# Year 11 Revision Booklet

# Paper 2: Challenges in the human environment









- Urban issues and challenges Question 1
- The changing economic world Question 2
  - The challenge of resource management Question 3
    - Food Question 4
    - IGNORE QUESTIONS 5 AND 6!

# <u>Urban Issues and Challenges - Q1</u>

A growing percentage of	the world's population lives in urban areas
What is urbanisation?	
	as uphan nanulation in developed (UTC) and developing (UTC)
Describe the changes to the countries.	ne urban population in developed (HIC) and developing (LIC)
	4000 <b>Key</b>
	Developing countries  Developed countries
	(millions)
	Population (millions)
	1000-
	0 1950 1960 1970 1980 1990 2000 2010 2020
	Figure 1 Urban population in developed and developing countries.
	<del></del>
Why is urbanisation happe	ning at a faster rate in LICs and a slower rate in HICs?
Outline the factors below	to explain how they affect the rate of urbanisation:
	Migration (push and pull factors):
CAN STORY	Natural increase:

What is a megacity?		
What is rural-urban migration?		
Rogota Lagoe Kinsh Lima Luanda  Key  Mexico City  Bogota Lagoe  Kinsh Luanda  Rio de Janeiro São Paulo  Megacities, 2014  Additional megacities by 2030	Chengquille Chengdu Beijing Tierrin- Toran Scott-Og Karachi Dehi Ahmeuabasa Shangh Hyderabad Kokata Hyderabad Kokata Bringalore Ho Chi Mi Chennai Qungkok Masa Jakarta	n la

## Case study of a major city in a NEE: Rio de Janeiro, Brazil

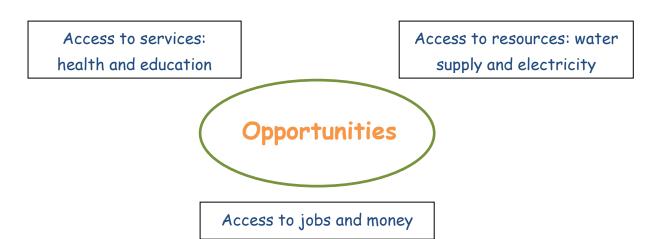
Complete the table to show why Rio de Janeiro is important regionally, nationally and internationally:

Regionally	Nationally	Internationally



Vhy is Rio a growing city? (Think about natural increase and migration).		
omplete the mind man below to show the social and economic apportunities for people living		

Complete the mind map below to show the social and economic opportunities for people living in Rio:



What are the challenges created by urban growth in Rio? Complete the table with brief notes to show these challenges:

Squatter settlements	Clean water, sewage and electricity	Health and education	Unemployment and crime	Waste, pollution and traffic congestion

An example of how urban p	lanning is improving	the quality of life for the urban poor: Favela
<u>Bairro Project</u> , <u>Rio de Jane</u> List 5 improvements that w		
the Favela Bairro Project:		
•		
•		
What were the successes o	and failures of the	Favela Bairro Project?
Successe	S	Failures
Urban change in cities in environmental opportunitie		variety of social, economic and
Key People/km²	Describe the po	opulation distribution in the UK. Include names
>150 10-149 <10 Major cities	•	mpass points in your answer. Include most and
NORTHERN		
WALES		
0 100 200		

	major city in the Ul y Manchester is a m he wider world:	ajor city, both		
•				
_	n impacted on the gr er and where the inf		· ·	•
Outline the oppor	tunities created by	urban change in Mo	anchester in the ta	ble below:  Urban greening
	entertainment		systems	2. 2 m. g. 30g

Complete annotations below to explain the challenges created by urban change in Manchester.

Environmental dereliction, building on brownfield and greenfield sites, waste disposal Social and economic: deprivation, inequalities in housing, education, health and employment







Impact of urban sprawl on the rural-urban fringe and the growth of commuter settlements

#### An example of an urban regeneration project: Salford Quays

Why did the area need regeneration? Use the images below to help you:





Social improvements	Economic improvements	Environmental improvements
_		
rban sustainability requires	management of resources and	l transport
/hat is the definition of 'sust		•
dentify 5 features of a susta	iinable city:	
•	<del> </del>	
•		
•		
•		
hoose 2 from your list above	and explain how this character	stic makes a city sustainable:
•		
•		

How urban transpor	<u>'t strategies are</u>	used to re	duce traf	fic congestion: Mo	<u>inchester</u>
Give 2 reasons why	there are more c	ars on the	roads nov	v:	
Outline what Manch				T	
Pedestrianisation	Metrolink	Metros	shuttle	Bike hire	Electric bollards
Identify the advant traffic:	tages and disadva	untages of	the schem	nes used by Manch	nester to reduce
Advanta	ages/successes			Disadvantages	/failures

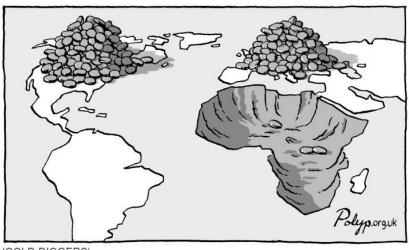
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# The Changing Economic World - Q2

There are global variations in economic development and quality of life What is development? The Brandt Line (shown on the map) divides the world into developed and developing countries. Describe the location of the developed and developing countries. List the measures of development that are used to classify countries and give a brief definition. The list has been started for you: GNI (Gross National Income) HDI (Human Development Index) Literacy rate \_\_\_\_\_ What are the limitations of these measures of development? I.e. why can they not be trusted entirely?

The demographic transition model (DTM) shows changes over time in the population of a country. As a country develops it should move through the stages of the model. How does a falling birth rate 5? Stage High stationary Early expanding Late expanding Low stationary Declining? (fewer children) reflect Birth rate Death rate increased economic 30 development? and death rates (per 1000 Natural people per year) Total population Examples A few remote groups Egypt, Kenya, India Brazil USA, Japan France, UK Birth rate High Falling Very low Death rate High Falls rapidly Falls more slowly Natural Stable or slow increase Stable or slow increase Very rapid increase Increase slows down Slow decrease Many children needed for farming. Many children die at an early age. Religious/social encouragement. No family planning. Family planning. Good health. Improving status of women. Later marriages. Reasons for Reasons for changes in death rate Disease, famine. Poor medical knowledge so many children die. Improvements in medical care, water supply and sanitation. Fewer children die. Good health care. Reliable food supply. How does an increasing death rate reflect high levels of development? Briefly outline 5 factors that cause uneven development (there should be at least one physical, one economic and one historical):

Consequence: disparities in	below are caused by uneven dev  Consequence: disparities in	Consequence: internationa
wealth	health	migration
rious strategies exist for rhat is the development gap?	reducing the global development	t gap



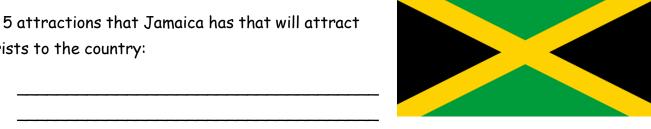
What m	essage do	es this	image	shov

•	Complete the table below outlining what each strategy involves and how it will help to improve the development of LICs:				
Strategy What does it involve? How will this reduce the development gap?					

Strategy	What does it involve?	How will this reduce the development gap?
Investment		
Industrial development		
Tourism		
Aid		
Intermediate technology		
Fairtrade		
Debt relief		
Microfinance loans		

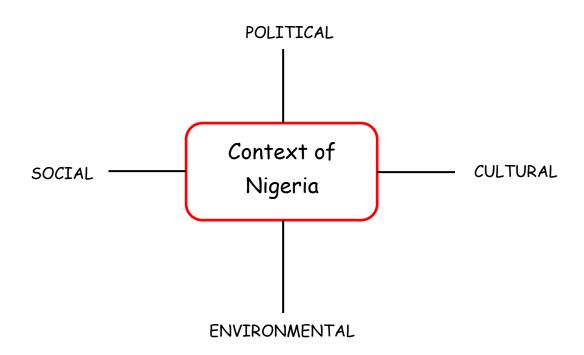
An example of how the growth of tourism in a LIC or NEE helps to reduce the development gap: Jamaica

List 5 attractions that Jamaica has that will attract tourists to the country:

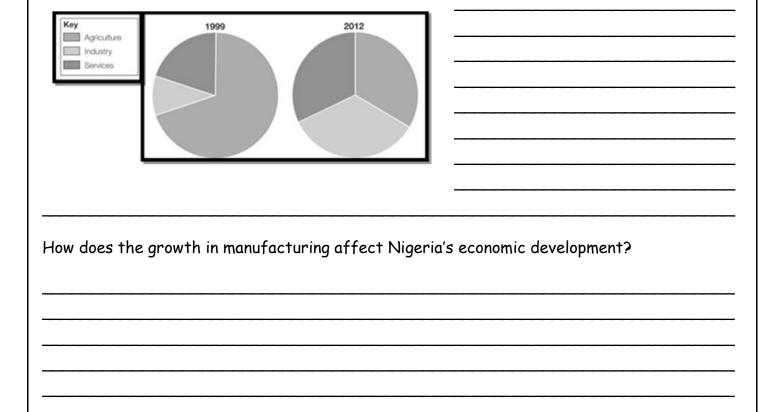


Adv	antages	Disadvantages
	s are experiencing rapid	economic development which leads to change
case study of a NE  with the control of the control	E: Nigeria, Africa  Describe the location o	•
case study of a NE  worldation  which the control of Africa  case study of a NE  worldation  worldatio	E: Nigeria, Africa  Describe the location o	change

Complete the mind map showing the political, social, cultural and environmental aspects of Nigeria:



Describe how Nigeria's economy has changed using the pie charts below:



What is a TNC?	KF
Why do TNCs like KFC locate in Nigeria?  •	
•	
Complete the table below showing the advant	ages and disadvantages of TNCs in Nigeria:
Advantages	Disadvantages
How has the presence of KFC and Shell Oil in	Nigeria stimulated industrial development?
How has Nigeria's political links with the rest gained independence?	r of the world changed since the 1960s when it

What does Nigeria contribute in terms of trade to the rest of the world?
What is aid?
When would a country receive emergency aid?
When would a country receive developmental aid?
Why does Nigeria need aid? Give 3 reasons:  •
•
How does aid benefit Nigeria and what prevents this aid being used effectively?
Benefits of aid to Nigeria Why aid may not be effective in Nigeria

Benefits of aid to Nigeria	Why aid may not be effective in Nigeria

Outline how economic growth can have a negative effect on the environment:
Industrial growth leads to
Urban growth leads to
Mining and oil extraction leads to





Has people's quality of life in Nigeria improved as a result of economic development?

Yes it has improved	No it has not improved		













Major changes in the economy of the UK have affected, and will continue to affect, employment patterns and regional growth				
Outline how the UK's employmentertiary and quaternary industri	<del>-</del>	1800 (i.e. primary, secondary,		
Why has it changed in this way? on the UK economy:	Complete the table below outl	ining the impact of each factor		
De-industrialisation	Globalisation	Government Policies		
What is a post-industrial econon	ny?			
How has the development of IT economy?	affected the growth and chard	acteristics of the UK's		

Service industries and financ	ce Research
/hat is a science park?	
the state of the s	
/hat is a business park?	
ou do acionos and buginosa nanka n	novide appendunities for regional accommic arough?
ow do science and business parks pr	rovide opportunities for regional economic growth?
and the same of th	
That are the impacts of industry on	
That are the impacts of industry on	
/hat are the impacts of industry on	the physical environment?
•	the physical environment?
	the physical environment?
•	the physical environment?
•	the physical environment?
•	the physical environment?

Complete the mind map to show 4 ways in which industrial development can be more sustainable:



An example of how modern industrial development can be more environmentally sustainable: Tutbury Factory, Nestle

Nestle has 486 factories located in 85 different countries and 6 of these factories are in the UK. They have a life-cycle assessment approach to their products which means they consider the environmental impact of products throughout the full life of these goods, i.e. farming to transport and



beyond. Nestle have invested £100 million in the Tutbury factory. List below 5 strategies Nestle have done to make their factory more sustainable:

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•	 		<del> </del>
•	 		
•			
•			
·			
•	 Nestle Good Food, Good Life	愚	
	 Good Food, Good Elle		Nestie malian



Rural landscapes are changing in the UK; some areas are experiencing rapid population growth as people are moving out into the countryside for a more peaceful life, whereas other areas are experiencing population decline.

What are the social and economic impacts of a growing population and a declining population?

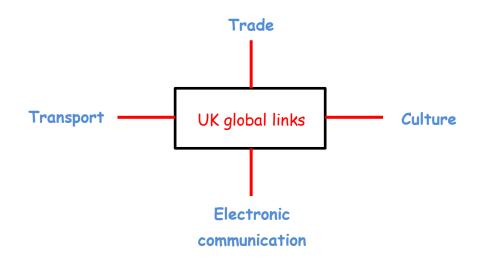
	Social effects	Economic effects
Growing population		
Declining population		

Improvements to transport infrastructure affect both employment and regional growth. Outline some of the improvements being made to the UK's transport links:

Type of Transport	Improvements made
Road improvements	
TOWNS CONTROL AND STREET AND STRE	
Railway improvements	
Developing ports	
Airport developments	

*	What is the north-south divide?	
	Give 2 reasons why there is a north-south divide:	
examples of stre	hich these regional differences can be resolved (try to give some specific ategies used in the UK):	
•		
How can improved transport links help reduce the north-south divide?		

The UK has global links through trade, culture, transport and electronic communications. Briefly outline information for each on the mind map below:



In 1973 the UK became a member of the European Union (EU). It includes 28 countries and has important trading and political influence. In 2016, however, the UK voted to leave the EU

and will complete its exit by 2019.



How has the EU affected the UK?



•	
•	
•	

The UK is a member of the Commonwealth which is a voluntary group of 53 countries and 2.2 billion people.

How does the UK benefit from being in the Commonwealth?

- •
- \_\_\_\_\_





# The Challenge of Resource Management - Q3

Food, water and energy are fundamental to human development	
What are resources?	
<u>Food</u>	
	Describe the patterr of global undernourishment.
% of population undernourished > 35% 25 - 34% 15 - 24% 5 - 14% < 5%   5%   10%	
Why does undernourishment or malnutrition lead to a slowly growing ed	conomy?
What is becoming an increasing health issue in HICs linked to food?	
<u>Water</u>	<del></del>

What is meant by physical water scarcity? Give an example of a place that has this.

What is meant by economic water scarcity? Give an example of a place that has this. Name 3 continents that have mostly little or no water scarcity: Name 3 countries that have mostly little or no water scarcity: Little or no water scarcity Approaching physical water scarcity Not estimated Physical water scarcity Economic water scarcity Energy Describe the global pattern of energy consumption. FINAL ENERGY CONSUMPTION IN 2003 70 - 260 260 - 530 530 - 1,100 1,100 - 2,500 2,500 - 10,000 Figures not available How might this pattern change in the future?

The changing demand and provision of resources in the UK create opportunities and challenges
Food in the UK
The UK imports about 40% of the total food consumed. List 4 reasons why it imports so much food below:
•
•
•
Many foods travel long distances, known as 'food miles'. This is very expensive and adds to our carbon footprint (an individual's use of greenhouse gases). Many vegetables come from Kenya, e.g. mange tout and green beans. The farmers in Kenya receive only 12% of the final price, whereas, supermarkets earn 45% of the price.
What is agribusiness and how will it help to reduce the reliance on foreign imports?
Agribusiness:
Agribusiness helps because
What is organic produce?
Give 3 advantages of eating local food for people in the UK and the environment.
•

#### Water in the UK

	100	Drinking ther 4%	
	Outdoor		
	7%		Toilet 30%
Washing up 8%			
lothes washing 13%			
			Baths and taps

Give 3 reasons for the increased demand for water in the UK:

• \_\_\_\_\_

• \_\_\_\_\_

•

What is meant by water surplus and water deficit? Give an example of areas in the UK for both:

Water surplus:

Water deficit:

Complete the table below to outline how the UK is coping with increased water demand:

Saving water	Water transfer	Managing water quality

Why are some water supplies suffering from pollution?

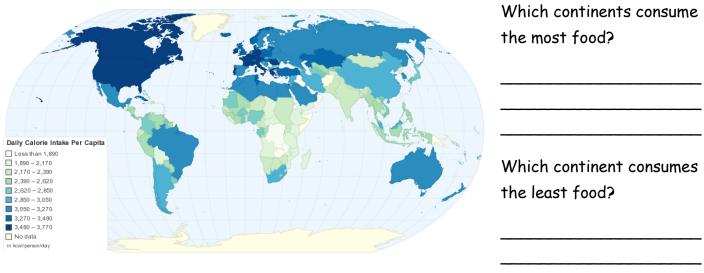
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- •
- •

Energy in the UK		
Despite increasing demand for e Give 2 reasons for this:  •		onsumption has actually fallen.
• Describe how the UK's energy m		
What is meant by energy securi		
What is happening to the UK's su	·	
<u>Coal</u>	<u>Gas</u>	<u>Oil</u>
	requirement from	aims to meet 15% of its energy n renewable sources. However, reliant on fossil fuels. Why are so important?
Why is fracking controversial?		

Nuclear energy and wind energy are two important energy sources being developed in the UK. Complete the table below to show the economic and environmental issues associated with exploiting these resources:

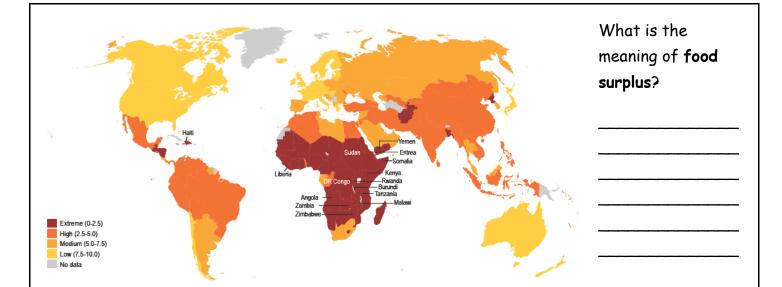
	Economic	Environmental
Nuclear		
Wind		
farms		

Demand for food resources is rising globally but supply can be insecure, which may lead to conflict



Why is global food consumption increasing?

- ------
- •
- -----



What is the meaning of food deficit?

Annotate the photograph below explaining the factors affecting food supply:



What are the impacts of food insecurity? Complete the tal	
Famine	
Under nutrition	
Soil erosion	
Rising prices	
Social unrest	PARAMETER AND ADDRESS OF THE PARAMETER AND ADDRESS OF THE PARAMETER AND ADDRESS OF THE PARAMETER
Different strategies can be used to increase food suppl	у
How can we increase the supply of food?	
How does irrigation increase the supply of food?	

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Explain below how aeroponics and hydroponics increase the food supply:

### <u>Aeroponics</u> <u>Hydroponics</u>



What is meant by the term 'green revolution'?	
What is biotechnology and how does it increase food yield	ls?
How does appropriate technology work to increase food su	.pplies?

An example of a large scale agricultural development: River Indus - Indus Basin Irrigation System (IBIS)  The project covers about 1 million square km and includes parts of India, China and Afghanistan.  Outline below the main features of the project:			
Complete the table below showing the advantages and disadvantages of the IBIS:			
Advantages	Disadvantages		
What is sustainable food supply?			
How can we manage food supplies in a sustainable way?			
How is organic farming sustainable?			

#### Complete the information table below outlining other sustainable methods:



Permaculture

Urban Farming





Fish from sustainable sources

Meat from sustainable sources





Seasonal food consumption

Reducing food loss and waste

**FARM AFRICA** 



An example of a local scheme in a LIC or NEE to increase sustainable supplies of food

Farm Africa is an international organisation working to build a prosperous rural Africa. It aims to increase harvests, build incomes and sustain natural resources in order to effectively fight poverty.

# What does Farm Africa do? Crops Livestock Fisheries Forests Climate Resilience