



GCSE

3110U20-1

FRIDAY, 6 JUNE 2025 — AFTERNOON

GEOGRAPHY

**UNIT 2: ENVIRONMENTAL AND
DEVELOPMENT ISSUES**

**1 hour 30 minutes plus your additional
time allowance**

Surname

First name(s)

Centre Number

Candidate Number

0

ADDITIONAL MATERIALS

In addition to this paper you may use a calculator and a ruler if required.

INSTRUCTIONS TO CANDIDATES

Use black ink, black ball-point pen or your usual method.

Write your name, centre number and candidate number in the spaces on the previous page.

**Answer BOTH questions in Section A.
Answer ONE question from Section B.**

Write your answers in the spaces provided in this booklet.

Additional space is provided for some questions within the booklet (if required). If further space is required for any question, you should use the additional page(s) at the back of the booklet, taking care to number the question(s) correctly.

(Turn over)

INFORMATION FOR CANDIDATES

The number of marks is given in brackets [] at the end of each question.

Your ability to communicate and organise your ideas will be assessed in questions that are worth 6 or 8 marks. The accuracy of your writing will be assessed in your answer to question 2(a)(v).

(Turn over)

SECTION A – CORE THEMES

Answer ALL of the questions in this section.

THEME 5: WEATHER, CLIMATE AND ECOSYSTEMS

1 (a) Study the map opposite then answer the questions that follow.

(Turn over)

1 (a)(i) Identify the key terms for the following definitions using the table below.

Put the correct letter next to the definition. [2 marks]

The long-term pattern of weather within a particular area.

The conditions in the atmosphere at any point in time and location.

LETTER	TERM
A	Microclimate
B	High pressure
C	Weather
D	Climate
E	Low pressure

(Turn over)

1 (a)(ii) Name the settlement on the map with the highest average January temperature. [1 mark]

(iii) Suggest how ONE factor influences the January temperature in Haverfordwest. Use map evidence to support your answer. [3 marks]

(Turn over)

(Turn over)

1 (a)(iv) Study the climate graphs opposite. Compare the annual rainfall patterns for Haverfordwest and King's Lynn. Use data from the graphs to support your answer.

[4 marks]

(Turn over)

(Turn over)

1 (b) Study the diagram opposite.

- (i) Circle the correct answers in the passage below. [3 marks]**

The global atmospheric circulation is a system which transports air in a series of cells. The (FERREL / POLAR / HADLEY) cell involves hot air rising at the equator. Air pressure at A, between the Ferrel and Hadley cells is (HIGH / LOW / MEDIUM). Air pressure at B, between the two Hadley cells is (HIGH / LOW / MEDIUM).

(Turn over)

1 (b)(ii) Explain why weather conditions are different between high pressure and low pressure systems in the UK.

[6 marks]

(Turn over)

(Turn over)

1 (c) Study the map opposite.

Describe the global distribution of the tundra biome. Use map evidence only.

[3 marks]

(Turn over)

1 (d) Study the resources opposite and below.

Fact Box

- **Tundra winters are long and dark with few hours of sunlight.**
- **Thin layer of soil that is not frozen.**
- **Short growing seasons for plants which are mainly mosses and lichens. Few trees able to grow.**
- **Animals have adapted to cold conditions – layers of insulating fat or fur, shorter breeding cycle, fewer species.**
- **Low population density of 0.03 inhabitants per km² across global tundra ecosystems.**
- **The majority of settlements have a population size of 5000 people or less.**

(Turn over)

“Climate has a greater influence than human activity on biodiversity in ecosystems such as the tundra.”

To what extent do you agree with this statement? [6 marks]

Use evidence from the resources on and opposite page 14 to help your answer. You may also use other examples you have studied.

(Turn over)

(Turn over)

Additional space for Question 1(d) only:

(Turn over)

THEME 6: DEVELOPMENT AND RESOURCE ISSUES

2 (a) Study the maps opposite and the Fact Box below.

Fact Box

- **On average, people in the poorest areas of the UK are likely to have long-term illness diagnosed over 10 years earlier than those in the richest areas.**
- **Children living in poorer areas are more likely to be living with long-term health conditions, for example, asthma.**
- **London is the UK's fastest-growing economic region.**
- **For March 2022, the average house price in London was £550 000 compared to £155 000 in north east England.**

(Turn over)

**2 (a)(i) Give the male life expectancy in
Edinburgh. [1 mark]**

(Turn over)

2 (a)(ii) Tick (✓) the TWO correct statements in the table below. Use information from the maps opposite page 18. [2 marks]

STATEMENT	CORRECT (✓)
Average income is higher in Newcastle than London.	
Belfast has an average income of £17001 – £21000	
Manchester's male life expectancy is over 85 years.	
In the UK, male life expectancy is higher in the north than the south.	
Male life expectancy in Scotland is less than 81 years.	

(Turn over)

2 (a)(iii) Describe ONE political factor that may lead to varying levels of wealth across the UK. [2 marks]

(Turn over)

2 (a)(iv) Describe how a positive multiplier can help a region to develop.

[2 mark]

(Turn over)

2 (a)(v) Regional inequalities in the UK have greater economic impacts than social impacts. To what extent do you agree with this statement?
[8 marks]

You may use the resources on and opposite page 18, and other examples you have studied.

The accuracy of your writing will be assessed in your answer to this question. [3 marks]

(Turn over)

(Turn over)

(Turn over)

(Turn over)

Additional space for Question 2(a)(v) only:

(Turn over)

2 (b) Study the graph opposite.

(i) Describe the relationship between employment and income growth in the tourism industry. Use data from the graph to support your answer.

[3 marks]

(Turn over)

(Turn over)

2 (b)(ii) Give TWO reasons why tourism can have a negative effect on employment within a country.

[4 marks]

Reason 1: _____

(Turn over)

Reason 2: _____

(Turn over)

2 (c) Study the images opposite.

(i) Explain why MNCs locate in more than one country. [4 marks]

(Turn over)

(Turn over)

2 (c)(ii) Give ONE advantage and ONE disadvantage of MNCs to the country in which they locate.

[2 marks]

Advantage: _____

Disadvantage: _____

END OF QUESTION 2

(Turn over)

SECTION B – OPTIONS

**Answer ONE question in this section,
EITHER Question 3 OR Question 4.**

THEME 7: SOCIAL DEVELOPMENT ISSUES

3 (a) Study the graph opposite.

**(i) Complete the graph using the data
below. [1 mark]**

YEAR	PROJECTED DEATH RATE (PER 1000 PEOPLE)
2025	5

(Turn over)

3 (a)(ii) Use the graph to calculate the range for death rate in Senegal from 1955 to 2025. Show your working in the box below.

[2 marks]

Answer: _____ per 1000 people

(Turn over)

**3 (a)(iii) Describe the changing death rate
in Senegal between 1955 and 2025.**

[3 marks]

(Turn over)

3 (a)(iv) Describe ONE economic factor that can help to reduce death rates in sub-Saharan African countries.

[2 marks]

(Turn over)

3 (a)(v) Explain why political factors can influence changing birth rates in sub-Saharan Africa. [4 marks]

(Turn over)

3 (b)(i) Describe ONE challenge created by malaria in sub-Saharan Africa.

[2 marks]

(Turn over)

3 (b)(ii) Give ONE reason why an international approach to tackling malaria is necessary. [2 marks]

(Turn over)

3 (c) Study the images opposite.

Evaluate strategies used to tackle malaria in sub-Saharan Africa. You may refer to other examples you have studied. [8 marks]

(Turn over)

Additional space for Question 3(c) only:

(Turn over)

END OF QUESTION 3

(Turn over)

If you have answered Question 3 DO NOT answer Question 4

THEME 8: ENVIRONMENTAL CHALLENGES

4 (a) Study the graph opposite.

(i) Complete the graph using the data below. [1 mark]

Year	Spending in millions (£)
2021	1020

(Turn over)

4 (a)(ii) Use the graph to calculate the range for spending on flood and coastal erosion defences in England between 2008 and 2021.

Show your working in the box below. [2 marks]

Answer: £ _____ million

(Turn over)

4 (a)(iii) Describe the changes in spending on flood and coastal erosion defences in England between 2008 and 2021. [3 marks]

(Turn over)

4 (a)(iv) Describe ONE long-term effect of climate change on people.

[2 marks]

(Turn over)

4 (a)(v) Explain why climate change will have a long-term impact on government spending in the UK.

[4 marks]

(Turn over)

(Turn over)

4 (b)(i) Describe ONE negative impact of tourism on water resources.

[2 marks]

(Turn over)

4 (b)(ii) Give ONE reason why managing tourists in a tropical coastline/coral reef area can benefit the ecosystem.
[2 marks]

(Turn over)

4 (c) Study the images opposite.

Evaluate strategies used to make tourism more sustainable. You may refer to other examples you have studied. [8 marks]

(Turn over)

(Turn over)

Additional space for Question 4(c) only:

END OF QUESTION 4

END OF PAPER

(Turn over)

Question Number	Additional page, if required. Write the question number(s) in the left-hand margin.

(Turn over)

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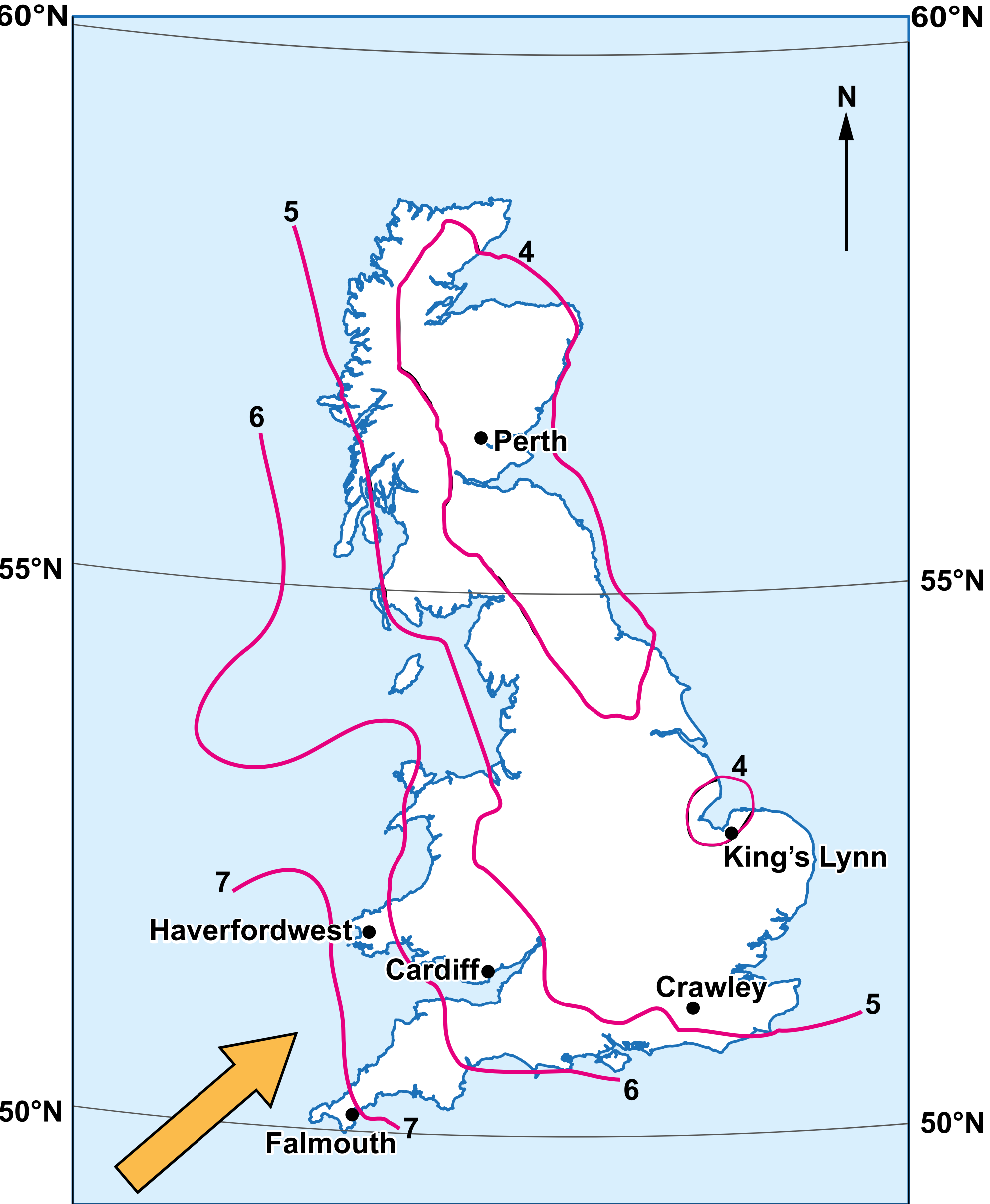
(Turn over)

Question Number	Additional page, if required. Write the question number(s) in the left-hand margin.

For Examiner's use only		
	Maximum Mark	Mark Awarded
Question 1	28	
Question 2	28	
Writing accurately	3	
Question 3	24	
Question 4	24	
Total	83	

either
or

ISOTHERM MAP TO SHOW AVERAGE JANUARY TEMPERATURES (°C) IN THE UK

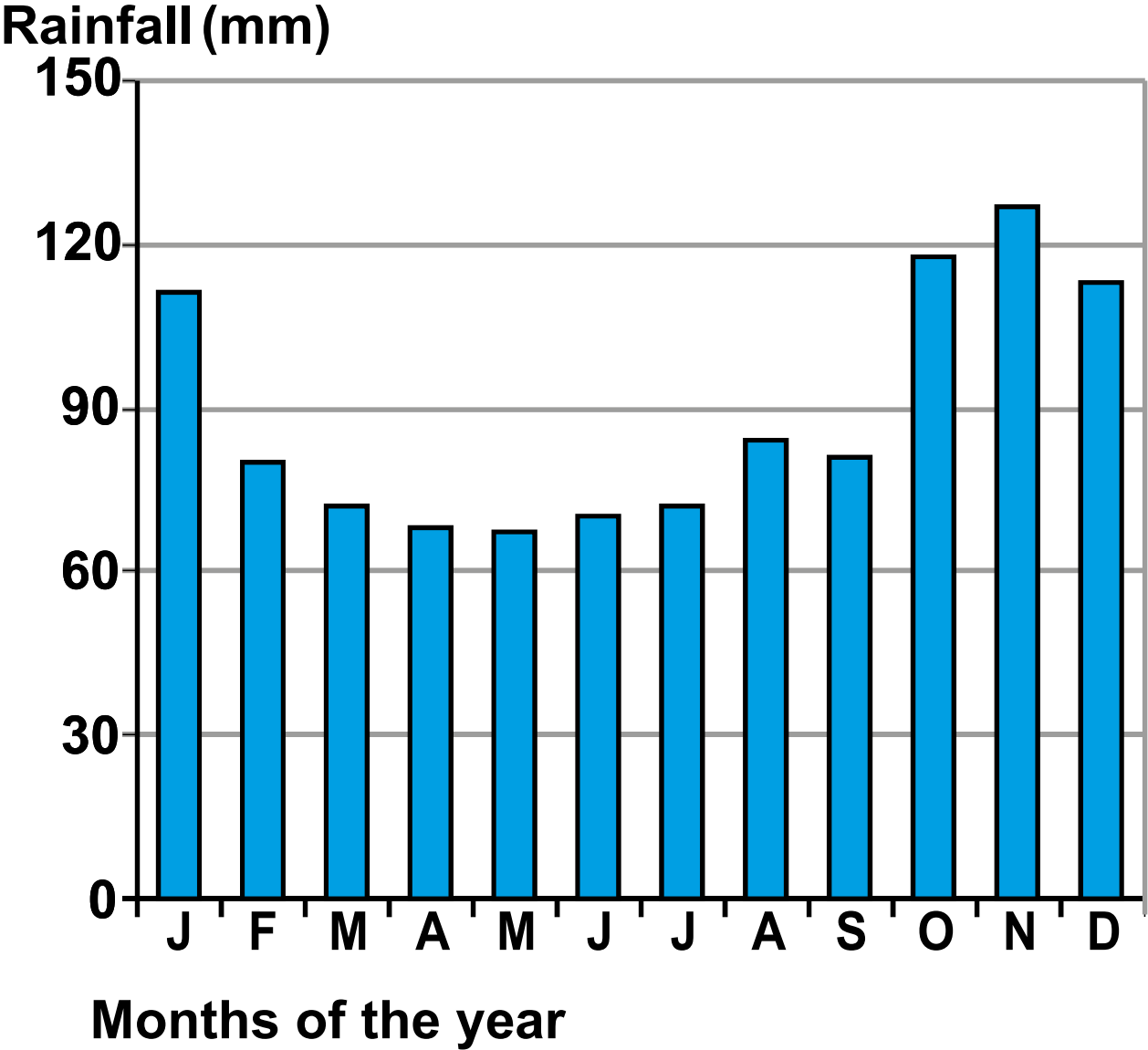


Key:

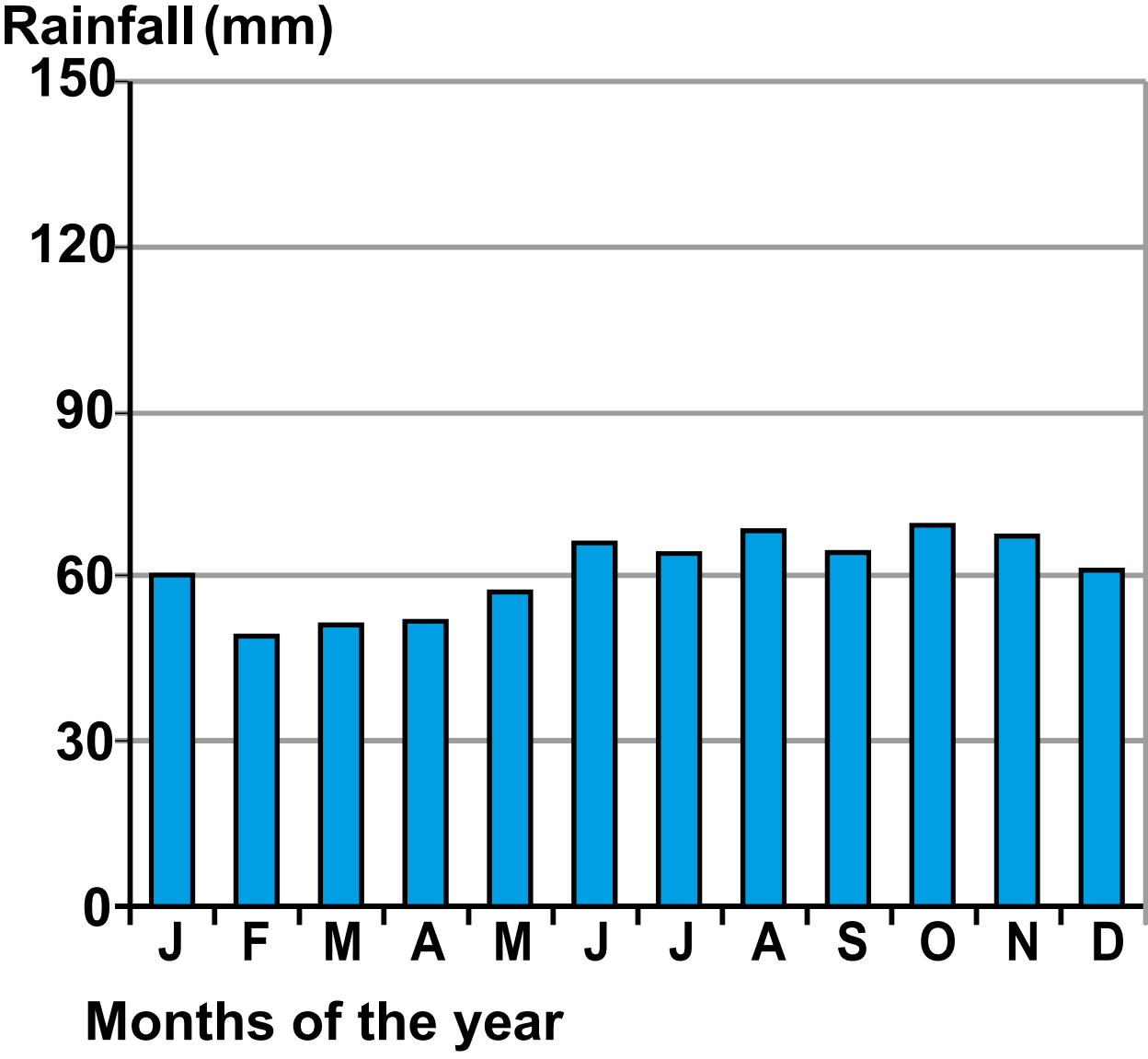
-  Prevailing winds and ocean currents
-  Settlement in the UK
-  Isotherm

0 120 km

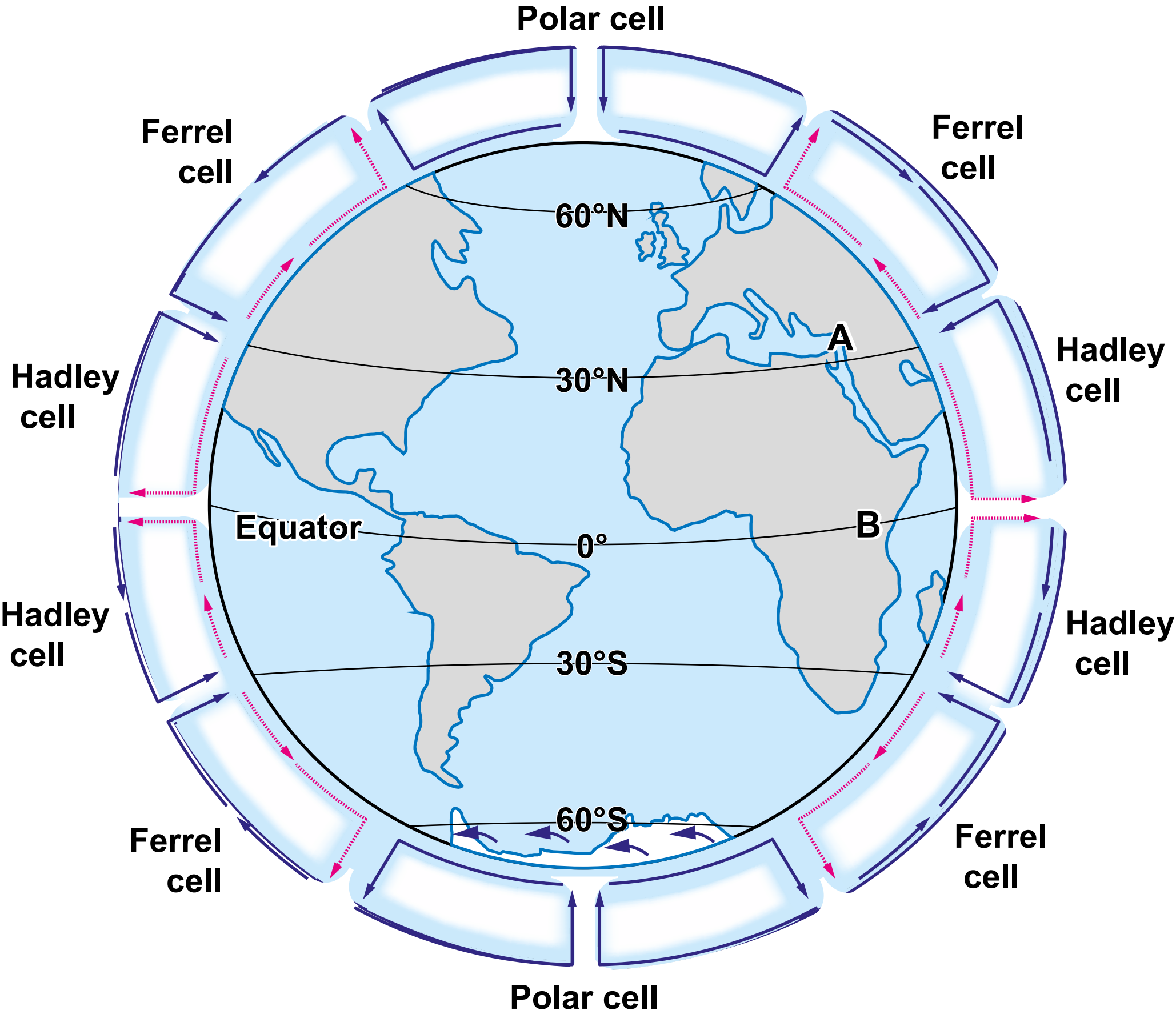
**ANNUAL RAINFALL FOR
HAVERFORDWEST**



ANNUAL RAINFALL FOR KING'S LYNN

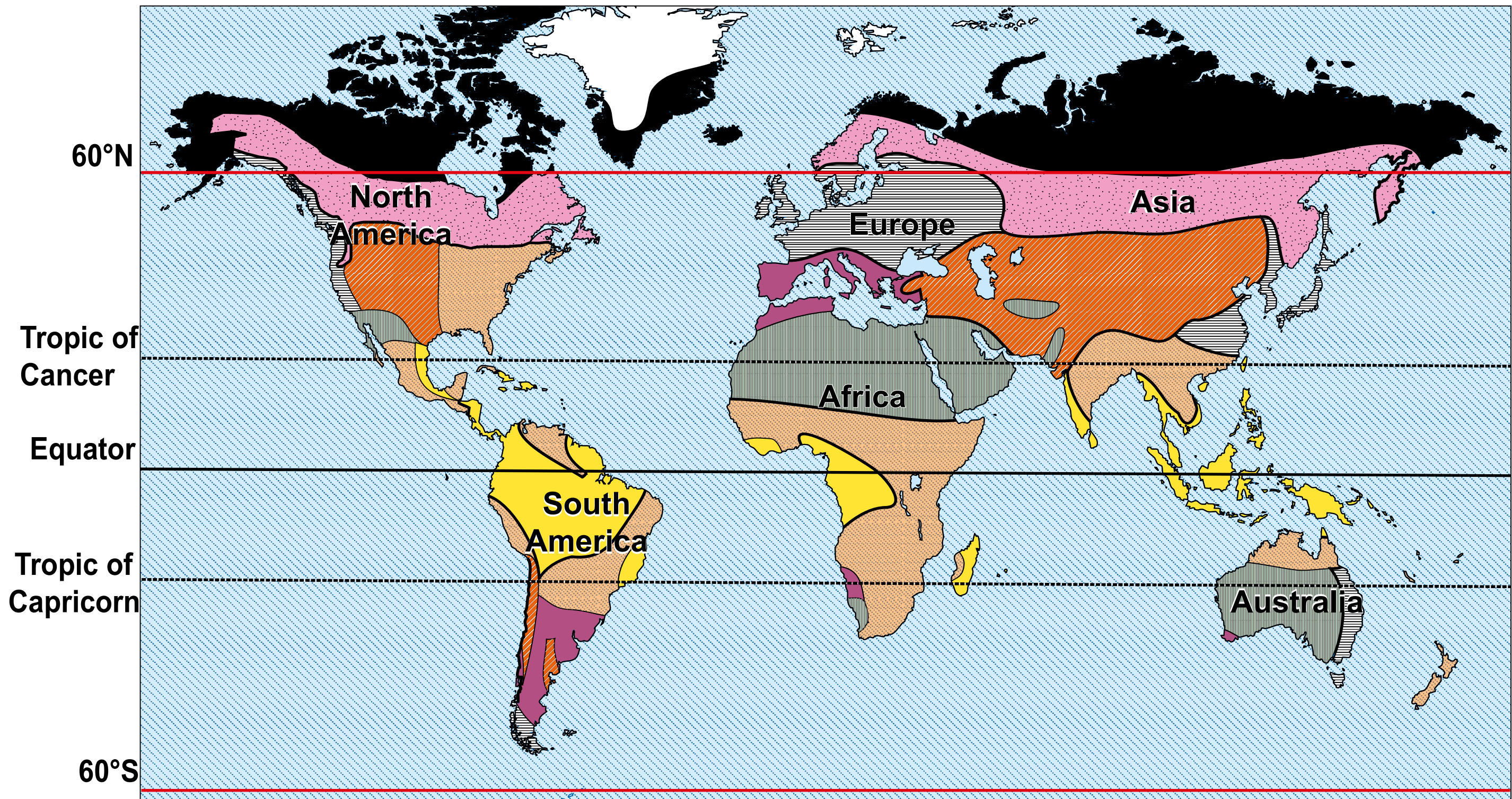


GLOBAL ATMOSPHERIC CIRCULATION

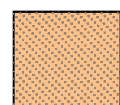


Key: —————→ cold air → hot air

GLOBAL BIOMES



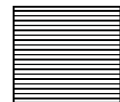
Key:



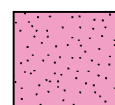
Hot semi-arid grassland



Tropical rainforest



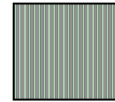
Temperate deciduous forest



Taiga (boreal forest)



Semi-desert



Subtropical desert



Woodland/Shrubland



Tundra



Polar ice cap

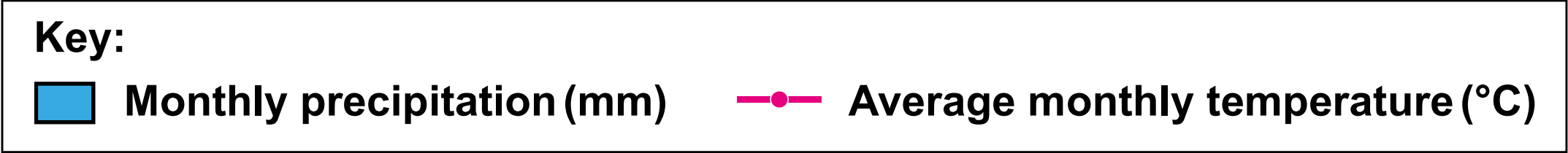
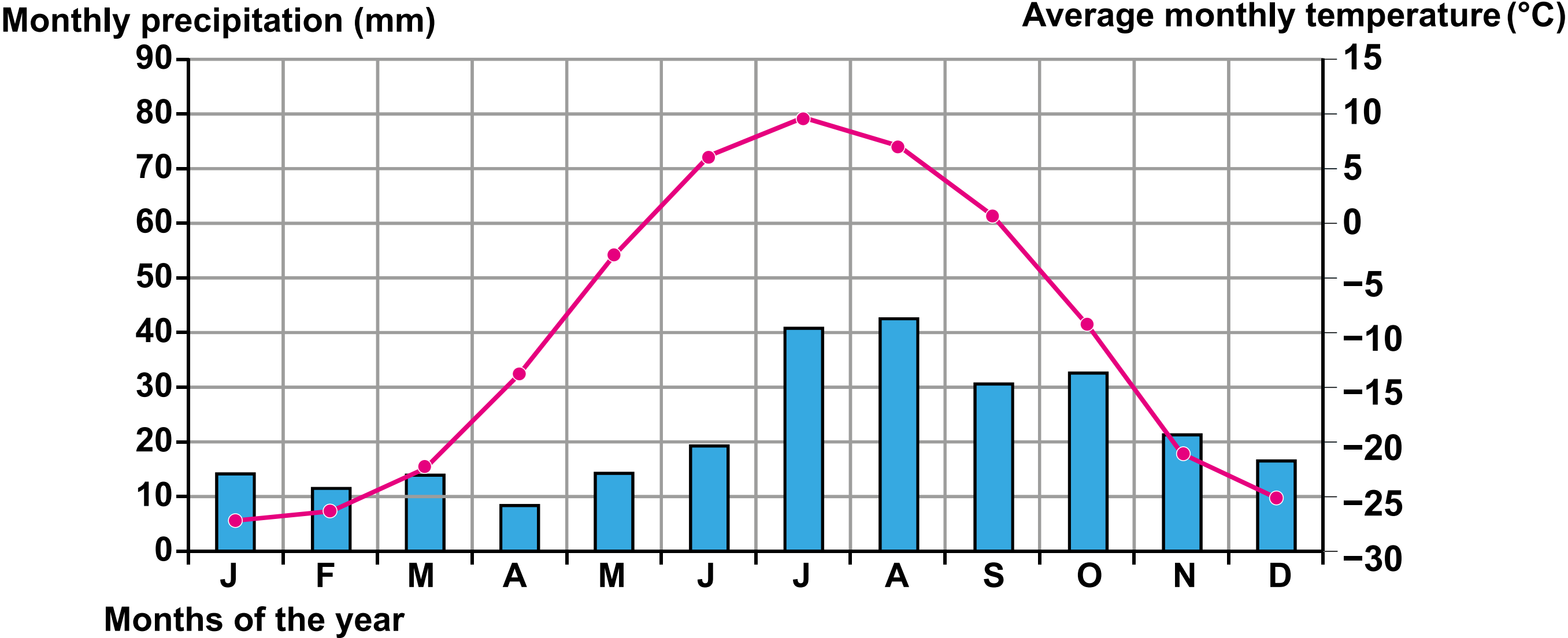
TOURISM IN THE TUNDRA



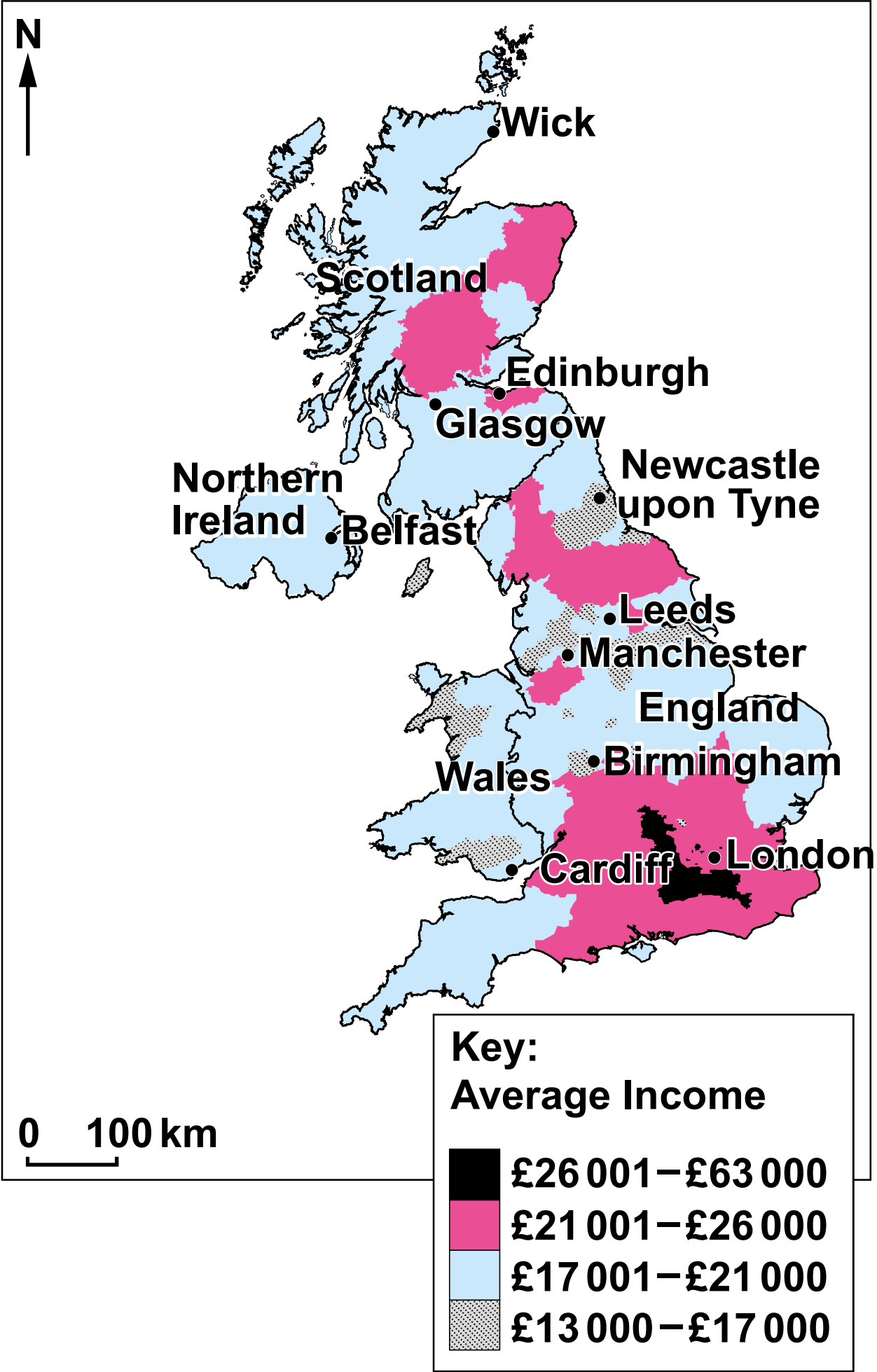
OIL PIPELINE THROUGH THE TUNDRA



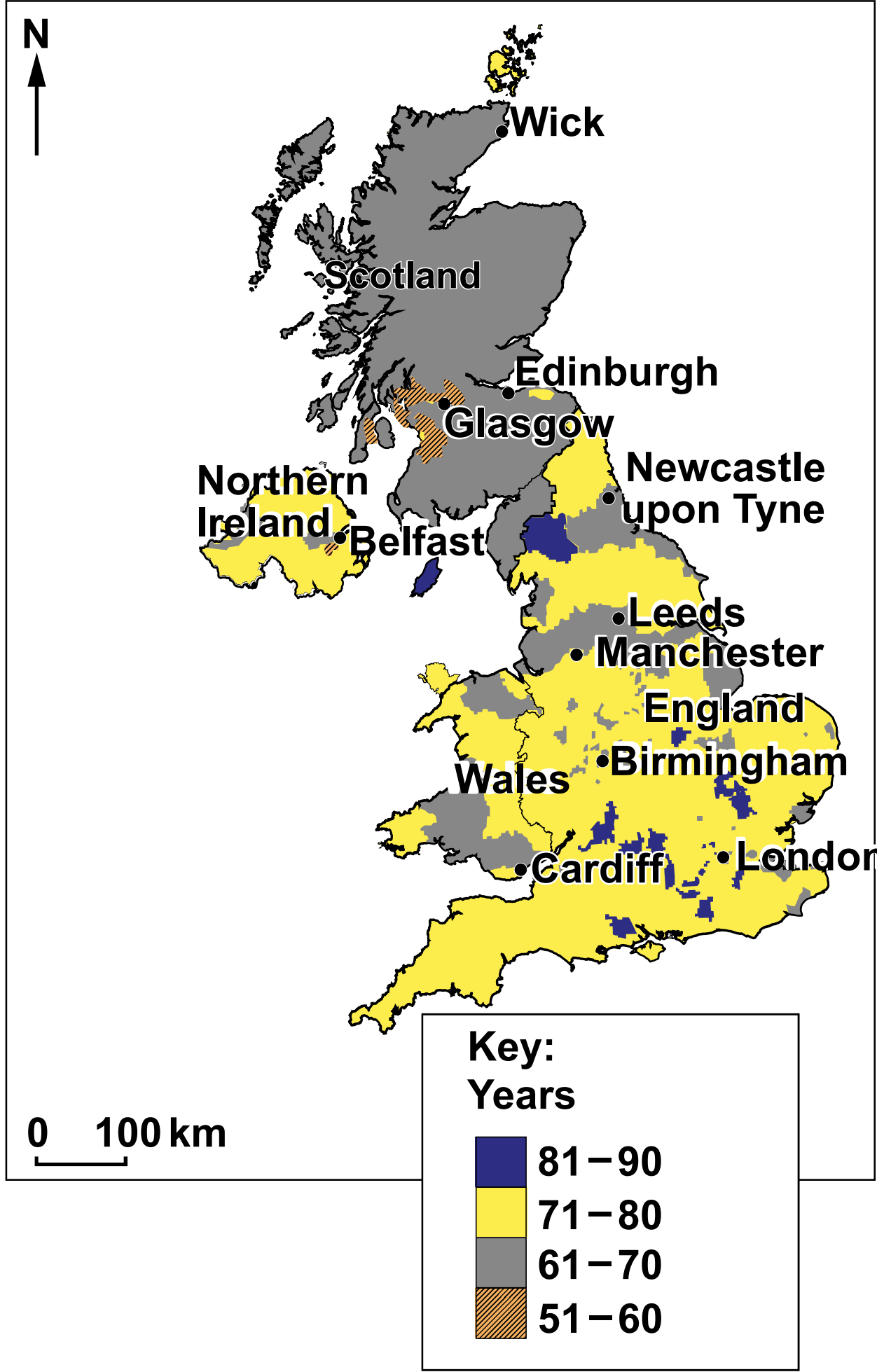
CLIMATE GRAPH FOR A TUNDRA ECOSYSTEM IN CANADA



UK AVERAGE INCOME 2021



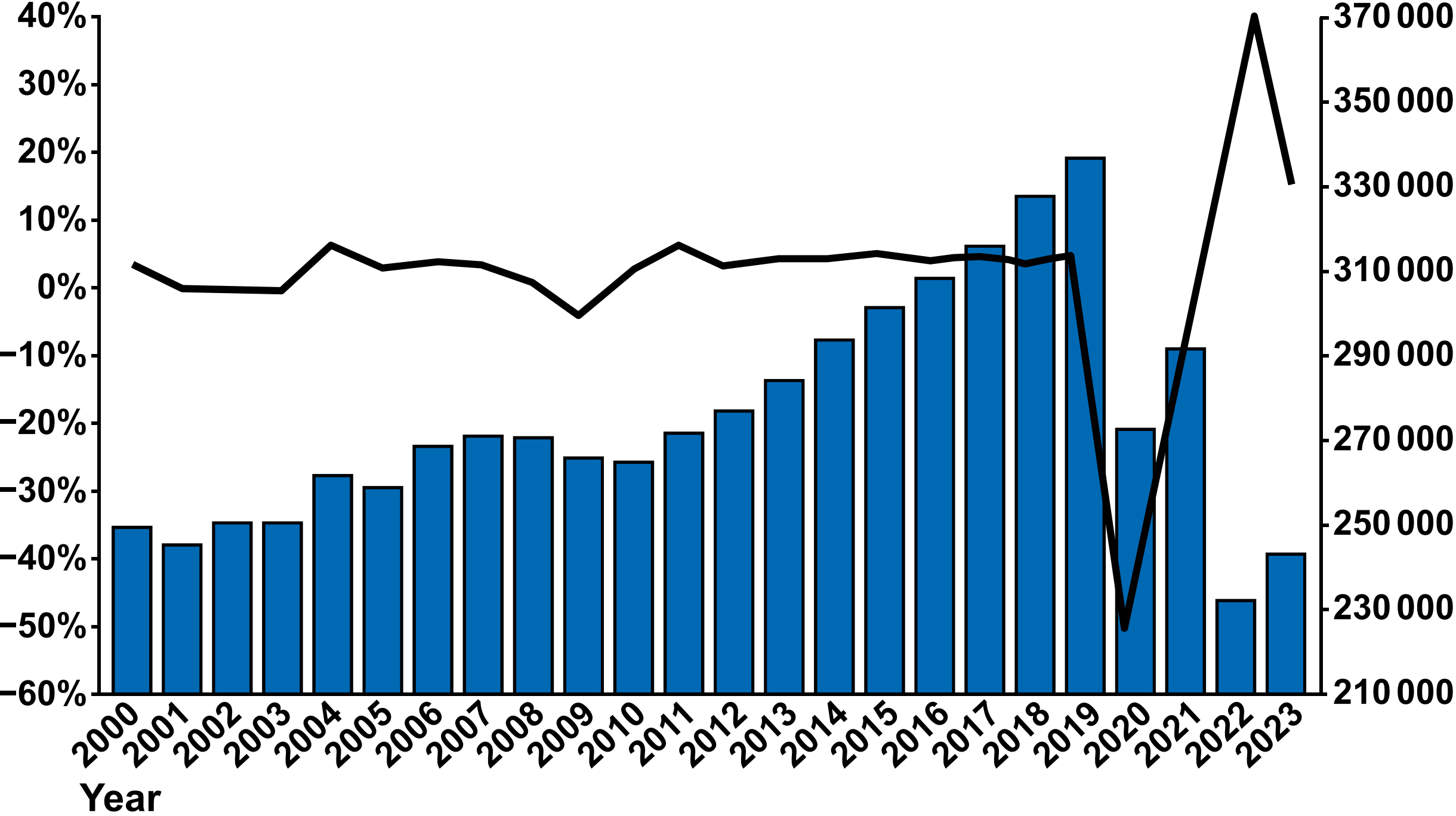
UK MALE LIFE EXPECTANCY



GROWTH IN GLOBAL TOURISM INCOME AND EMPLOYMENT 2000-2023

Growth in global tourism income (%)

Global tourism employment (thousands)

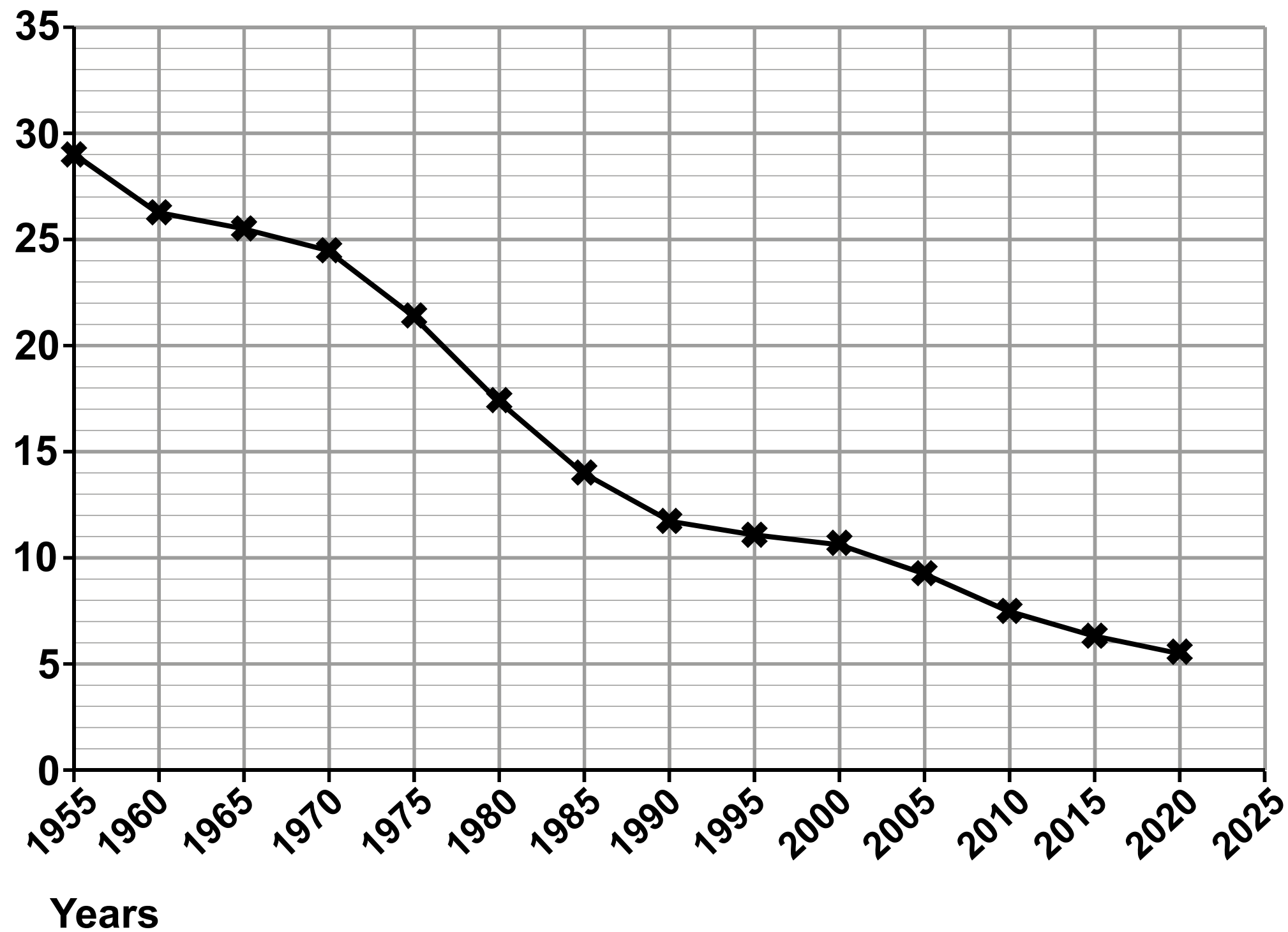


Key: — Growth in global tourism income ■ Global tourism employment

SOME EXAMPLES OF MULTINATIONAL COMPANIES (MNCS)



DEATH RATE FOR SENEGAL IN SUB-SAHARAN AFRICA (PER 1000 PEOPLE) 1955–2025



SOME METHODS OF TACKLING MALARIA INFECTIONS IN SUB-SAHARAN AFRICA

INSECTICIDE-TREATED MOSQUITO NET

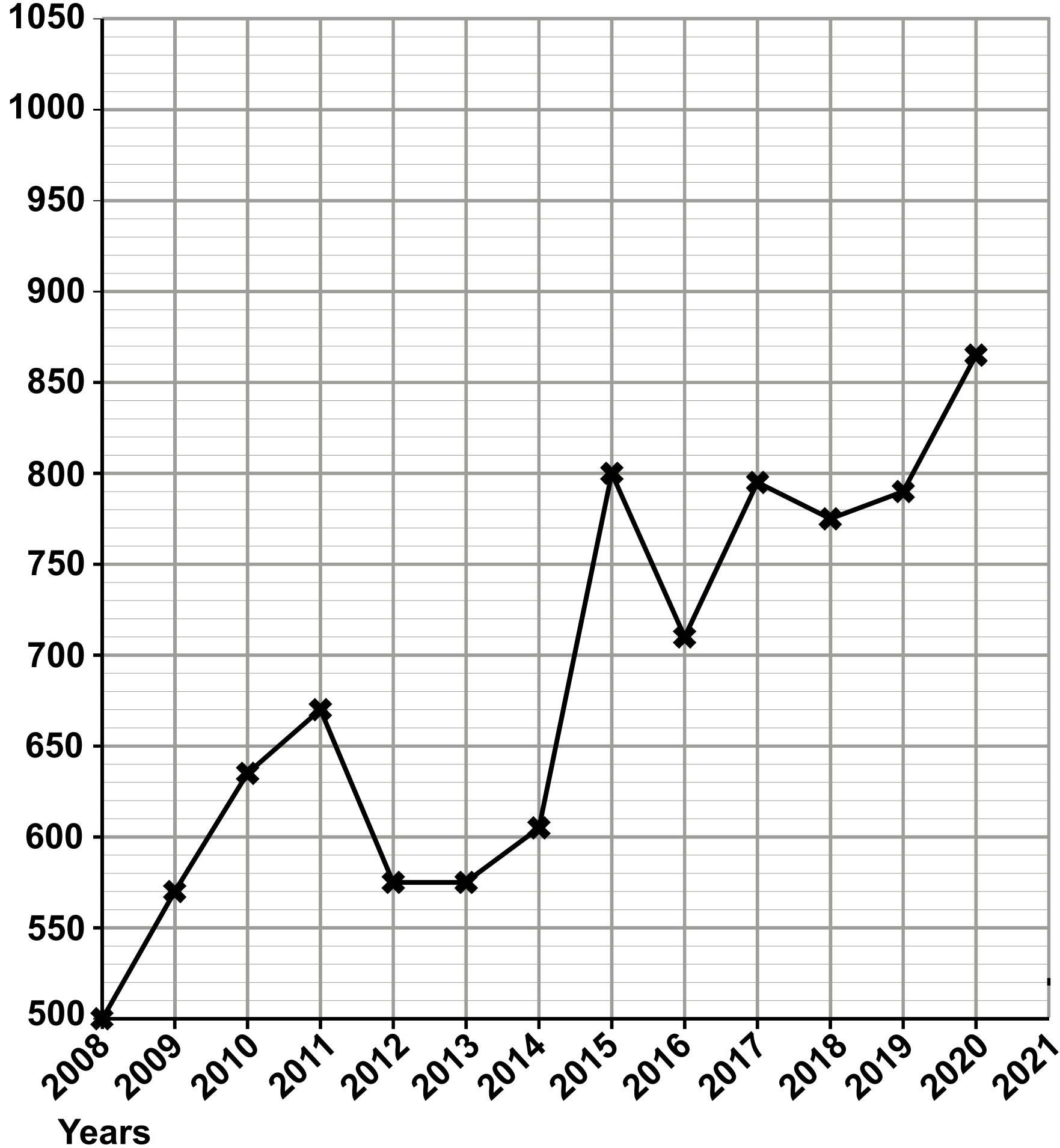


WORLD MALARIA DAY MARCH



SPENDING ON FLOOD AND COASTAL EROSION DEFENCES IN ENGLAND 2008-2021

Spending
in millions (£)



SOME METHODS OF ENCOURAGING SUSTAINABLE TOURISM

GREEN TOURISM AWARD HOTEL



RESPONSIBLE TOURISM SIGN IN BOLIVIA

