <b>one</b> type of land use found in a rural environment.	(1)
e) Explain how NGOs have managed <b>two</b> challenges in rural environments in developing or emerging countries.	(4)
f) Study Figure 2b in the Resource Booklet.	
Suggest <b>one</b> reason for the trends shown.	(3)



(g) Explain <b>one</b> strategy used to improve health and <b>one</b> strategy used to improve housing in rural areas in developing or emerging countries.	(4)
Health	
Housing	



Analyse the factors that	have caused rural	change in deve	loped countries.	
, Julian in the factors tride				(8)



(Total for Question 2 = 25 marks)

					If you answer Question 3 put a cross in the box $\ oxdot$ .	
3	Url	ban	envi	ror	nments	
	(a)	(i)	Iden	tify	one advantage of building on a greenfield site.	(1)
			×	A	It is more expensive to build on.	
			×	В	It is cheaper to build on.	
			×	C	Infrastructure will need to be installed.	
			X		Wildlife and habitats are lost.	
		(ii)	State	e OI	<b>ne</b> factor affecting the rate of urbanisation.	(1)
	(b)	Ide	_		e minimum population of a megacity.  1 million people	(1)
			<b>■</b> B		5 million people	
		D	<b>3</b> (	-	10 million people	
		D		)	20 million people	
	(c)	Stu	ıdy Fi	gur	re 3a in the Resource Booklet.	
					e piece of evidence that shows this urban area may have experienced nisation.	(2)
				•••••		



(d) Define the term <b>informal employment</b> .	(1)
(e) Explain <b>two</b> factors that have contributed to counter-urbanisation.	(4)
(f) Study Figure 3b in the Resource Booklet.	
Suggest <b>one</b> reason for the trend shown.	(3)



(g) Explain <b>two</b> strategies designed to improve quality of life in urban areas in a developed country.	(4)
1	
2	
(h) Study Figure 3c in the Resource Booklet.	
Analyse the social challenges facing urban areas in developing or emerging countries.	
emerging countries.	(8)



(Total for Question 3 = 25 marks)



#### **SECTION B**

#### **Geographical enquiry**

Answer ONE question only from this section.

Some questions must be answered with a cross in a box  $\boxtimes$ . If you change your mind about an answer, put a line through the box  $\boxtimes$  and then mark your new answer with a cross  $\boxtimes$ .

If you answer Question 4 put a cross in the box  $\square$ .

4 Investigating economic activity and energy

Study Figures 4a and 4b in the Resource Booklet. These show extracts from a student's data analysis, conclusions and evaluations about the changing use of energy.

The aim of the student's investigation was to investigate local attitudes towards the development of a new solar energy farm.

The student carried out a questionnaire, environmental quality survey and took photographs, which the student annotated, and collected newspaper articles including photos of the area.

(a) Identify (	one source of secondar	y data used b	y the student.
----------------	------------------------	---------------	----------------

(1)

(b) Identify **one** advantage of using a questionnaire as a data collection method.

(1)



(c) Suggest <b>one</b> way the reliability of the data could have been affected.	(2)
(d) Study Figures 4a and 4b in the Resource Booklet. Evaluate the student's data analysis and conclusions.	(8)



(Total for Question 4 = 12 marks)	

## If you answer Question 5 put a cross in the box $\ oxdots$ .

## 5 Investigating rural environments

Study Figures 5a and 5b in the Resource Booklet. These show extracts from a student's data analysis, conclusions and evaluations about the changing use of rural environments.

The aim of the student's investigation was to investigate local attitudes towards the development of a new visitor centre in The Cévennes National Park, France.

The student carried out a questionnaire, environmental quality survey and took photographs, which the student annotated, and collected newspaper articles including photos of the area.

(a)	Identify <b>one</b> source of secondary data used by the student.	

(1)

(b) Identify <b>one</b> advantage of using a questionnaire as a data collection method.	
---	--

(1)

(c)	Suggest	one way th	e reliability o	f the data	could have	been affected
-----	---------	------------	-----------------	------------	------------	---------------

(2)

>	
}	
}	



(d) Study Figures 5a and 5b in the Resource Booklet.	
Evaluate the student's data analysis and conclusions.	(8)



(Total for Question 5 = 12 marks)

## If you answer Question 6 put a cross in the box $\square$ .

# 6 Investigating urban environments

Study Figures 6a and 6b in the Resource Booklet. These show extracts from a student's data analysis, conclusions and evaluations about the changing use of urban environments.

The aim of the student's investigation was to investigate local attitudes towards the development of a new retail building in Chicago, USA.

The student carried out a questionnaire, environmental quality survey and took photographs, which they annotated, and collected newspaper articles including photos of the area.

(a) Identify <b>one</b> source of secondary data used by the student.	(1)
(b) Identify <b>one</b> advantage of using a questionnaire as a data collection method.	(1)
(c) Suggest <b>one</b> way the reliability of the data could have been affected.	(2)



(d) Study Figures 6a and 6b in the Resource Booklet.	
Evaluate the student's data analysis and conclusions.	(0)
	(8)



ı	
	(Total for Question 6 = 12 marks)

**TOTAL FOR SECTION B = 12 MARKS** 

## **SECTION C**

## **Global Issues**

Answer ONE question only from this section.

	31130	. C.I,	put a line through the box 🔀 and then mark your new answer	
			If you answer Question 7 put a cross in the box $ lacktriangledown$	•
7	Fragile	env	rironments and climate change	
	(a) Ider	ntify	the correct word to complete the sentence below.	
	Clin	nate	change is the long-term changes in conditions.	(4)
				(1)
	$\times$	A	atmospheric	
	$\times$	В	aerobic	
	×	C	evaporation	
	×	D	forest	
	(b) Ider	ntify	one environmental impact of deforestation.	(4)
				(1)
	$\times$	A	increased exports of timber	
	$\boxtimes$	В	loss of species diversity	
	$\times$	C	local communities forced to move	
	$\times$	D	extra space for cattle ranching	
	(c) Stat	e oı	<b>ne</b> cause of the enhanced greenhouse effect.	(1)
				(1)



	(d) (i)	Study Figure 7a in the Resource Booklet.	
		Identify the countries labelled in Figure 7a with the highest net percentage decrease and lowest net percentage decrease in forest cover.	(2)
		Highest net percentage (%) decrease	
		Lowest net percentage (%) decrease	
1	(ii)	Suggest <b>two</b> reasons for this pattern of change.	(4)
I			
2			
	(e) Exp	olain <b>two</b> strategies to manage water shortages in fragile environments.	(4)
1			
2			



(f)	Sti	udy Figure 7b in the Resource Booklet.	
(1)		Calculate the mean amount of money spent on responding to climate change.	
		You must show all your workings in the space below.	
		Give your answer to one decimal place.	(2)
			(2)
		\$	
	(ii)	Describe the trends shown in Figure 7b.	(0)
			(2)



(g) Study Figure 7c in the Resource Booklet.	
Assess the potential impacts of desertification.	(4)
	(6)



economic impact		e will be greater in the fu	tare than the
	I 7c from the Resource Book support your answer.	let, and your own knowle	
			(12)



(Total for Overtion 7 – 25 months)
(Total for Question 7 = 35 marks)

	If you answer Question 8 put a cross in the box $ \square $ .	
Globalisatio	n and migration	
(a) (i) Identi	fy the correct word to complete the sentence below.	
The W	orld Bank provides low cost loans in developing countries to try and	
reduc	e	(1)
⊠ A	life expectancy	
⊠ B	income	
⊠ C	poverty	
⊠ D	exports	
(ii) Identi	exports  fy <b>one</b> disadvantage of transnational corporations (TNCs) for countries.	
(ii) Identi	fy <b>one</b> disadvantage of transnational corporations (TNCs) for	(1)
(ii) Identi host c	fy <b>one</b> disadvantage of transnational corporations (TNCs) for	(1)
(ii) Identi host c	fy <b>one</b> disadvantage of transnational corporations (TNCs) for countries.  attract other businesses	(1)
(ii) Identi host c	fy <b>one</b> disadvantage of transnational corporations (TNCs) for ountries.  attract other businesses provide job opportunities for residents	(1)
(ii) Identi host c	fy <b>one</b> disadvantage of transnational corporations (TNCs) for countries.  attract other businesses provide job opportunities for residents potential for exploitation of local workers	(1)
(ii) Identi host c	fy <b>one</b> disadvantage of transnational corporations (TNCs) for countries.  attract other businesses provide job opportunities for residents potential for exploitation of local workers	(1)



	(ii) Study Figure 8a in the Resource Booklet.	
	Identify the countries labelled in Figure 8a with the highest and lowest number of international migrants.	(2)
	Highest	,
	Lowest	
1	(iii) Suggest <b>two</b> possible reasons for the pattern shown in Figure 8a.	(4)
1		
2		
1	c) Explain <b>two</b> ways geopolitical relationships can affect trade.	(4)
2		



(d) Stu	ıdy Figure 8b in the Resource Booklet.		
(i)	Calculate the percentage change for the number of international tourist arrivals between 1990 and 2018.		
	You must show all your workings in the space below.		
	Give your answer to one decimal place.	(2)	
(ii)	Describe the trend in the number of tourists shown in Figure 8b.	(2)	%

(e) Study Figure 8c in the Resource Booklet.		
Assess the impacts of the growth of global tourism.	(6)	
	(0)	

	inable tourism is impossible to achieve because of the large nu	ımbers	
of tou	of tourists.'		
Use Figures 8b and 8c from the Resource Booklet, and your own knowledge and			
understanding to support your answer.		(12)	
		(12)	



(Total for Question 8 = 35 marks)



	If you answer Question 9 put a cross in the box $\ oxdot$ .				
9	Development and human welfare				
	(a) (i) Ide	entif	y the correct word to complete the sentence below.		
	The Human Development Index is created using GNP per capita, years of education and				
				(1)	
	X	A	life expectancy		
	$\boxtimes$	В	mortality rate		
	$\boxtimes$	C	fertility rate		
	$\bowtie$	D	number of doctors per 1,000 people		
	(ii) Identify <b>one</b> type of demographic data.		(4)		
				(1)	
	X	A	Gross National Product (GNP)		
	X	В	Ecological footprint		
	X	C	Corruption Index		
	X	D	Infant mortality rate		
	(b) Identi	fy <b>or</b>	e international organisation that tries to reduce the development gap.		



(1)

<ul><li>(c) (i) Study Figure 9a in the Resource Booklet.</li><li>Identify the countries labelled in Figure 9a with the highest and lowest I of extreme poverty.</li><li>Highest</li></ul>	evels (2)
Lowest	
(ii) Suggest <b>two</b> possible reasons for the pattern shown in Figure 9a.	(4)
2	





	(4)
Advantage	
Disadvantage	
Study Figure 9b in the Resource Booklet.	
(i) Calculate the percentage decrease in the mortality rate in Bolivia fro 1990 to 2018.	om
You must show all your workings in the space below.	
Give your answer to one decimal place.	(2)
	(2)
(ii) Suggest what this trend might mean for the country's development	t. (2)
	(-)



(f) Study Figure 9c in the Resource Booklet.				
Assess the	factors that affect une	even development	within countries.	(6)
				(6)



'The most effective way to address inequ	ality within countries is to reduce poverty.	
Use Figures 9a and 9c from the Resource Booklet, and your own knowledge and understanding to support your answer.		
	(1	2)



(Total for Question 9 = 35 marks)

TOTAL FOR SECTION C = 35 MARKS
TOTAL FOR PAPER = 72 MARKS



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# Pearson Edexcel International GCSE (9-1)

Time 1 hour 45 minutes

Paper reference

4GE1/02R

**Geography** 

**PAPER 2: Human geography** 

**Resource Booklet** 

Do not return this Booklet with the question paper.

Turn over ▶







Figure 1a

Primary sector employment in Vietnam



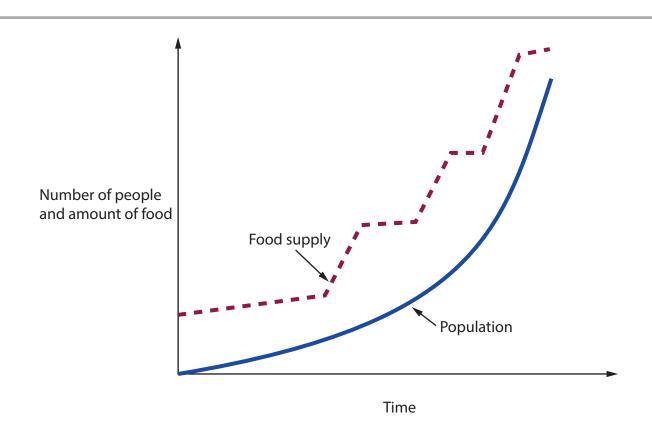
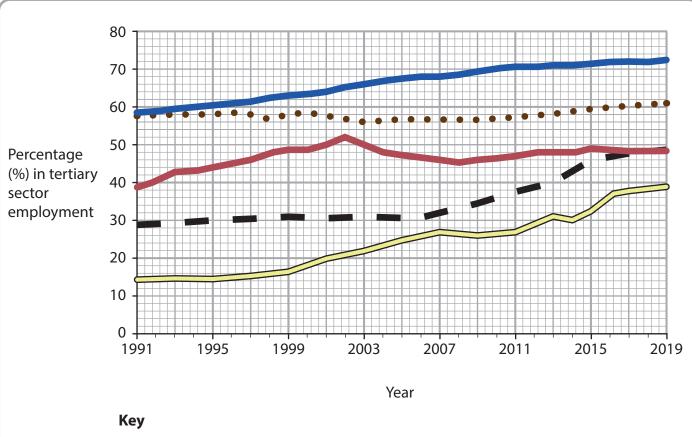


Figure 1b

Boserup's approach to population growth and food supply



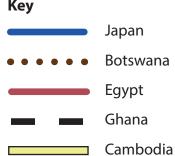


Figure 1c

Percentage (%) in tertiary sector employment in selected countries, 1991–2019



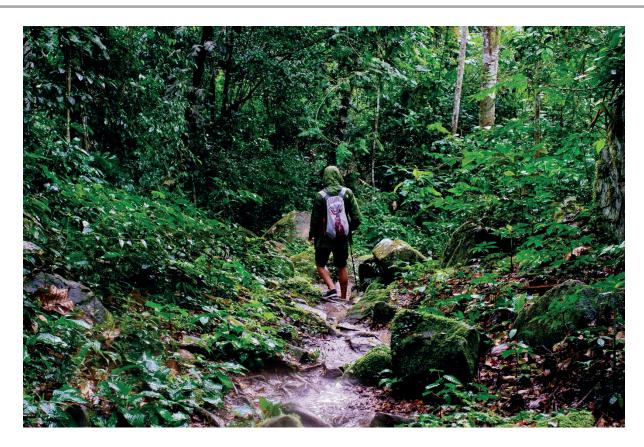


Figure 2a
A rainforest trail in Peru

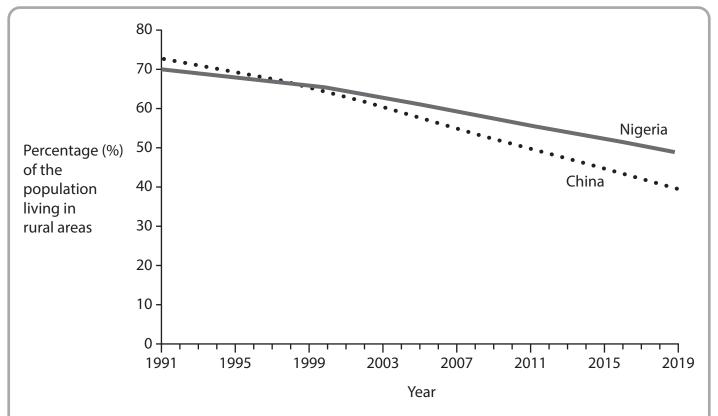


Figure 2b

Percentage (%) of the population living in rural areas

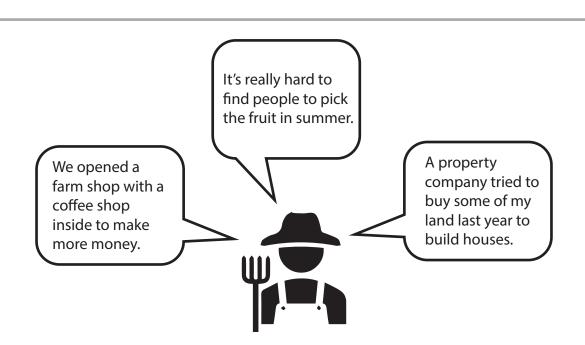


Figure 2c
Views from a farmer in the United States



Figure 3a An urban area in São Paulo, Brazil



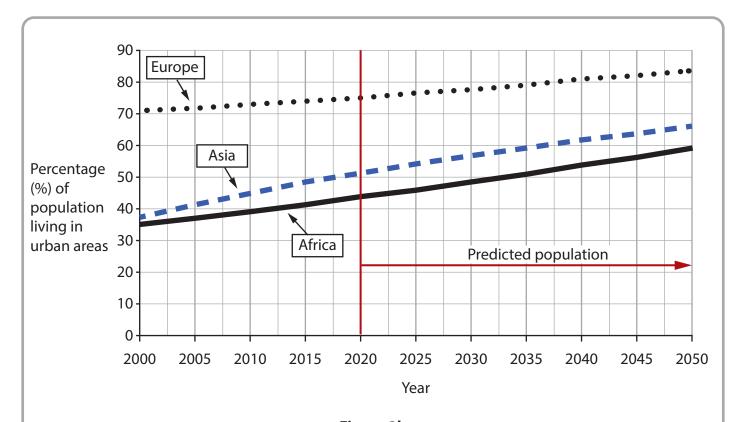


Figure 3b

Percentage (%) of population, and predicted population, living in urban areas for selected regions, 2000–2050

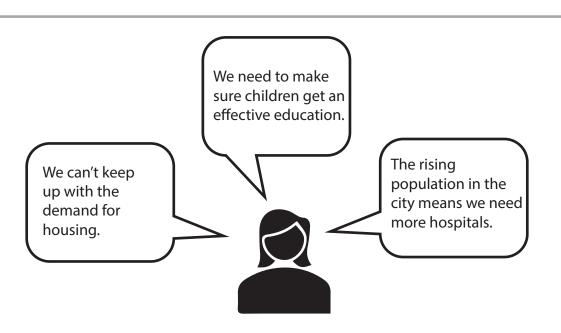


Figure 3c

Comments from a city official in Dhaka, Bangladesh



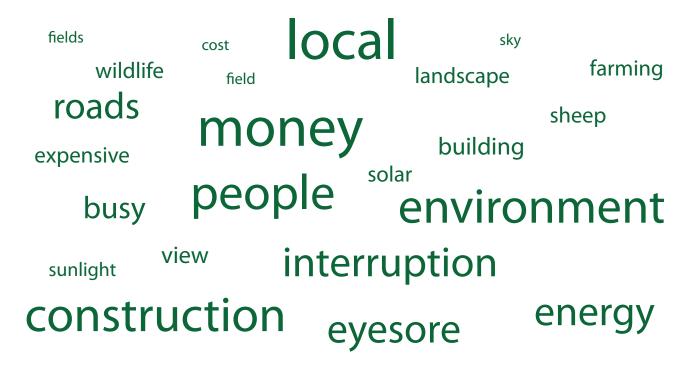


Figure 4a

Word cloud from questionnaire responses about views on a new solar energy farm

Conclusions					
1	I found that there were a lot of views about the new solar energy farm.				
The questionnaire showed that most of the local people are against to new development.					
The photographs show that the solar energy farm is relatively small compared to the number of fields that are currently used for farming					
Evaluations					
I think my results were very reliable but if I had more time I would asked more people to complete my questionnaire.					
5	I was able to use newspaper articles about other new solar energy farms to consider if the views from local people were similar.				
6	The photographs were good to remind me of the place I visited on fieldwork, but I didn't know how to use them well to present my data.				

Figure 4b

An extract from a student's written conclusion and evaluation

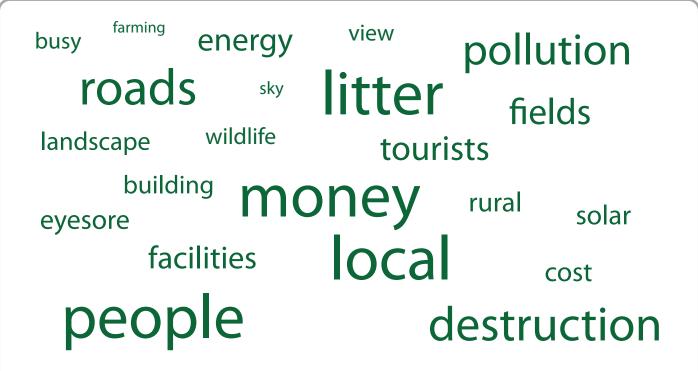


Figure 5a

Word cloud from questionnaire responses about the new visitor centre

Conclusions					
1	I found that there were a lot of views about the new visitor centre.				
2	The questionnaire showed that most of the local people are against the new visitor centre.				
The photographs show that the visitor centre is a small feature in the landscape compared to the number of fields that are currently used farming.					
Evaluations					
I think my results were very reliable but if I had more time I woul asked more people to complete my questionnaire.					
5	I was able to use newspaper articles about other new tourist facilities to consider if the views from local people were similar.				
The photographs were good to remind me of the place I visited on fieldwork, but I didn't know how to use them well to present my data.					

Figure 5b

An extract from a student's written conclusion and evaluation



urban litter rent change shops eyesore cost money tourists coffee busy local local new landscape facilities

# construction

roads people view pollution

interruption expensive redevelopment

building destruction

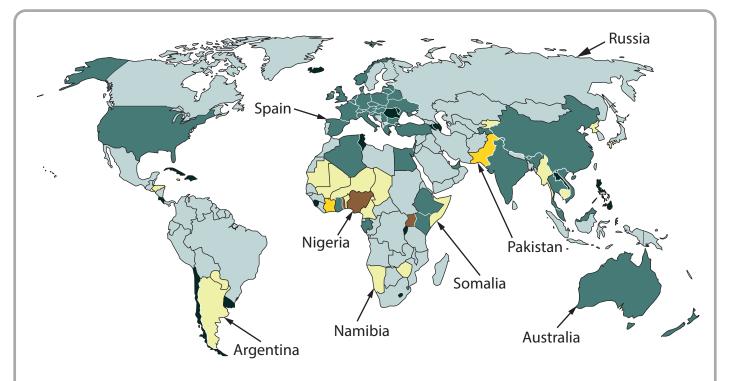
Figure 6a
Word cloud from questionnaire responses about the new retail building

Conclusions					
1	I found that there were a lot of views about the new development.				
2	The questionnaire showed that most of the local people are against the redevelopment of the building.				
The photographs show that the new retail building is quite a big feature the local neighbourhood, compared to the other small businesses around it.					
Evaluations					
4	I think my results were very reliable but if I had more time I would have asked more people to complete my questionnaire.				
5	I was able to use newspaper articles about redeveloped factories to consider if the views from local people were similar.				
6	The photographs were good to remind me of the place I visited on fieldwork, but I didn't know how to use them well to present my data.				

Figure 6b

An extract from a student's written conclusion and evaluation

Turn over ▶



**Key:** Net percentage (%) change in forest cover

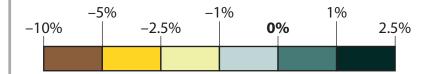


Figure 7a

Annual net percentage (%) change in forest cover, 2019–2020



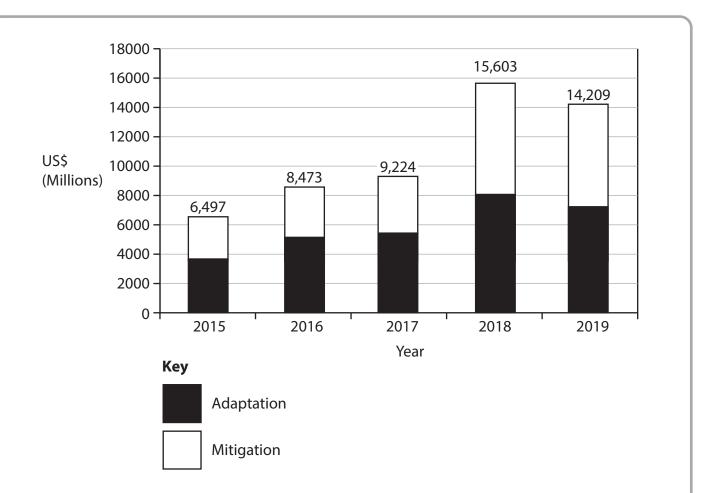


Figure 7b

Money spent by the World Bank on responding to climate change, 2015–2019

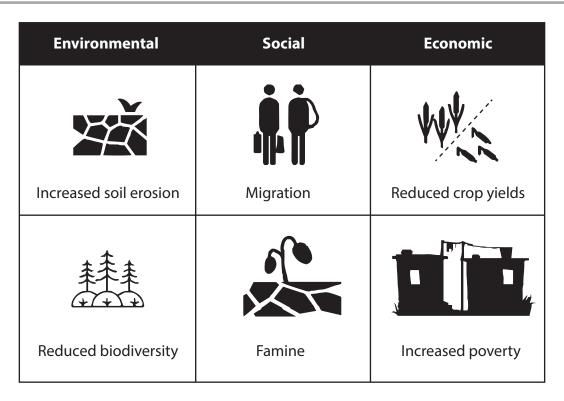
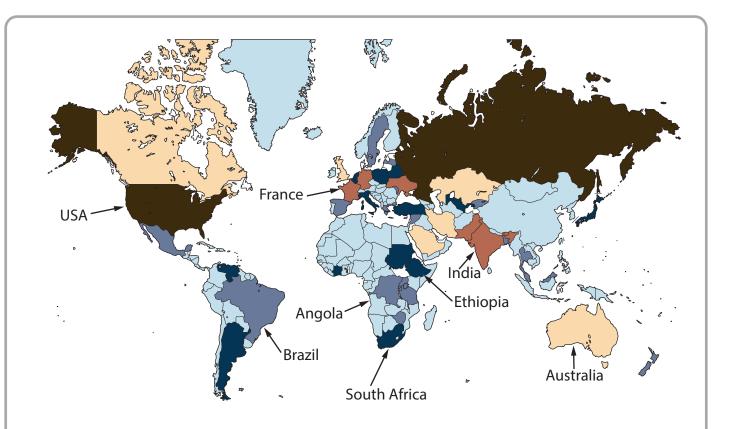


Figure 7c
Selected impacts of desertification





**Key:** Number of international migrants

10 million or over

5 million to less than 10 million

2.5 million to less than 5 million

1 million to less than 2.5 million

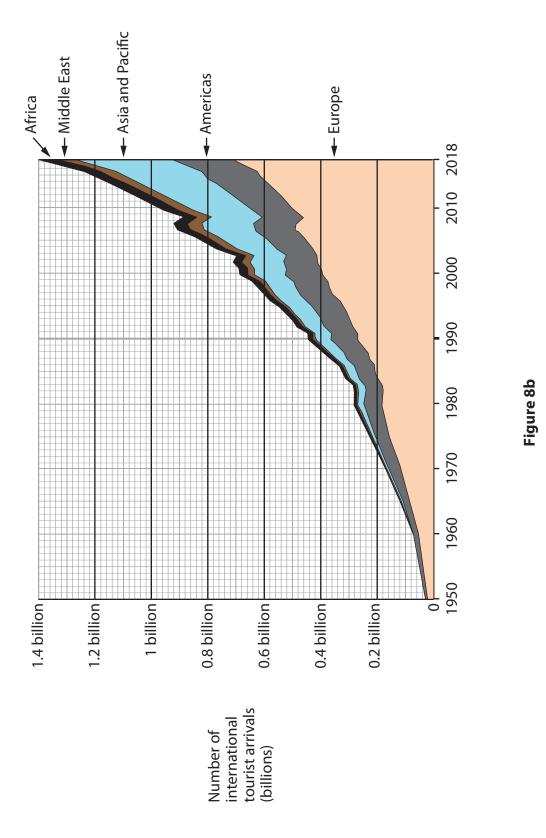
500,000 to less than 1 million

100,000 to less than 500,000

No data

Figure 8a

The number of international migrants, 2019



Number of international tourist arrivals, 1950-2018

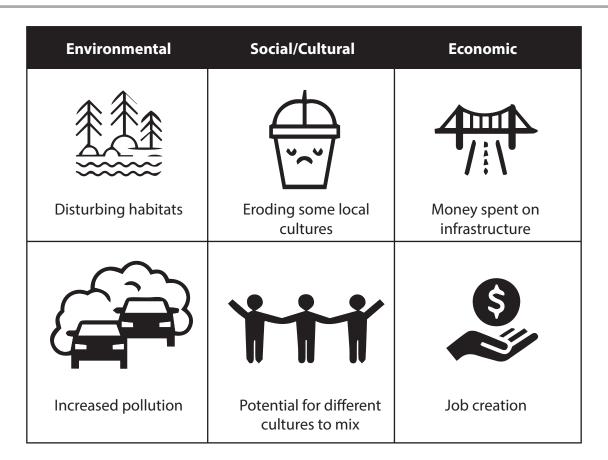
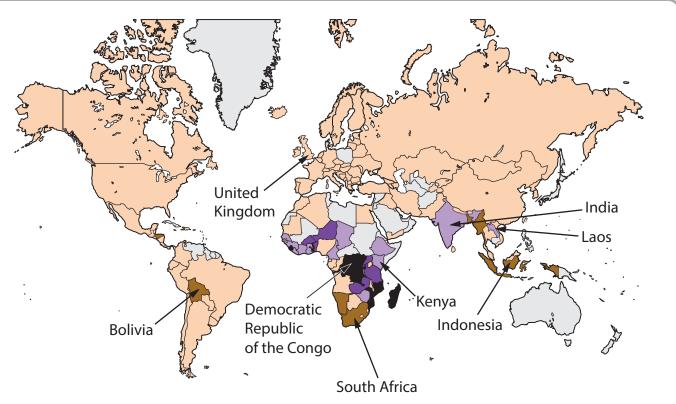


Figure 8c
Selected impacts of the growth of global tourism





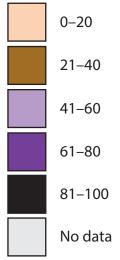


Figure 9a

Percentage (%) of the population living in extreme poverty (2017)

Extreme poverty is defined as living with per capita household consumption below \$1.9 per day

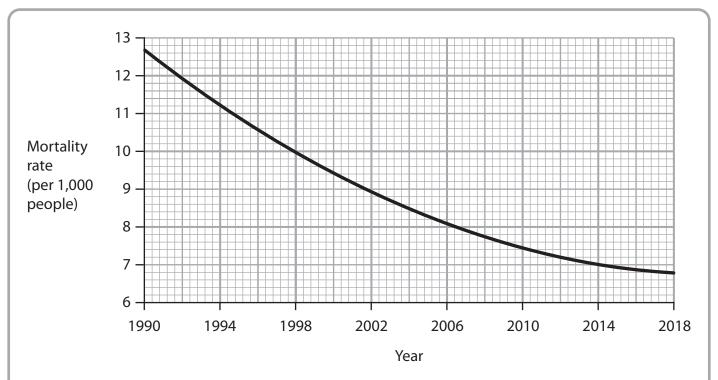


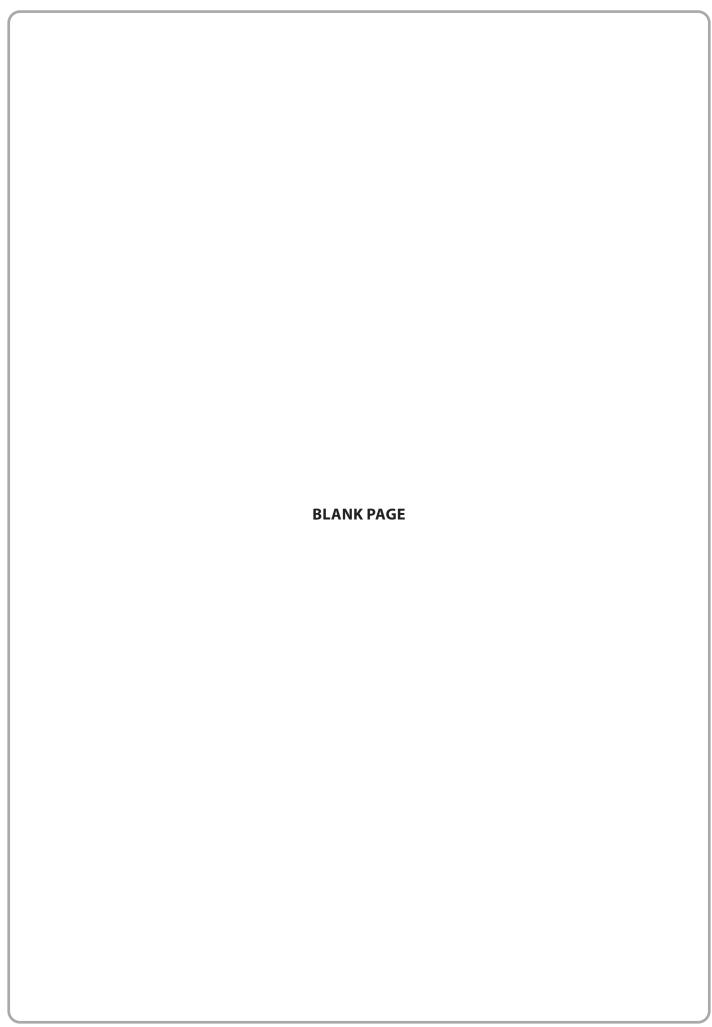
Figure 9b

Mortality rate in Bolivia, 1990–2018

Environmental	Social	Economic
Landscape features	Housing quality	Availability of employment
Climate	Access to services	Efficient transport systems

Figure 9c
Selected factors that affect uneven development within countries





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### **Acknowledegments**

Pearson Education Ltd. gratefully acknowledges all the following sources used in the preparation of this paper:

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locations=JP-GH-KH-BW-EG

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Figure 7a: Source adapted from: https://ourworldindata.org/grapher/forest-area-net-change-rate

Figure 7b: Source adapted from: http://pubdocs.worldbank.org/en/592361596711415924/World-Bank-

FY19-CFData-0803.pdf

Figure 8a: Source adapted from: https://www.un.org/en/development/desa/population/migration/data/estimates2/estimatesmaps.asp?0t0

Figure 8b: Source adapted from: https://ourworldindata.org/tourism

Figure 9a: Source adapted from: https://ourworldindata.org/extreme-poverty

Figure~9b: Source~adapted~from:~https://data.worldbank.org/indicator/SP.DYN.CDRT.

IN?locations=BO&start=1990

