



**A-level
GEOGRAPHY**

Paper 2 Human Geography

7037/2

Insert

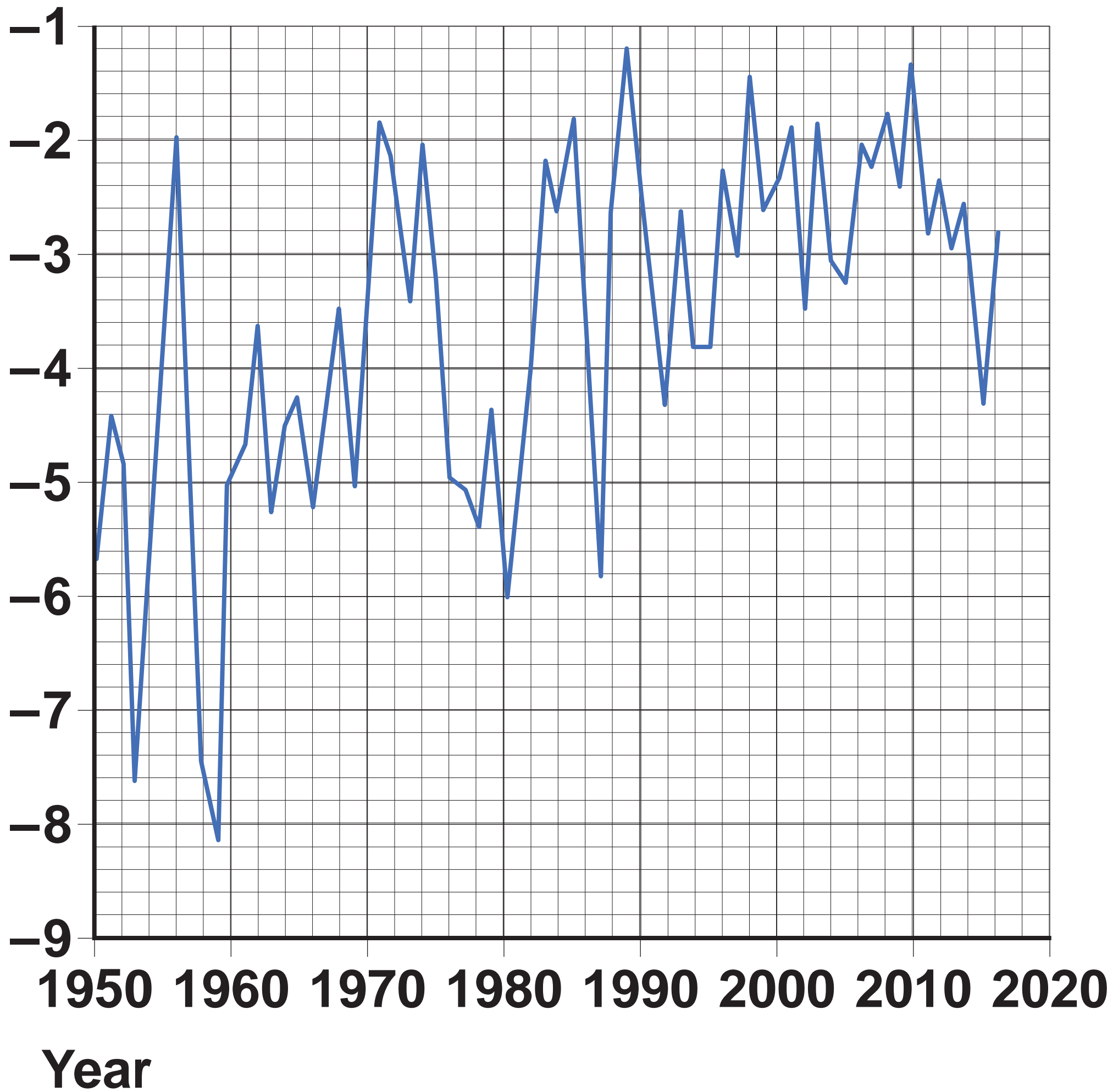
[Turn over]

FIGURE 1a – For use with Question 1

| Year | Mean July temperature (°C) |
|-------------|-----------------------------------|
| 1976 | -11.8 |
| 1980 | -16.0 |
| 1984 | -6.4 |
| 1988 | -5.4 |
| 1992 | -10.4 |
| 1996 | -5.7 |
| 2000 | -3.8 |
| 2004 | -4.8 |
| 2008 | -4.7 |
| 2012 | -3.9 |
| 2016 | -8.5 |

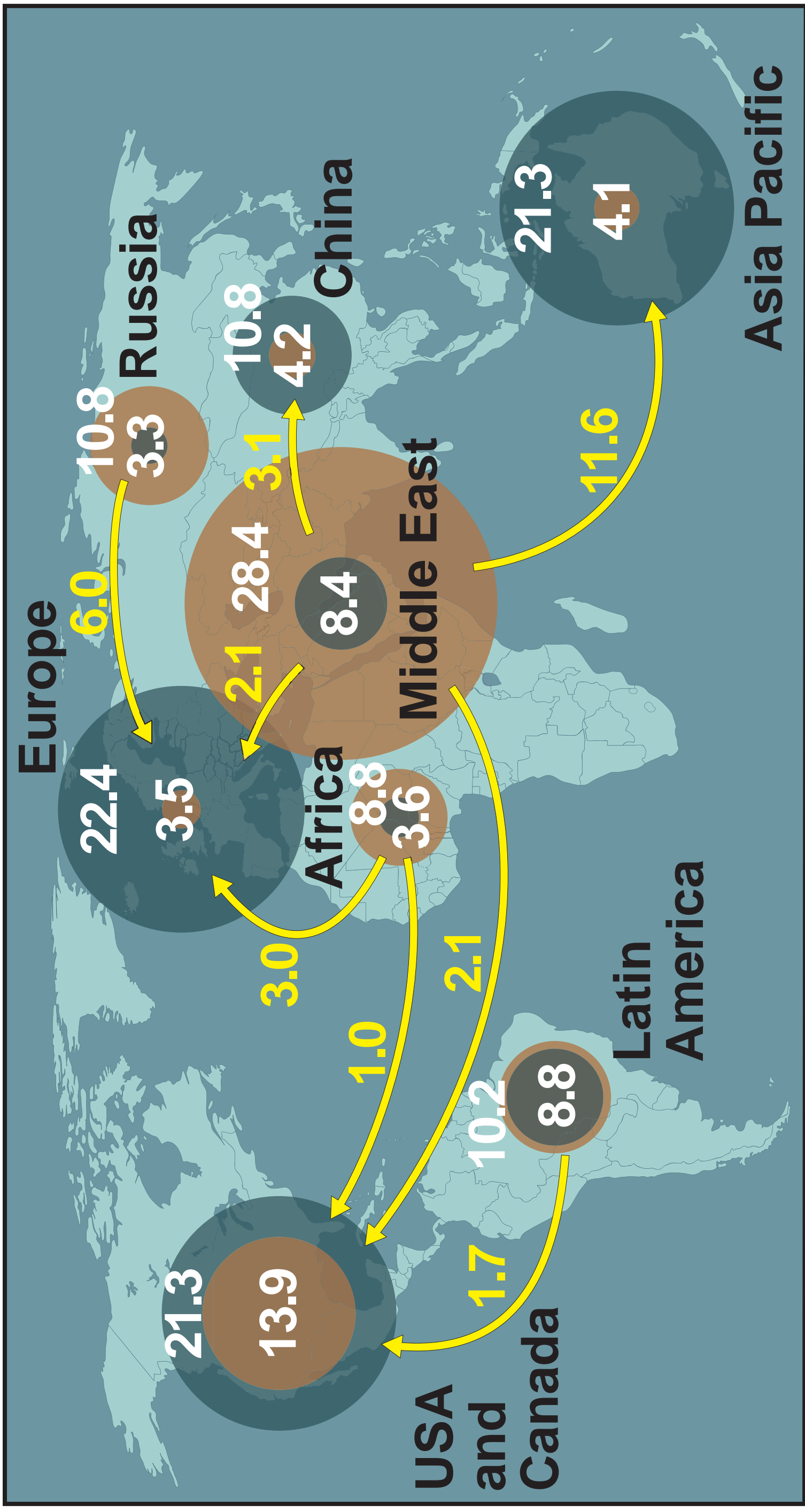
FIGURE 1b – For use with Question 1

Annual mean temperature (°C)




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FIGURE 2 – For use with Question 1



KEY

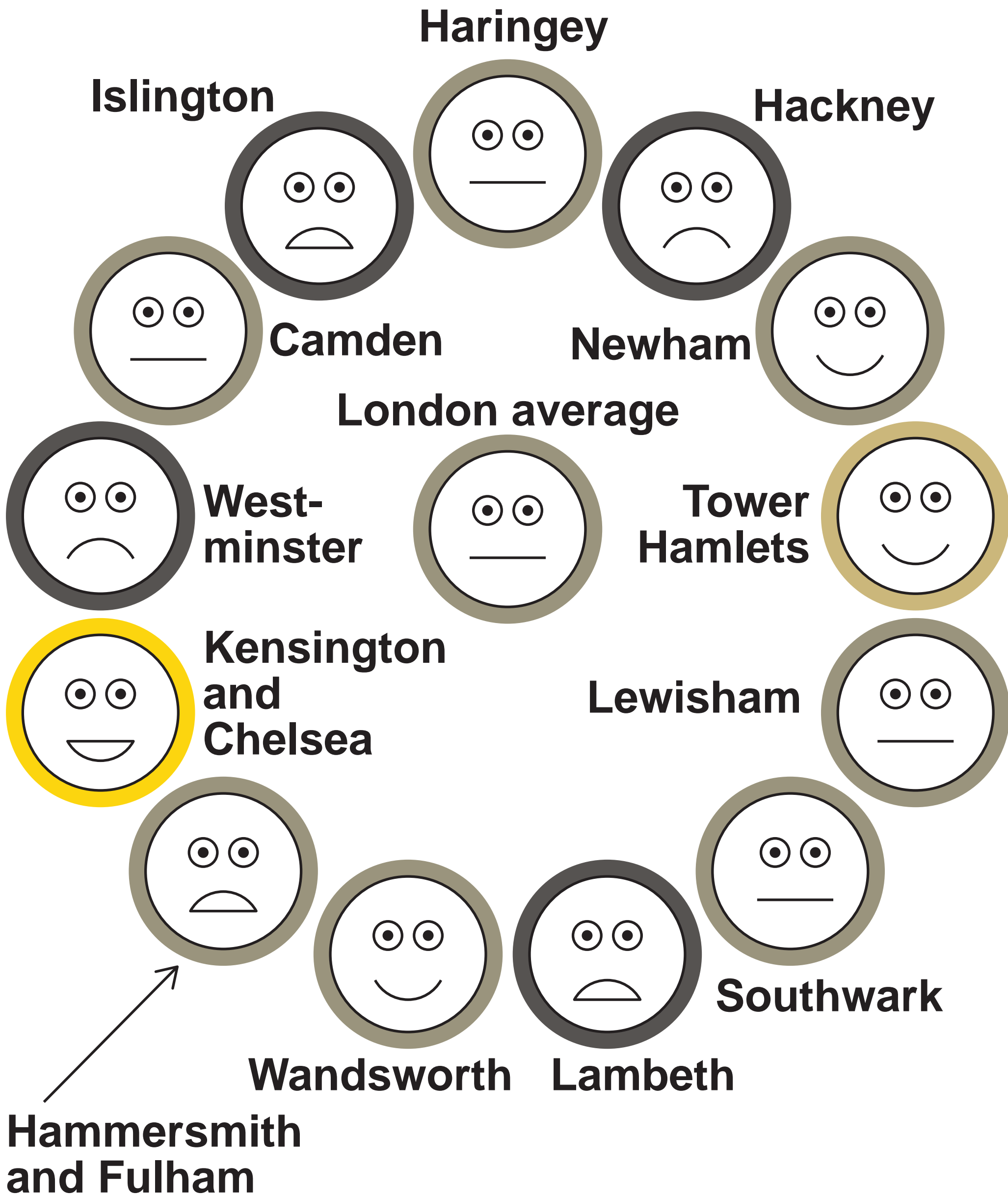
- Production  Trade flows
- Consumption

All values in million barrels per day

Only trade flows above 1 million barrels per day are represented

[Turn over]

FIGURE 3a – For use with Question 2



KEY

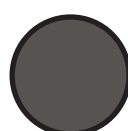
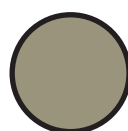
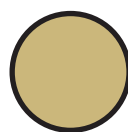
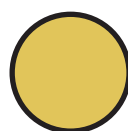
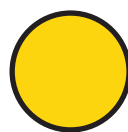
Overall, how satisfied are you with your life nowadays?

Overall, how happy did you feel yesterday?

Relatively high

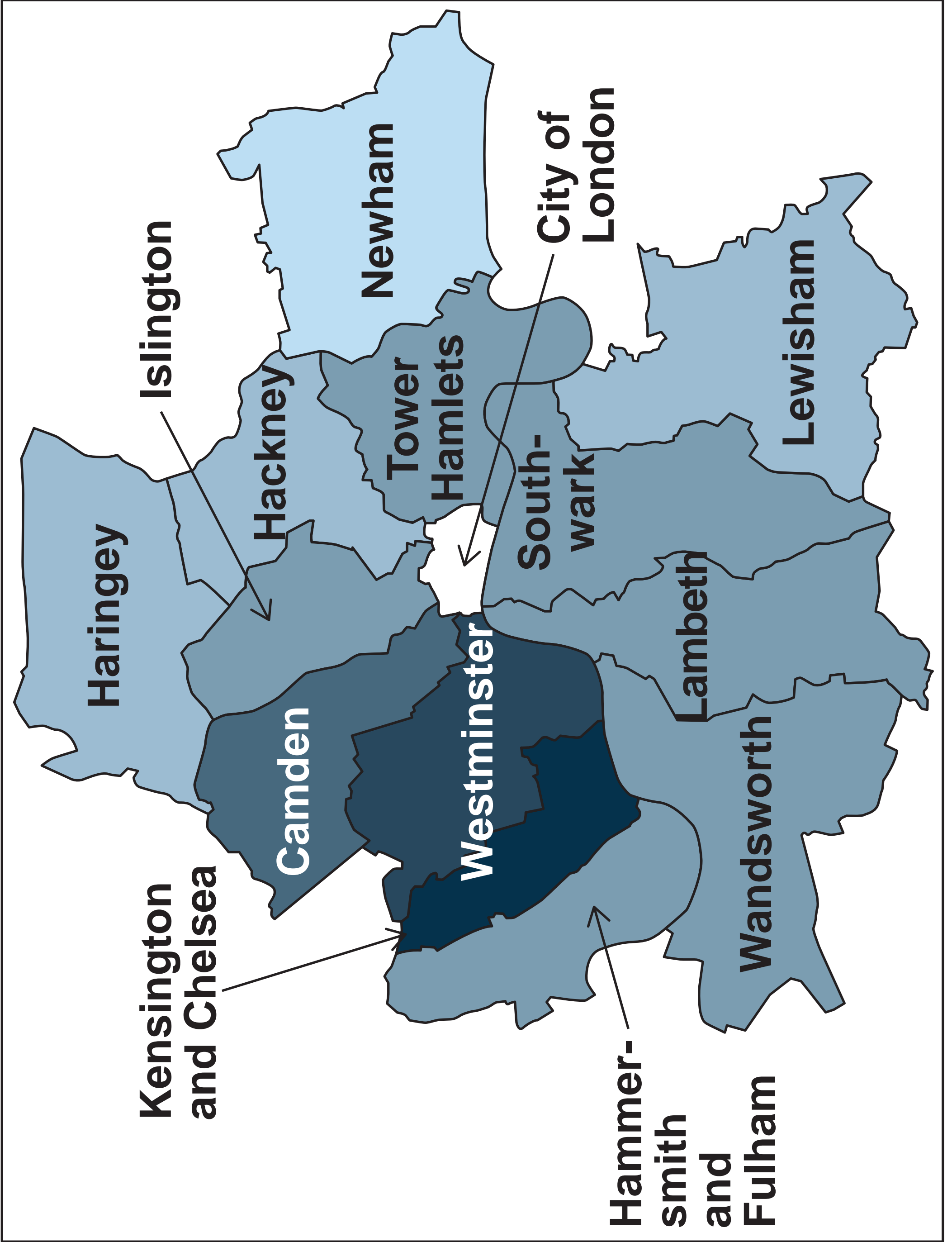


Relatively low



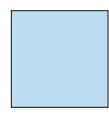
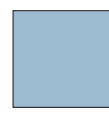





[Turn over]

FIGURE 3b – For use with Question 2



KEY

Average income per employed resident

-  £22 000 – £24 999
-  £25 000 – £34 999
-  £35 000 – £54 999
-  £55 000 – £84 999
-  £85 000 – £104 999
-  £105 000 – £137 000
-  No data

[Turn over]

FIGURE 4a – For use with Question 2

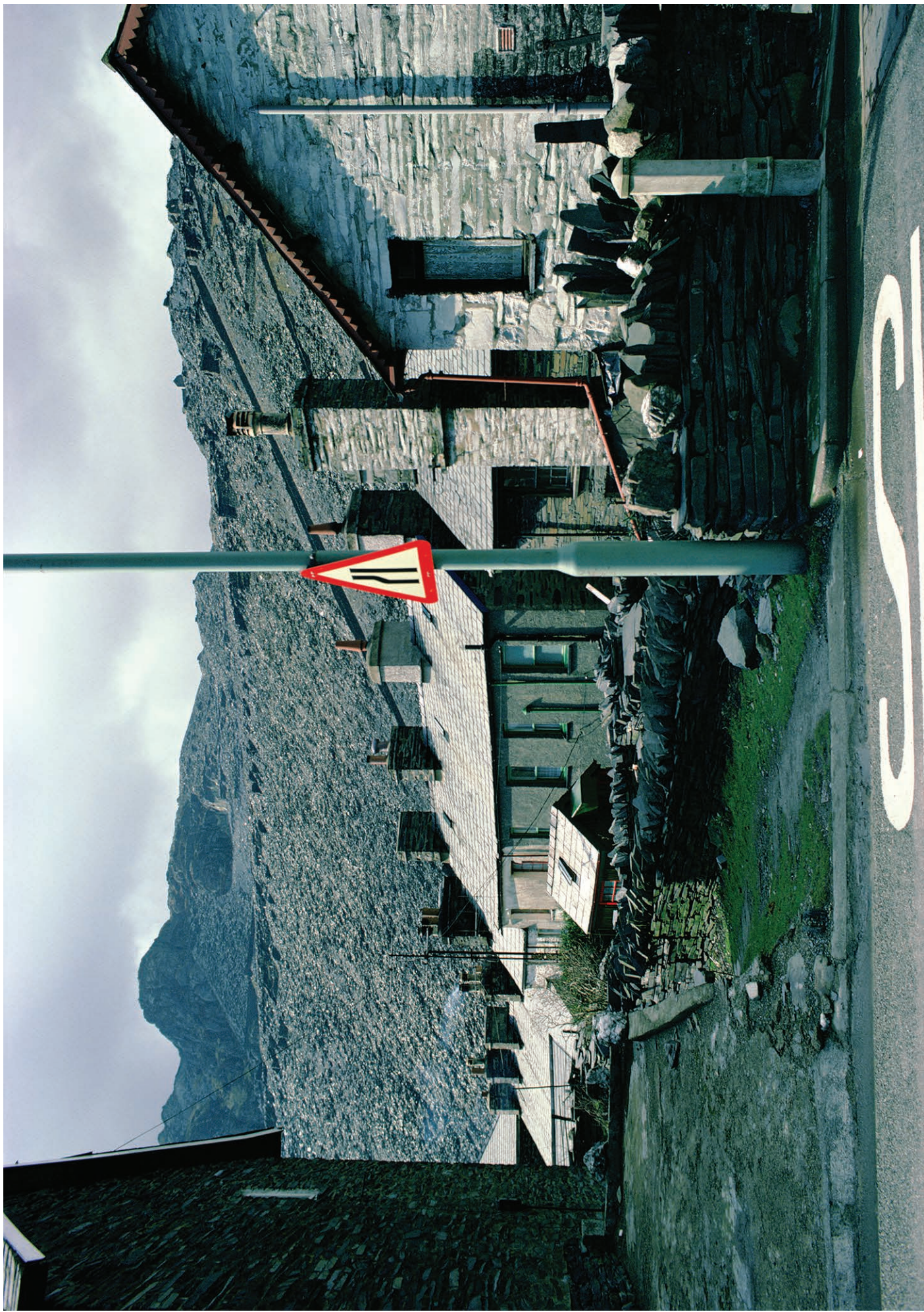


FIGURE 4b – For use with Question 2

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FIGURE 5a – For use with Question 3



KEY



**Interstate
Highway
Major Road**



**Other Road
Railway**



**Hospital
Points of Interest**



**Hotel
Religious
Place**



**Shopping Center
Educational Inst.**



**Waterbody
Vegetation**



**Airport
Museum**



[Turn over]

FIGURE 5b – For use with Question 3

Map showing temperatures in Portland cannot be reproduced here due to third-party copyright restrictions.

Map showing temperatures in Portland cannot be reproduced here due to third-party copyright restrictions.

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FIGURES 6a and 6b – For use with Question 3

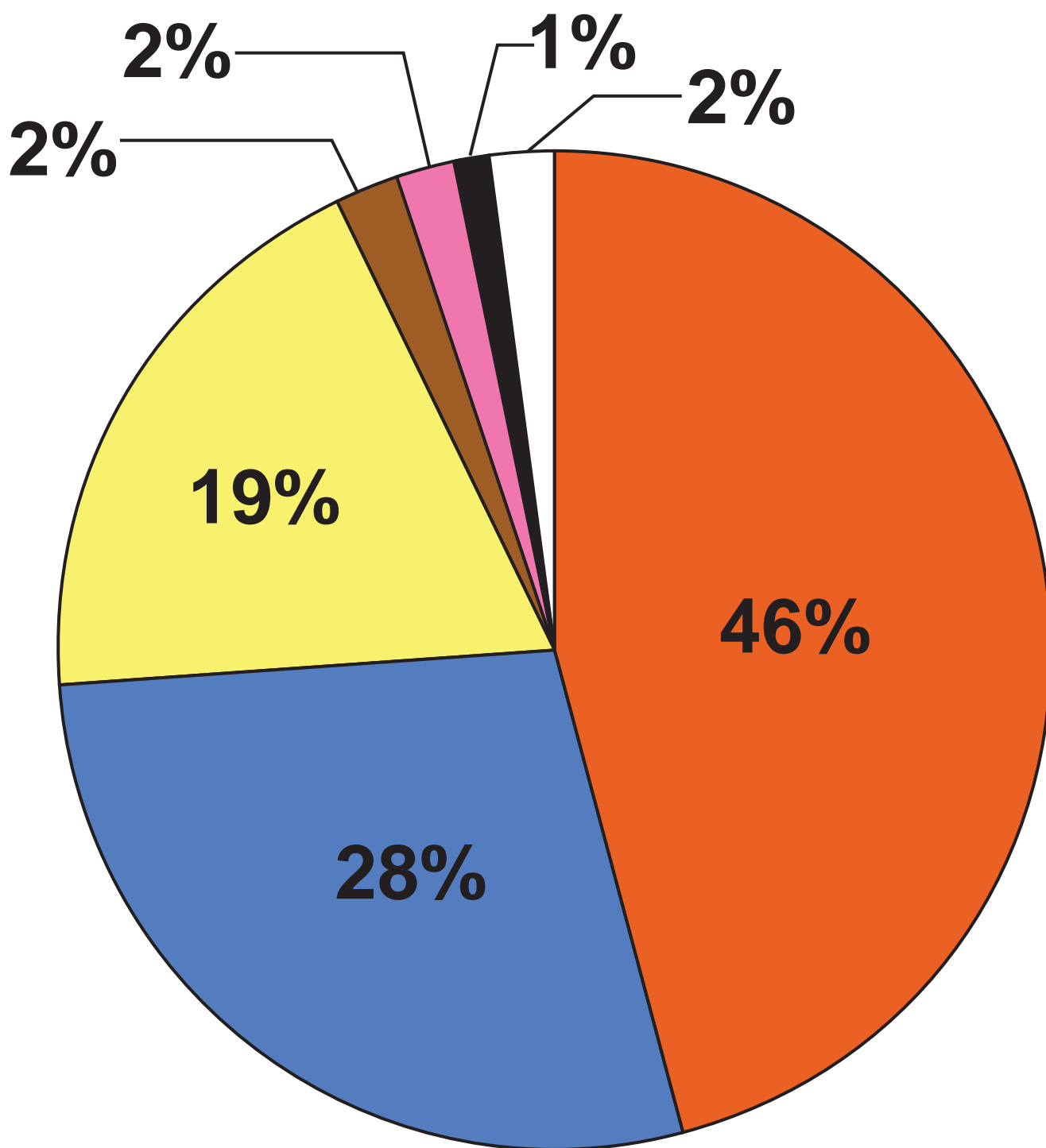
FIGURE 6a








FIGURE 6b



FIGURE 6c – For use with Question 3



KEY

-  **White (European Canadian)**
-  **Chinese**
-  **Asian (except Chinese)**
-  **Latin American**
-  **Aboriginal (indigenous peoples)**
-  **Black**
-  **Other**

[Turn over]

FIGURE 6d – For use with Question 3

| EMPLOYMENT SECTOR | THOUSANDS |
|--|------------------|
| GOODS PRODUCING SECTOR | 222.6 |
| Agriculture | 7.2 |
| Forestry, fishing, mining and utilities | 17.0 |
| Construction and manufacturing | 198.4 |
| SERVICES PRODUCING SECTOR | 1070.9 |
| Trade and retail | 196.3 |
| Transportation and warehousing | 85.2 |
| Finance and business | 144.0 |
| Science and technology | 130.5 |
| Education, health and public administration | 291.2 |
| Recreation and tourism | 169.7 |
| Other services | 54.0 |

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FIGURE 7a – For use with Question 4

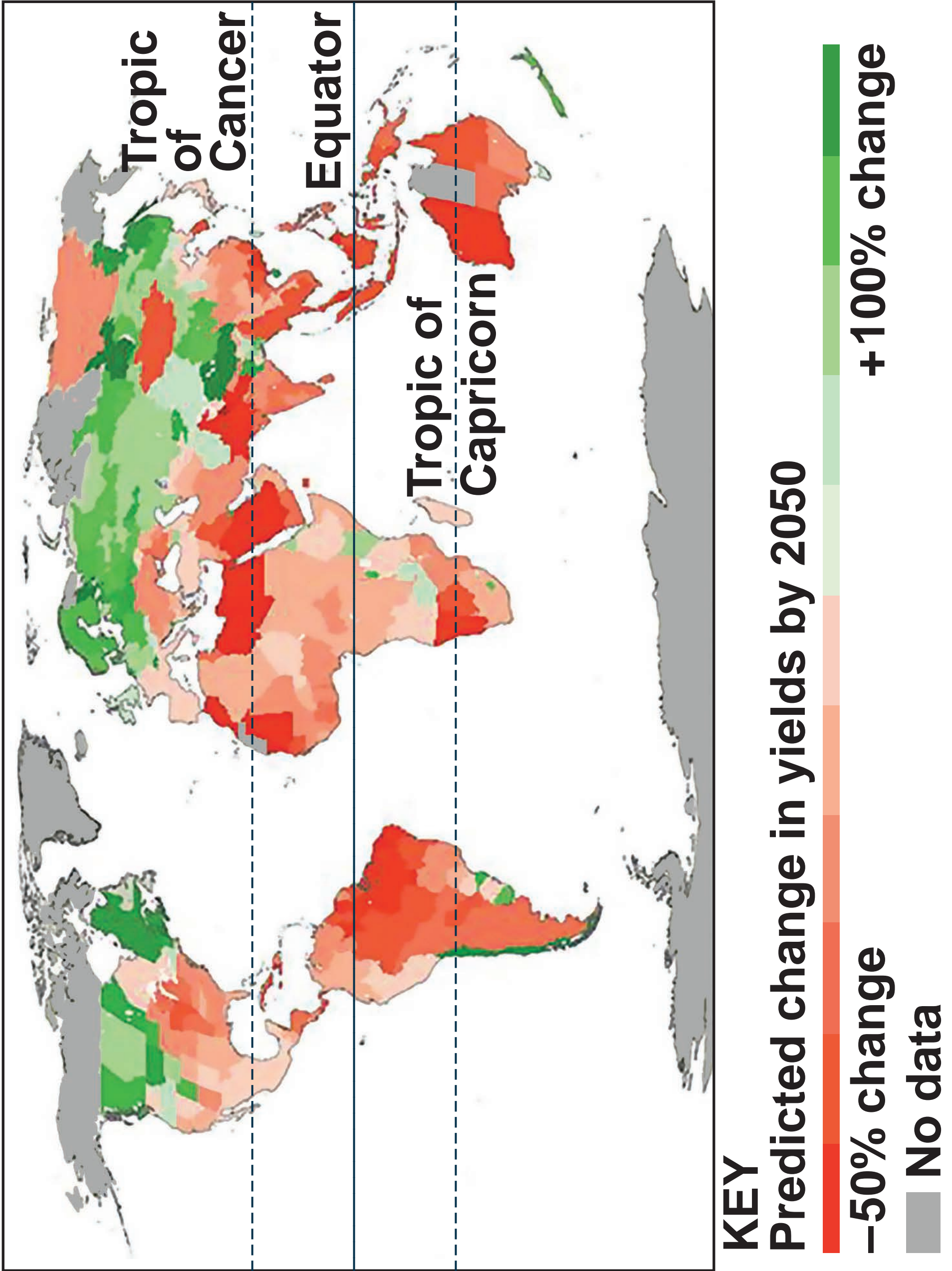
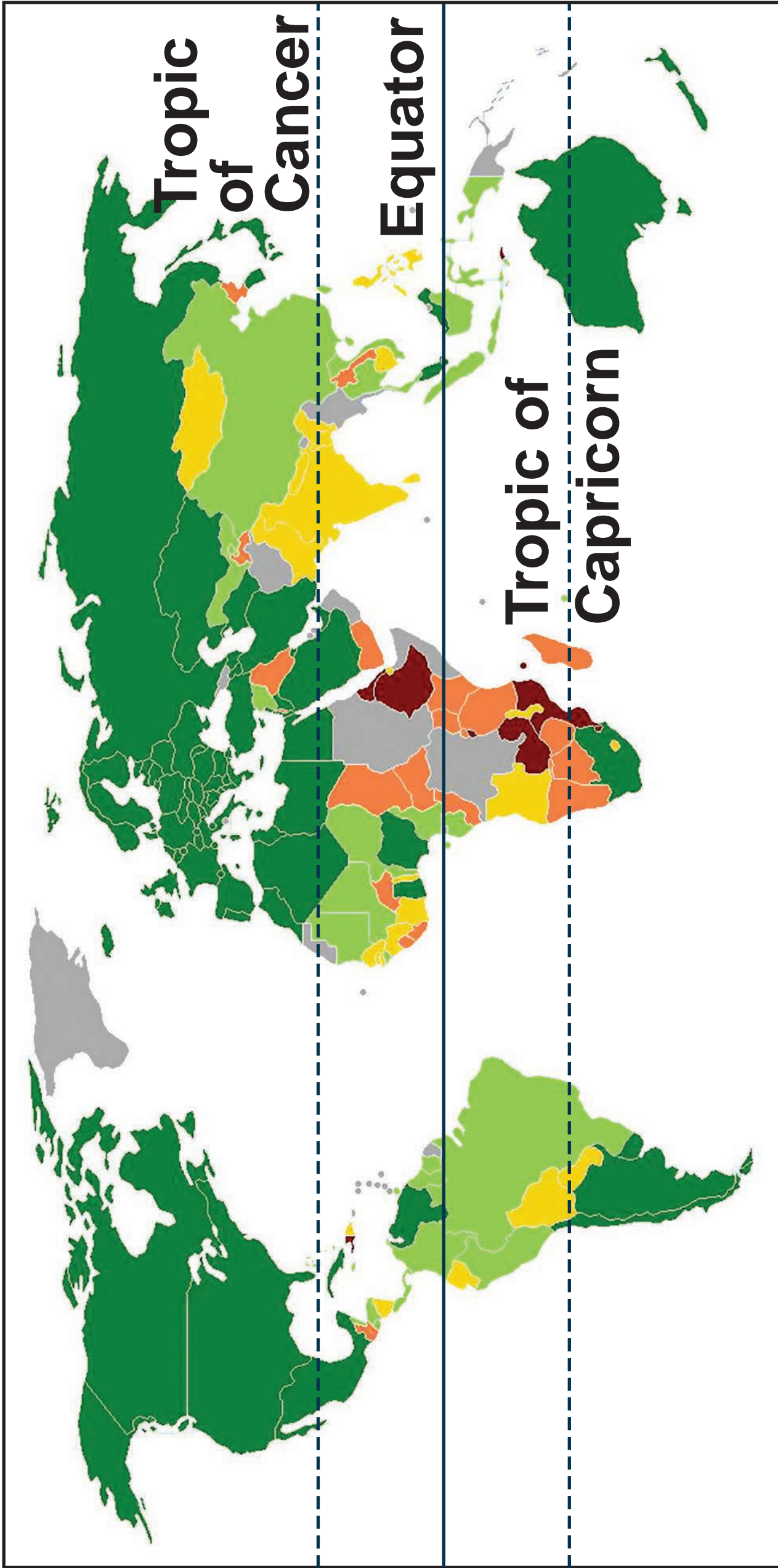


FIGURE 7b – For use with Question 4



KEY

% of population undernourished

More than 35

25.0 – 35.0

15.0 – 24.9

5.0 – 14.9

Less than 5

No data

[Turn over]

FIGURE 8 – For use with Question 4

Ghana hopes G8 New Alliance will end long history of food insecurity



Despite Ghana's large tracts of fertile land, the west African country has a long history of food insecurity. Millions in the south are no longer at risk, but the number of vulnerable people in the more arid north has increased in recent years.

The government says that is why Ghana has signed up to the G8 New Alliance for Food Security and Nutrition in 2012. Under the initiative, the country will focus on five crops: cowpea, maize, cassava, rice and yam.

“This is really about improving the environment of aid effectiveness, food and nutrition so that countries can really take ownership of their food security and initiatives,” said the Deputy Food and Agriculture Minister. “Ghana has huge potential in horticultural crops, in vegetables and fruits like pineapple. But natural resources by themselves do not bring economic returns. What is needed is more investment. There are better seeds than we are using, high-yield hybrid seeds that can double or triple harvests.”

There was, however, almost no knowledge of the G8 initiative among some stakeholders, including farmers and agricultural campaign groups contacted by The Guardian. The government admits that it could have done more to consult those involved in the agricultural sector before signing up to the plan.

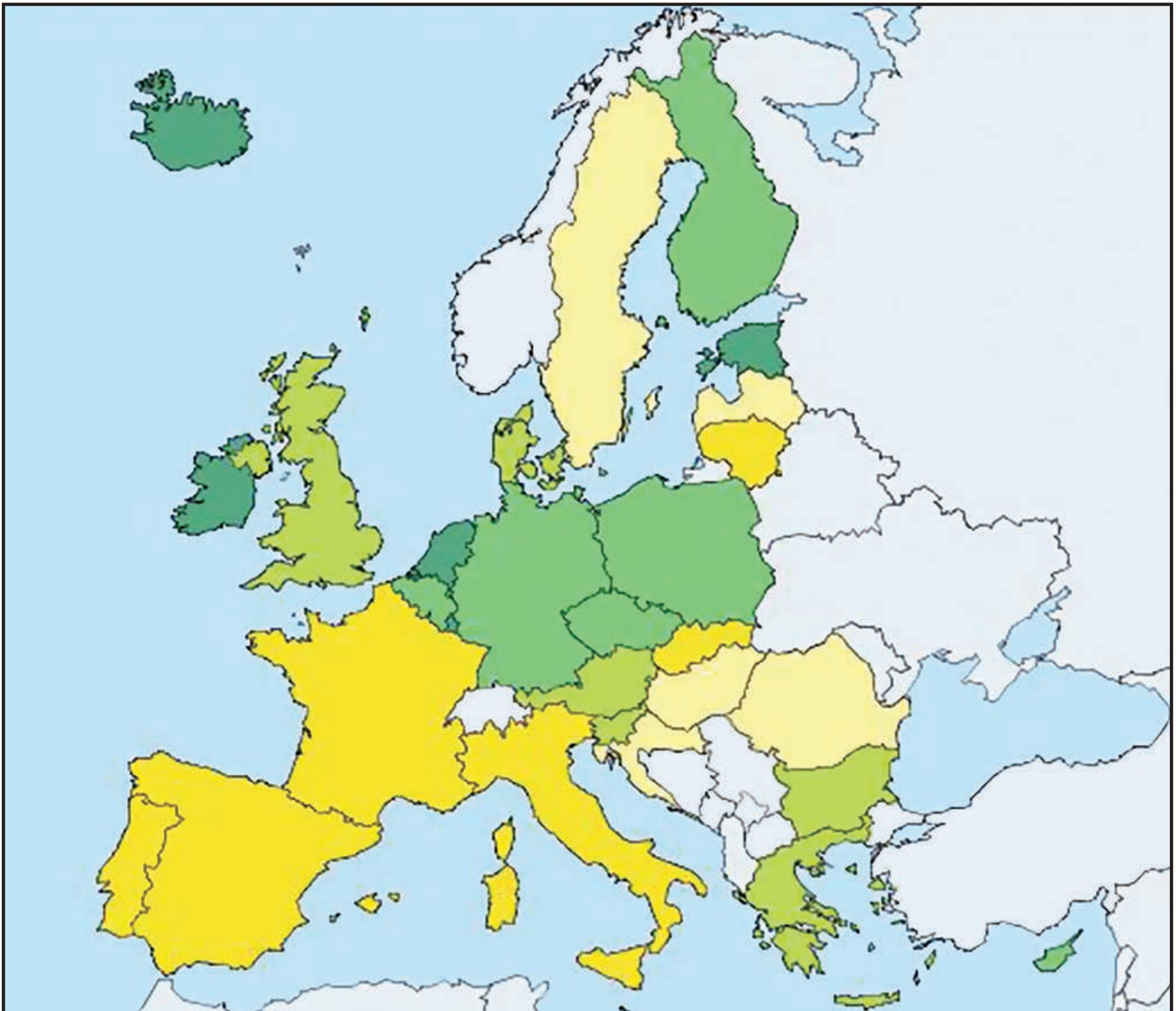
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Confusion surrounding the plans is made worse, critics say, by a dizzying array of regional and national agriculture programmes that are inaccessible to ordinary people. All the initiatives involve providing more incentives for the private sector to buy and cultivate land, and to become involved in the country's seed industry. But there has been growing concern in Ghana that the commercialisation of the food industry will not benefit small farmers.

A spokesperson from the University of Ghana's agriculture college said "For the peasant farmers in Ghana, land is life. If multinational producers are given the ability to buy large quantities of land, then naturally the farmers who depend on those facilities may be deprived of their livelihood. And so most people would have serious concerns about that."

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FIGURE 9a – For use with Question 5**KEY****Tonnes of CO₂ equivalent per capita, 2015**

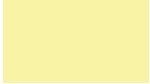




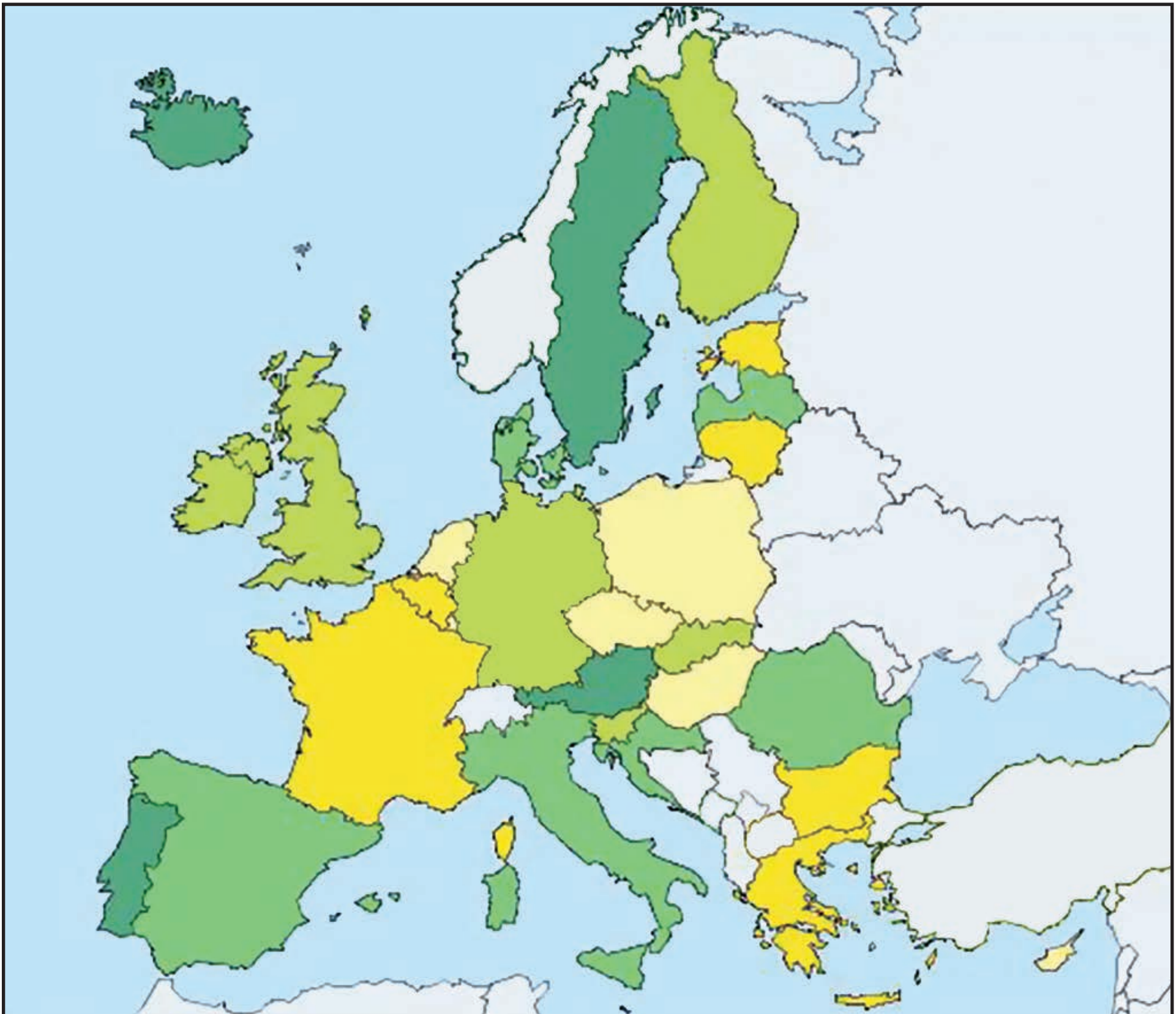
| | | | |
|---|--------------------|--|----------------------|
|  | 5.65 – 6.24 |  | 9.44 – 12.21 |
|  | 6.25 – 7.63 |  | 12.22 – 20.75 |
|  | 7.64 – 9.43 | | |

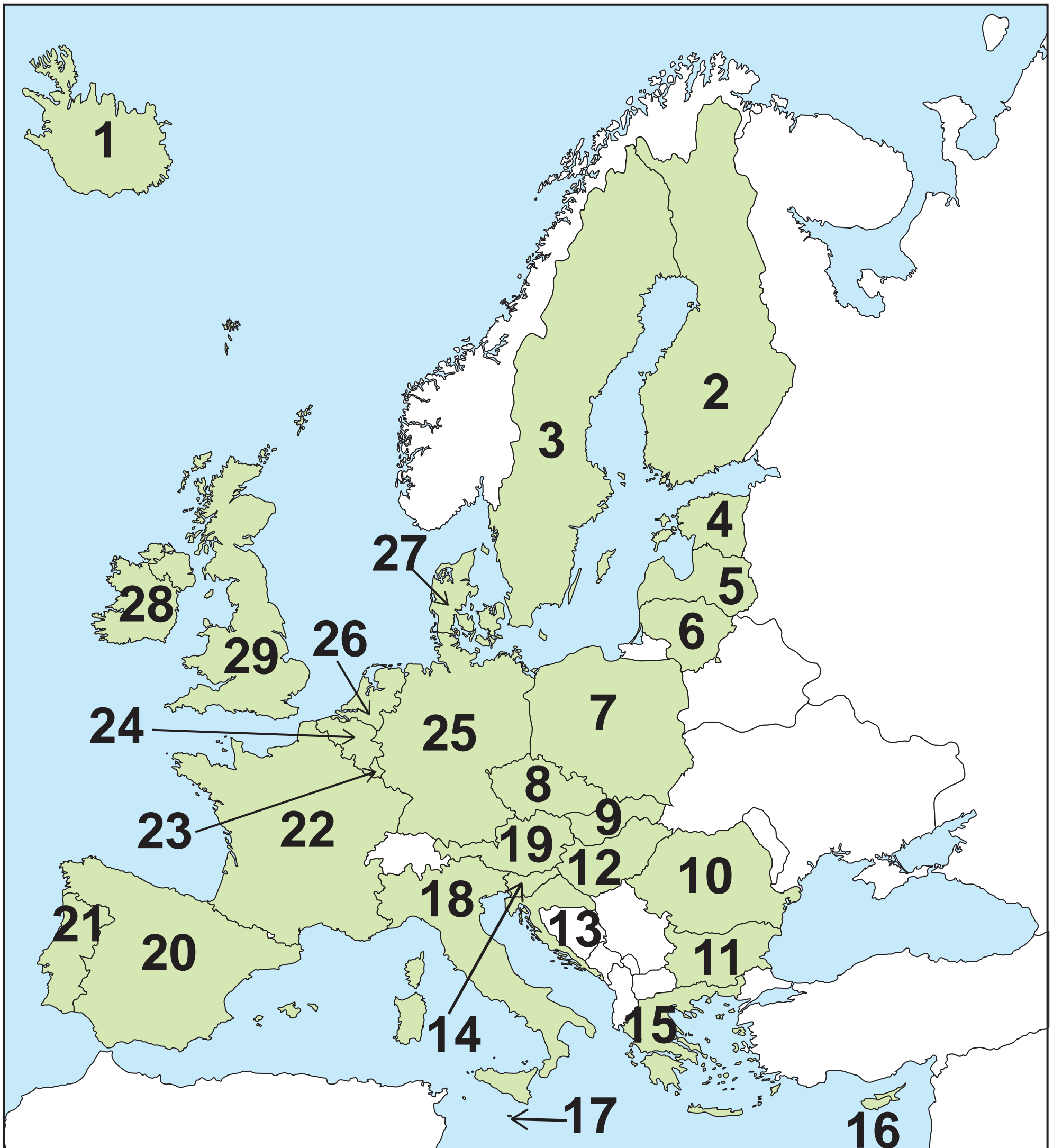
FIGURE 9b – For use with Question 5**KEY**

**% electricity generated from
renewable sources**

| | | | |
|---|--------------------|--|-----------------------|
|  | 4.2 – 14.0 |  | 33.2 – 52.1 |
|  | 14.1 – 22.0 |  | 52.2 and above |
|  | 22.1 – 33.1 | | |

[Turn over]

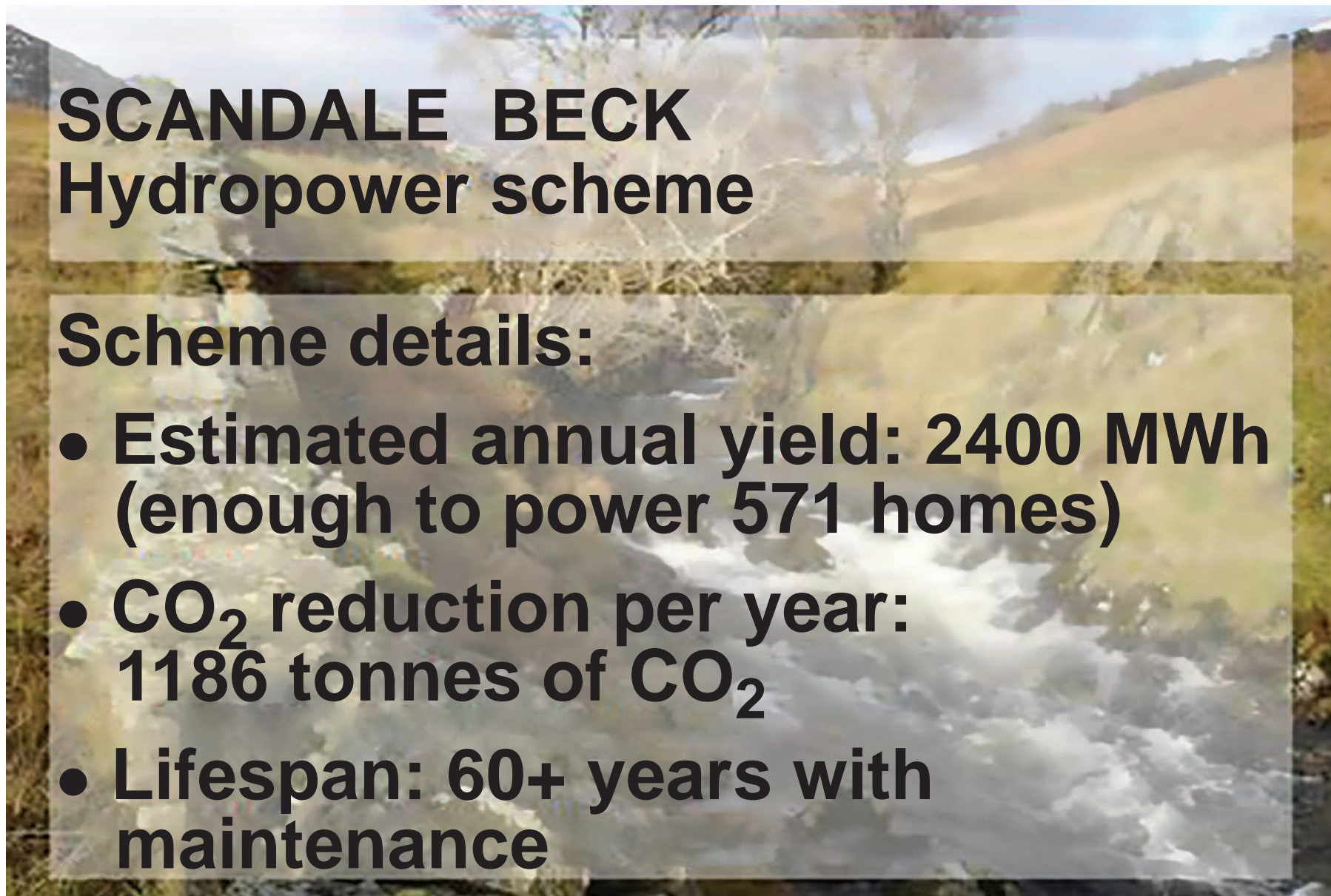
FIGURE 9c – For use with Question 5



KEY

- | | | | |
|-----------|------------------------|-----------|--------------------|
| 1 | Iceland | 16 | Cyprus |
| 2 | Finland | 17 | Malta |
| 3 | Sweden | 18 | Italy |
| 4 | Estonia | 19 | Austria |
| 5 | Latvia | 20 | Spain |
| 6 | Lithuania | 21 | Portugal |
| 7 | Poland | 22 | France |
| 8 | Czech Republic | 23 | Luxembourg |
| 9 | Slovak Republic | 24 | Belgium |
| 10 | Romania | 25 | Germany |
| 11 | Bulgaria | 26 | Netherlands |
| 12 | Hungary | 27 | Denmark |
| 13 | Croatia | 28 | Ireland |
| 14 | Slovenia | 29 | UK |
| 15 | Greece | | |

[Turn over]

FIGURE 10a – For use with Question 5**How the scheme works:**

- **A proportion of water is abstracted from Scandale Beck through a 2 mm fine screen.**
- **The water is sent down a buried pipeline, dropping 200 m to a turbine.**
- **The fall creates potential energy that is converted to mechanical energy by the turbine and to electrical energy by a generator.**
- **All water exits the turbine and is directed back to the Beck.**



The intake weir incorporates a fish pass to facilitate the movement of a small population of brown trout around the new weir.

Full restoration works along with a six-year monitoring programme of the flora in the construction footprint will monitor the effects of the construction over time, minimising any long-term changes.

[Turn over]



Ellergreen Hydro Ltd builds schemes that are traditional in design and appearance while making use of modern technology to produce clean, sustainable power and reduce the use of fossil fuels.



FIGURE 10b – For use with Question 5

| Month | Potential output (MWh) | Actual output (MWh) |
|----------------------|-------------------------------|----------------------------|
| November 2015 | 653.04 | 646.00 |
| April 2016 | 653.04 | 217.00 |
| August 2016 | 674.81 | 276.00 |
| November 2016 | 653.04 | 268.00 |
| January 2017 | 674.81 | 181.00 |

MWh = Megawatt-hours, a measure of electricity generation

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