iGeo Multimedia Test
(Sample Questions)

Source: https://www.iac-irtac.org/?q=node/136

- This test has **40 questions**.

- Look at every page and read the questions carefully.

- You have **50 minutes (educated in English) / 60 minutes (not educated in English) to complete the test**. If you finish early, please wait silently until the time is over.

- Each question is multiple-choice. Choose A, B, C, **or** D. **Only one answer is correct**.

- Mark your choice on the **answer sheet** by making a circle around the letter that you want to select.
    - If you make a mistake, cross out the selected letter and circle a new choice. If you believe there will be any confusion, also write the letter of your answer next to the question number.

- The ![video camera icon] symbol represents a video clue; please watch the video to answer the question.

- The ![audio speaker icon] symbol represents an audio clue; please play the audio to answer the question.

- For navigation, please use the arrows on the keyboard to move next (↓ →) or previous (↑ ←) page. ==**DO NOT CLICK ON THE ESCAPE BUTTON, AS THAT ENDS THE PRESENTATION**==

Copyright and Use Notice

Q 01 In which country were the following photographs taken?

A Fiji

B New Caledonia

C Samoa

D Papua New Guinea

Q 02 — What natural process is most likely responsible for the landscape transformation observed in the satellite images?

Source: https://science.nasa.gov/earth/earth-observatory/fresh-flows-spread-across-iceland-152631/

A   An effusive eruption from a fissure

B   An oil spill from a ruptured pipeline

C   The expansion of a wildfire

D   The sudden land collapse by melting permafrost

September 20, 2023   February 10, 2024   March 30, 2024

2 km
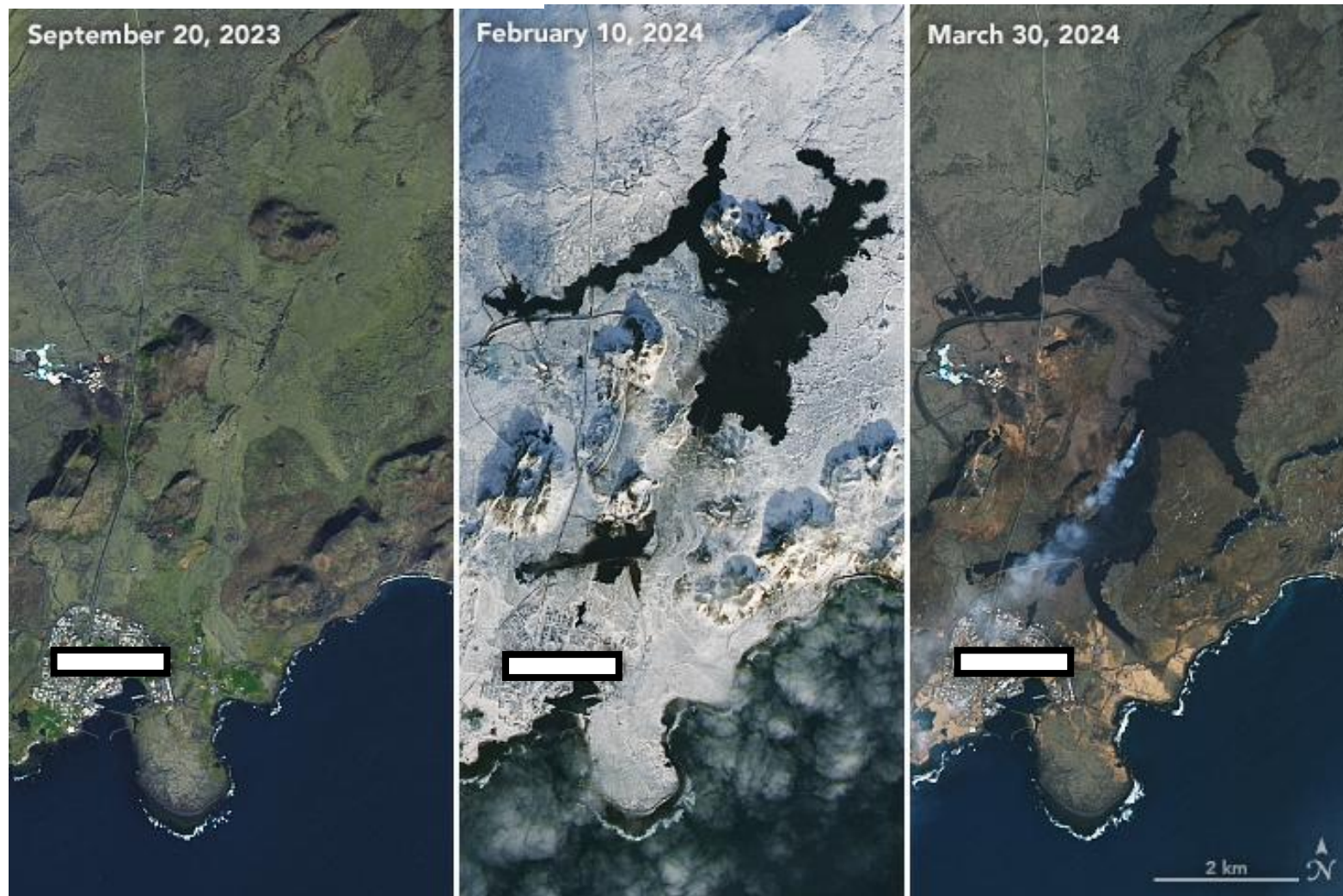
Intensionally blanked

Q 03 Referring to the planetary boundaries diagrams, which of the following statements best describes the status of the "biosphere integrity" (biodiversity loss) boundary in 2023?

Source: https://www.stockholmresilience.org/news--events/doing-business-within-planetary-boundaries/chapter-1-a-planet-under-pressure.html
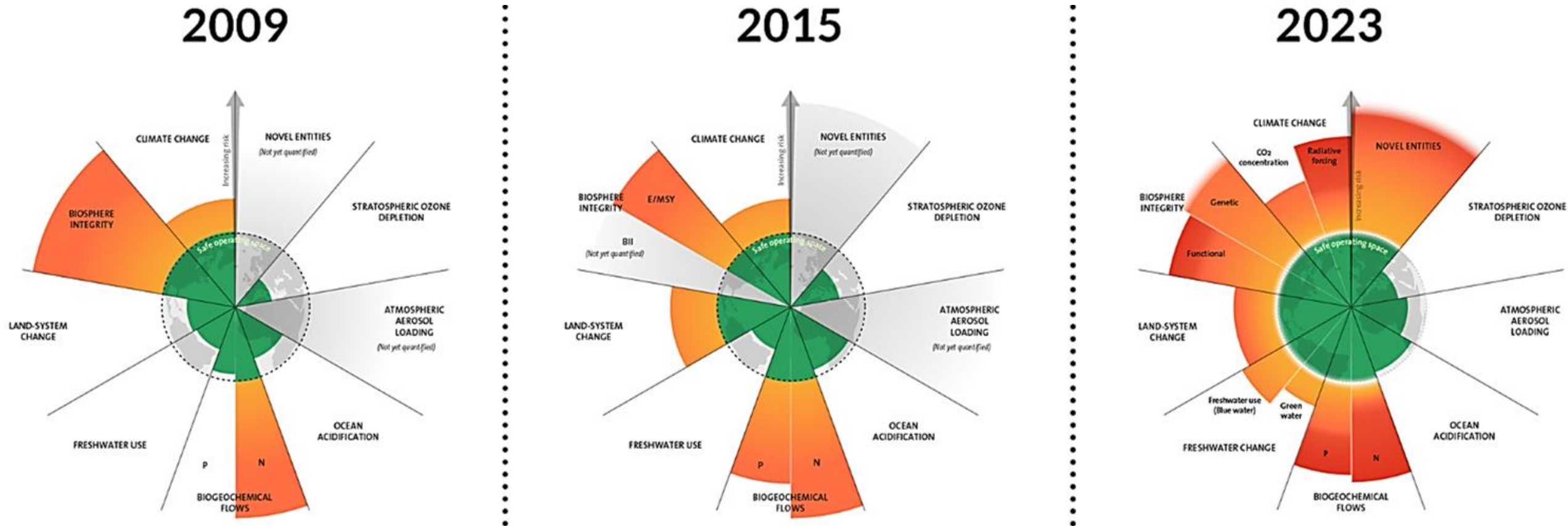
A It has been exceeded, suggesting unsustainable rates of species extinction.

B It is approaching the boundary but remains within the safe zone.

C It is currently within the safe operating space, with minimal risk.

D It is not yet defined within the planetary boundaries framework.

Source: https://doi.org/10.1037/10472-004

Issue 1: Maintenance of heritage cultural identity

Strategies of ethnocultural groups

Strategies of larger society
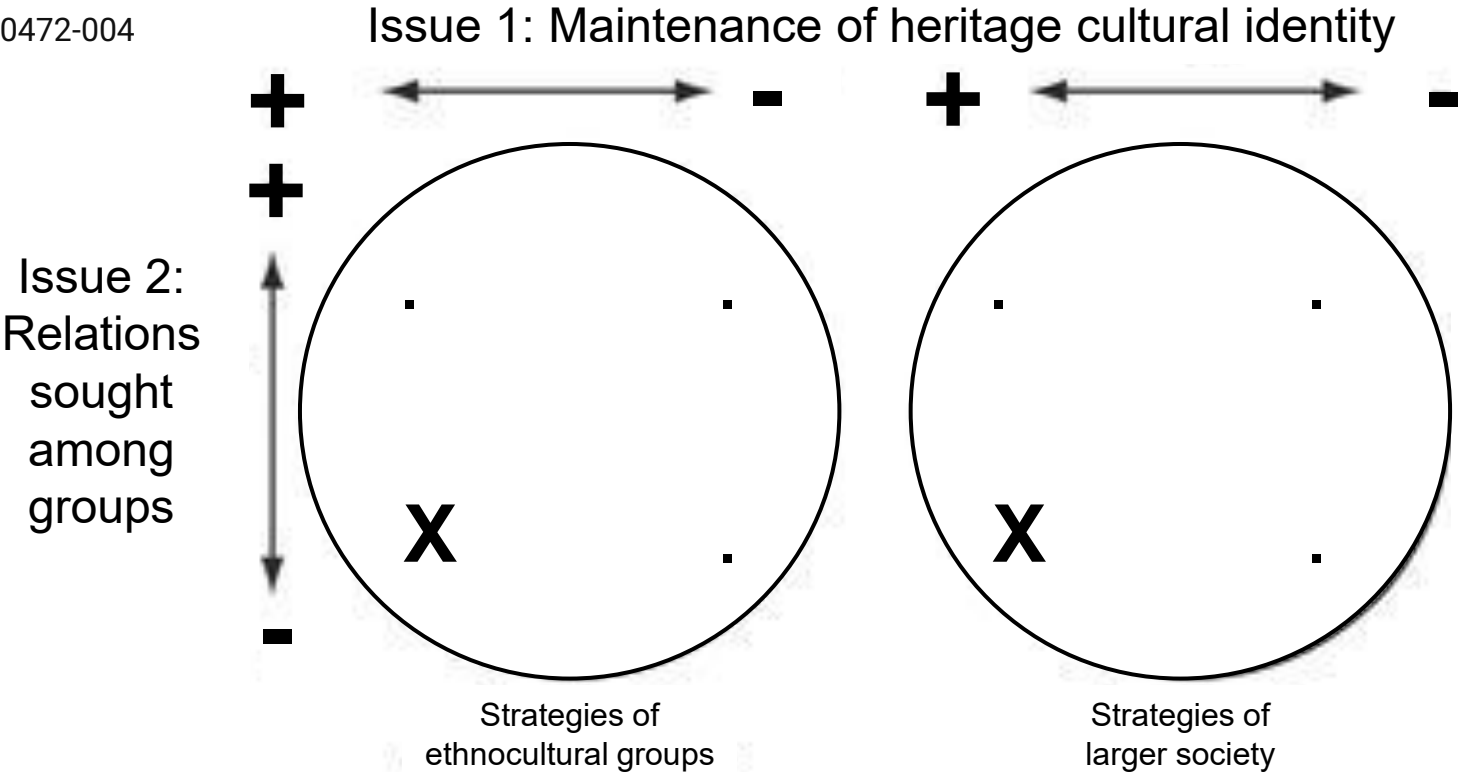
A	Assimilation and Melting pot
B	Integration and Multiculturalism
C	Marginalisation and Exclusion
D	Separation and Segregation

Source: https://commons.wikimedia.org/wiki/File:Nuclear_power_generation_in_different_countries.svg

A Gross domestic product

B Immigrant population

C Nuclear power generation

D Vehicle production

United States

China

France

South Korea

Germany

1965   1980   1990   2000   2010   2022
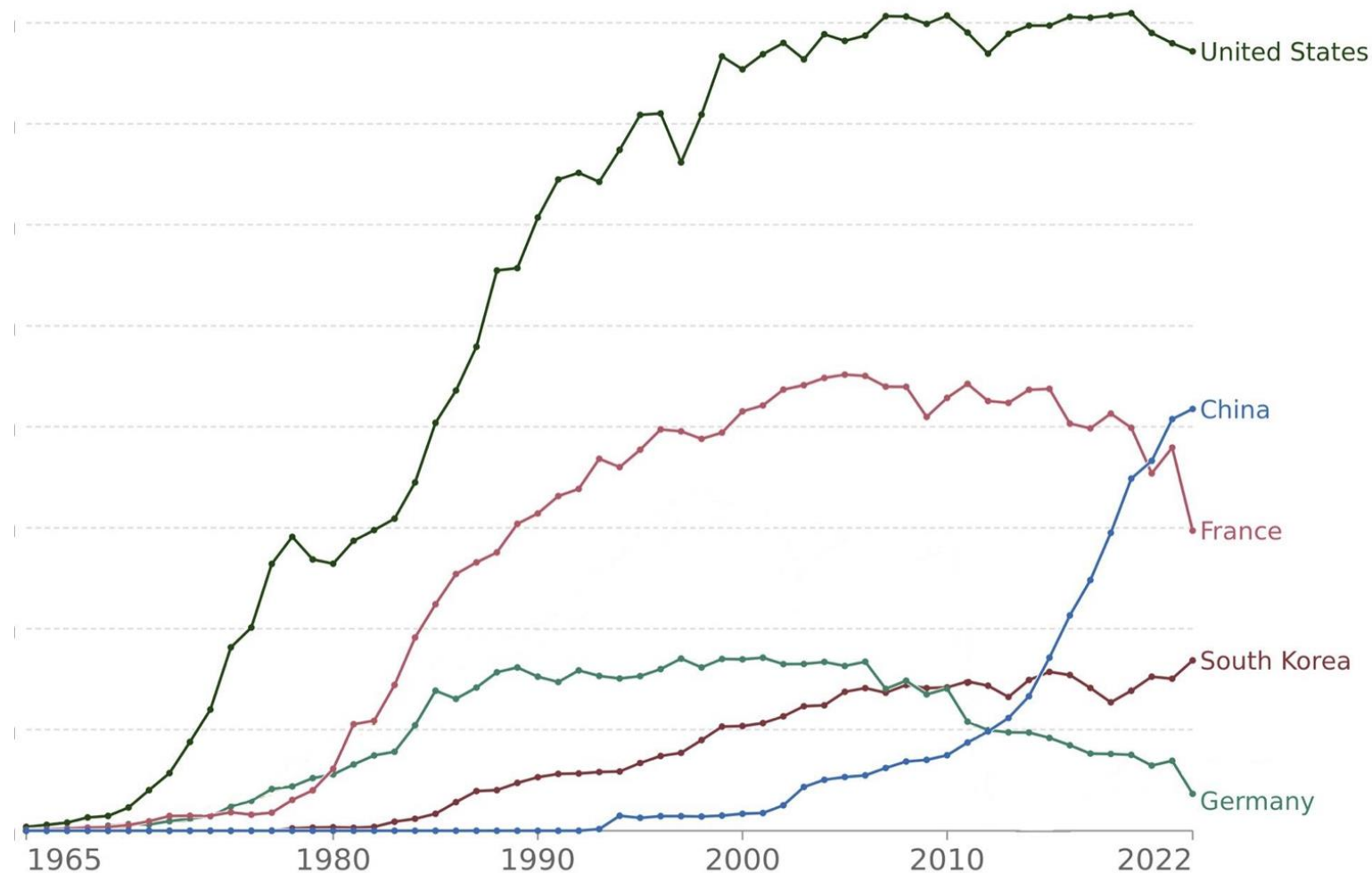
Q 06 Based on the schematic, which environmental concern would most likely be associated with the desalination process shown?

A The reduction of underground freshwater recharge due to changes in land use

B The release of concentrated brine into the sea, potentially harming marine life

C The competition between vegetation and infrastructure for freshwater allocation

D The increased likelihood of localised flooding from surface water mismanagement
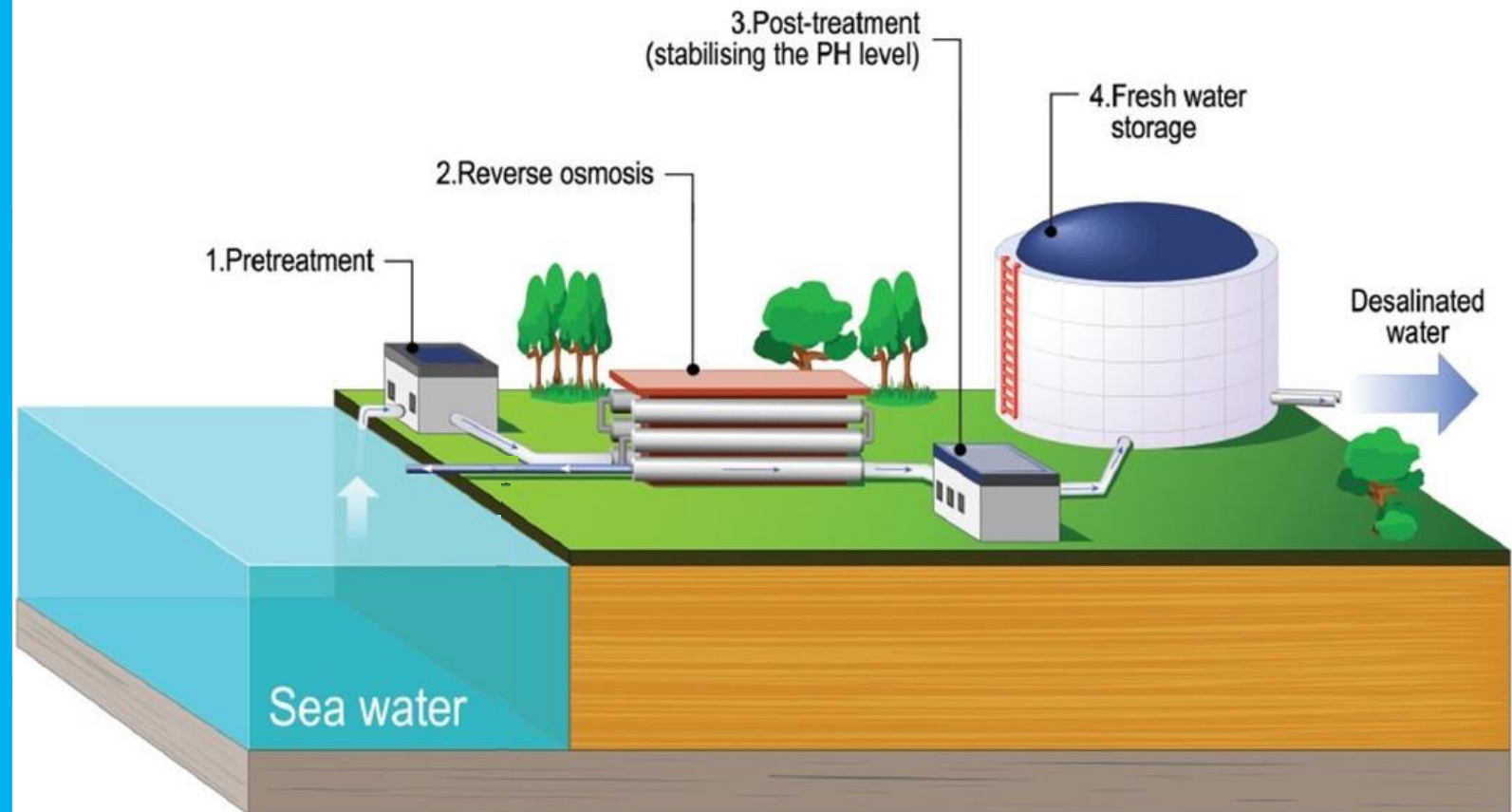
Q 07 What might be a long-term consequence if the Gulf of Maine continues warming at the current rate?

A Ocean temperatures worldwide will increase at a similar pace

B Regional climate patterns in the Gulf will become more predictable

C Marine species could migrate to cooler ocean regions

D The rising temperature trend will stop without human intervention

Sources:
https://www.neaq.org/exhibit/gulf-of-maine/
https://gmri.org/stories/2024-gulf-of-maine-warming-update/

United States

Canada
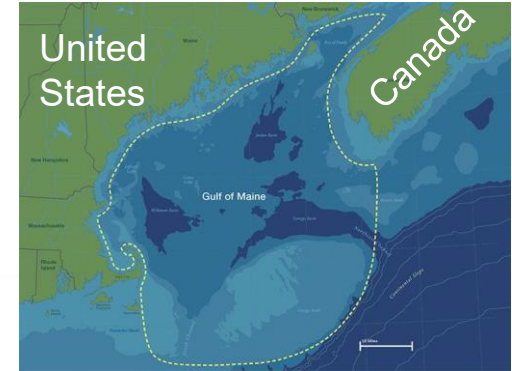
Gulf of Maine:

Annual Sea Surface Temperature Anomalies

1982-2024 Warming Rates
— Global Ocean : 0.3°F / Decade
— Gulf of Maine : 0.84°F / Decade

Sea Surface Temperature Anomaly

2 °F

0 °F

-2 °F

1980   1990   2000   2010   2020

Year

Gulf of Maine
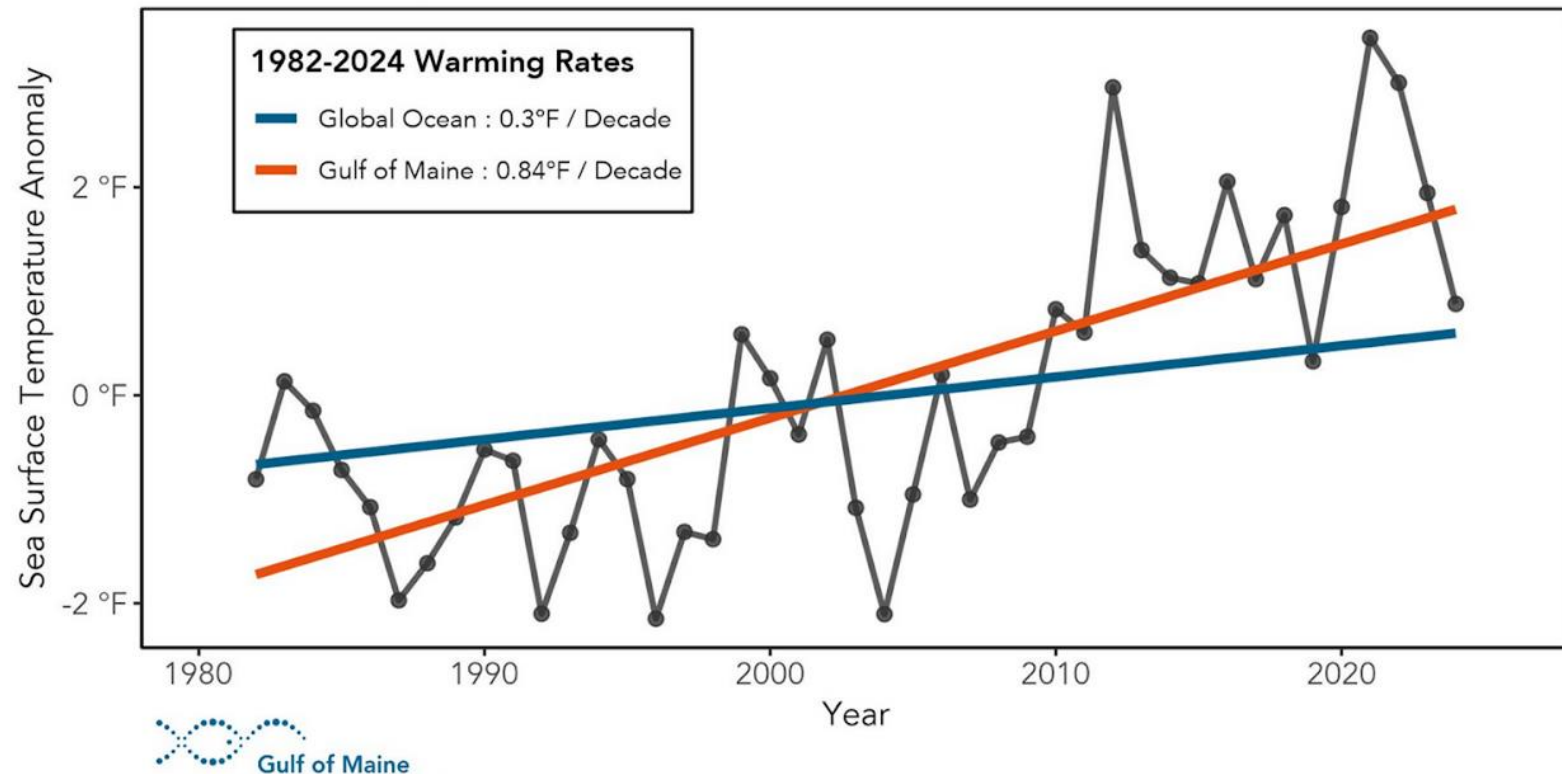
What pattern does this diagram represent?

Time 1: From Large City to Large City

Time 2: From Large City to Medium City

Time 3: From Large and Medium Cities to Smaller Cities

Legend
- Large City
- Medium City
- Small Town
- → directionality
- initial location
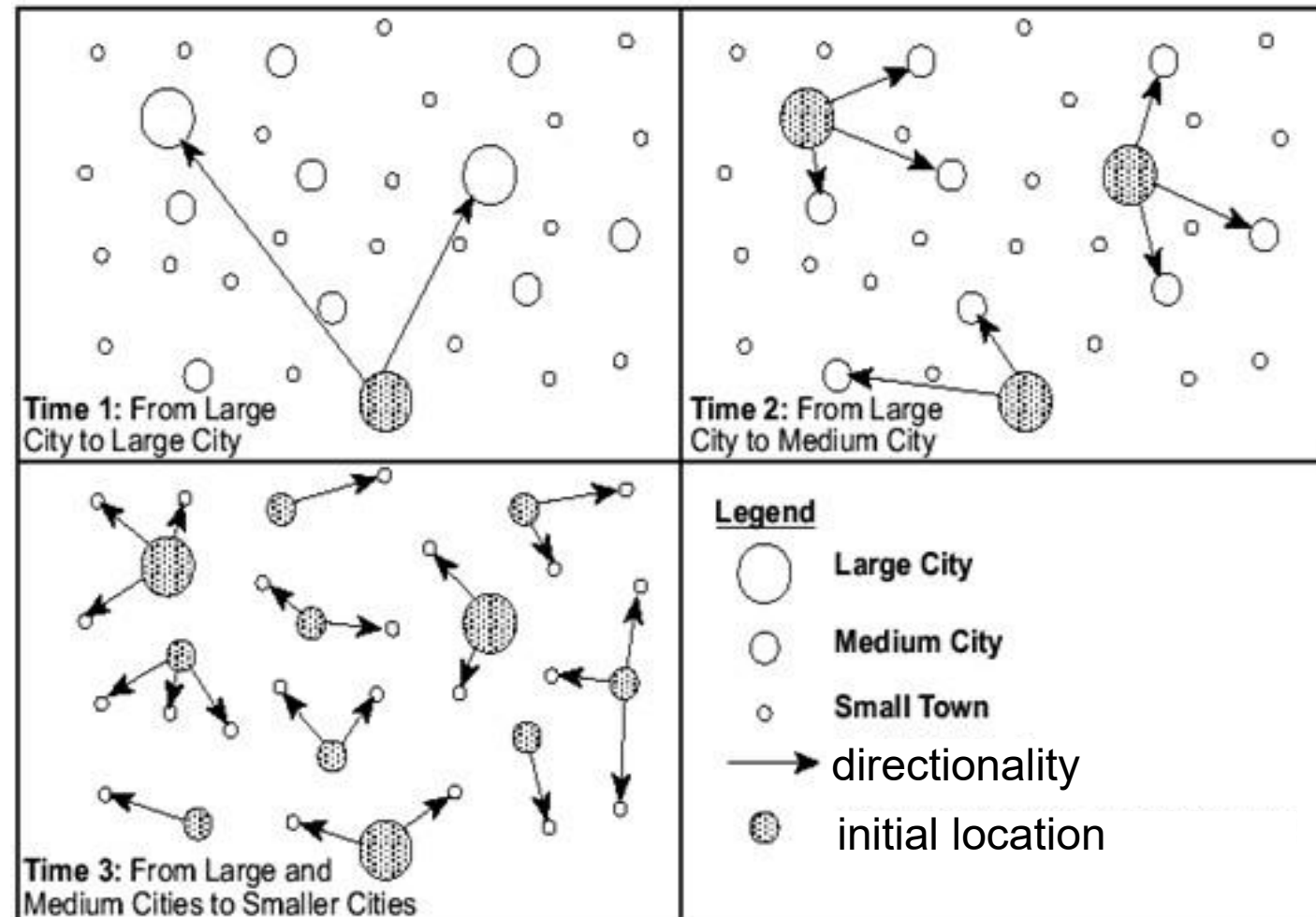
A	Cultural Diffusion	C	Spread of Diseases
B	Flow of Labour	D	Urbanisation

In which of the following scenarios would this urban model be most effectively used to explain urban spatial patterns?

A Analysing residential zones in Global North cities with decentralised business hubs

B Describing factory-based city growth in the early 20th-century industrial era

C Examining informal settlements in peri-urban megacity zones

D Interpreting migration-driven city structures in the Global South since 2010

1 Central business district
2 Wholesale, light manufacturing
3 Low-class residential
4 Medium-class residential
5 High-class residential
6 Heavy manufacturing
7 Outlying business district
8 Residential suburb
9 Industrial suburb
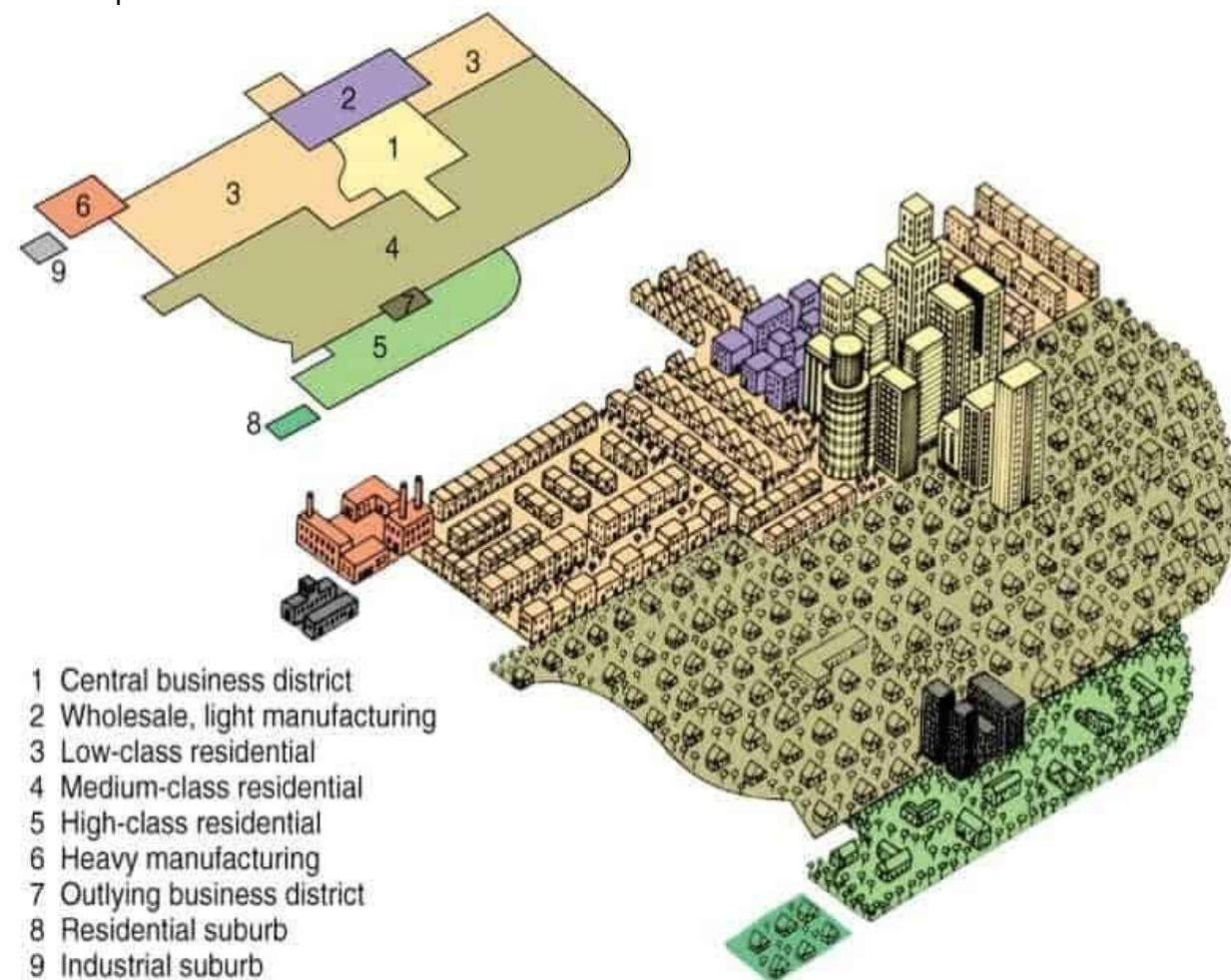
Q 10 Which point on the map is most likely to be represented by the national population pyramid shown?

Sources: https://commons.wikimedia.org/wiki/File:South_Africa_Population_Pyramid_2011_estimates.png
https://www.istockphoto.com/vector/world-map-illustration-gm1311340325-400470881
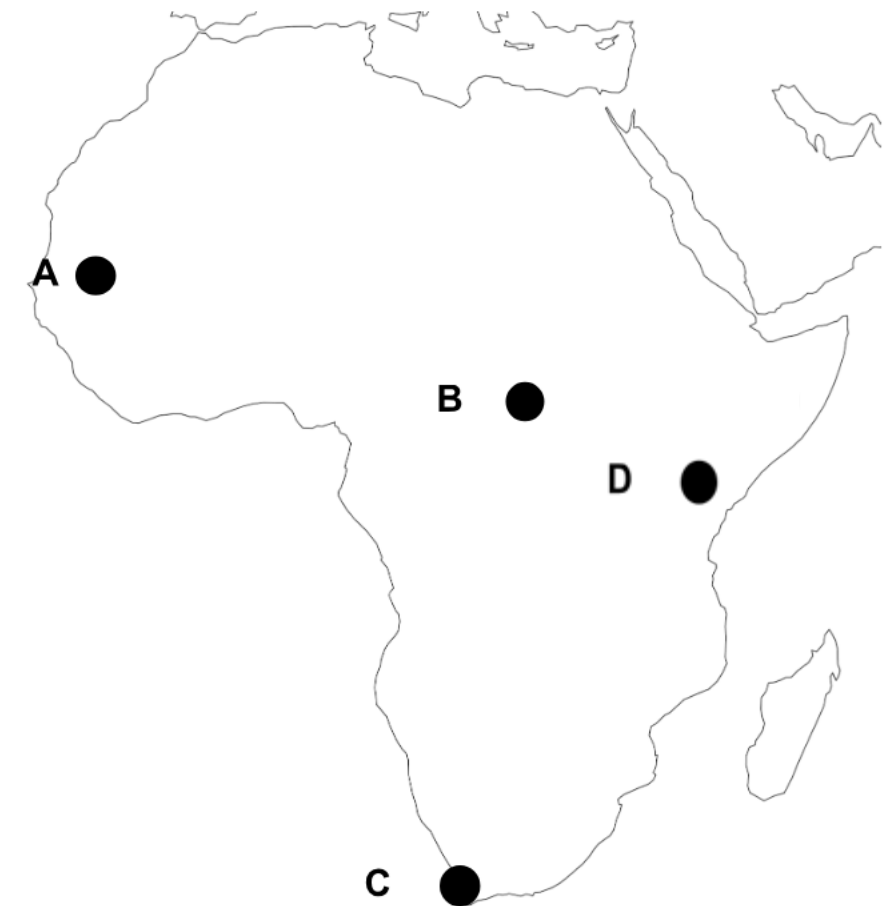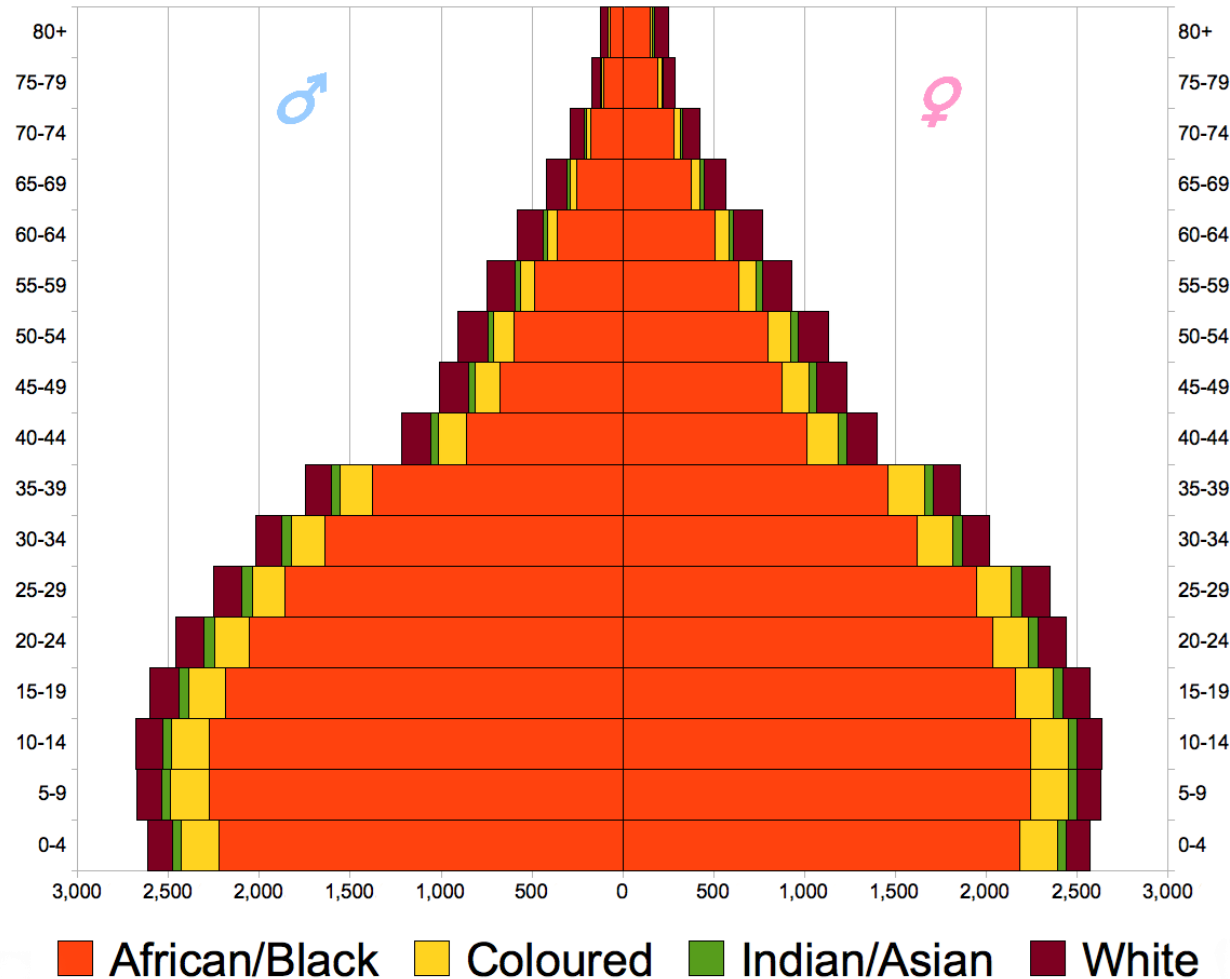
Q 11 This map represents observed and predicted growth in Nairobi between 1986 and 2023. What urban challenge best explains the widespread and fragmented growth pattern?

A The expansion of high-rise residential developments

B The growth of informal and unplanned settlements

The improved public healthcare and service delivery

The increase in affordable housing supply by the government
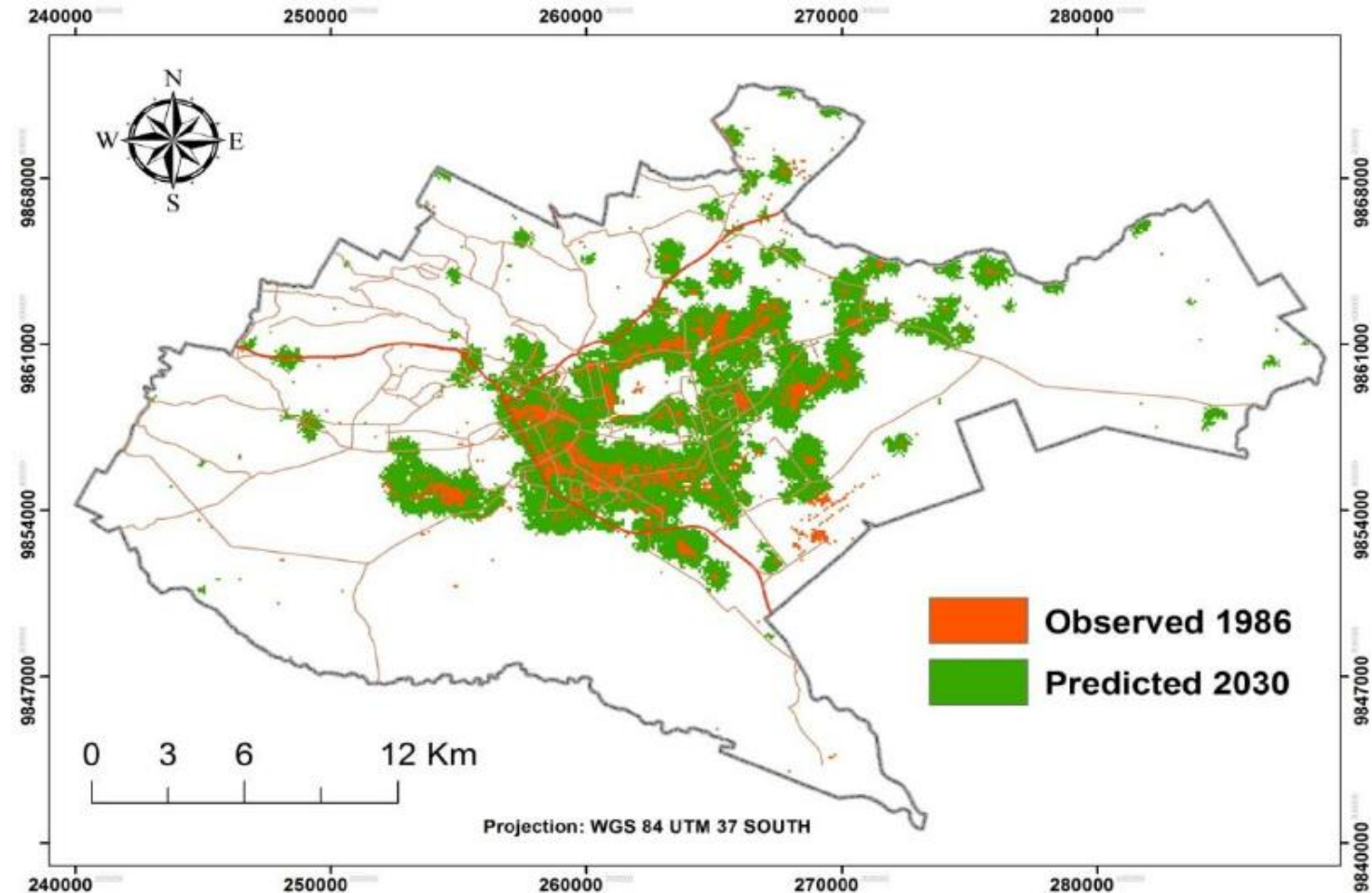
Source: https://www.researchgate.net/figure/Urban-growth-simulation-in-Nairobi-in-scenario-two-2030_fig9_260420063

Q 12 How does the rail network shown on the map contribute to Argentina's economic geography?

Source: https://www.liberallandscape.org/2019/04/15/pedestrian-priority-in-buenos-aires/

A It facilitates export of agricultural products from inland regions

B It improves access between rural communities and cities

C It links large car production sites directly to overseas markets

D It reduces trade dependence on Argentina's landlocked neighbours.
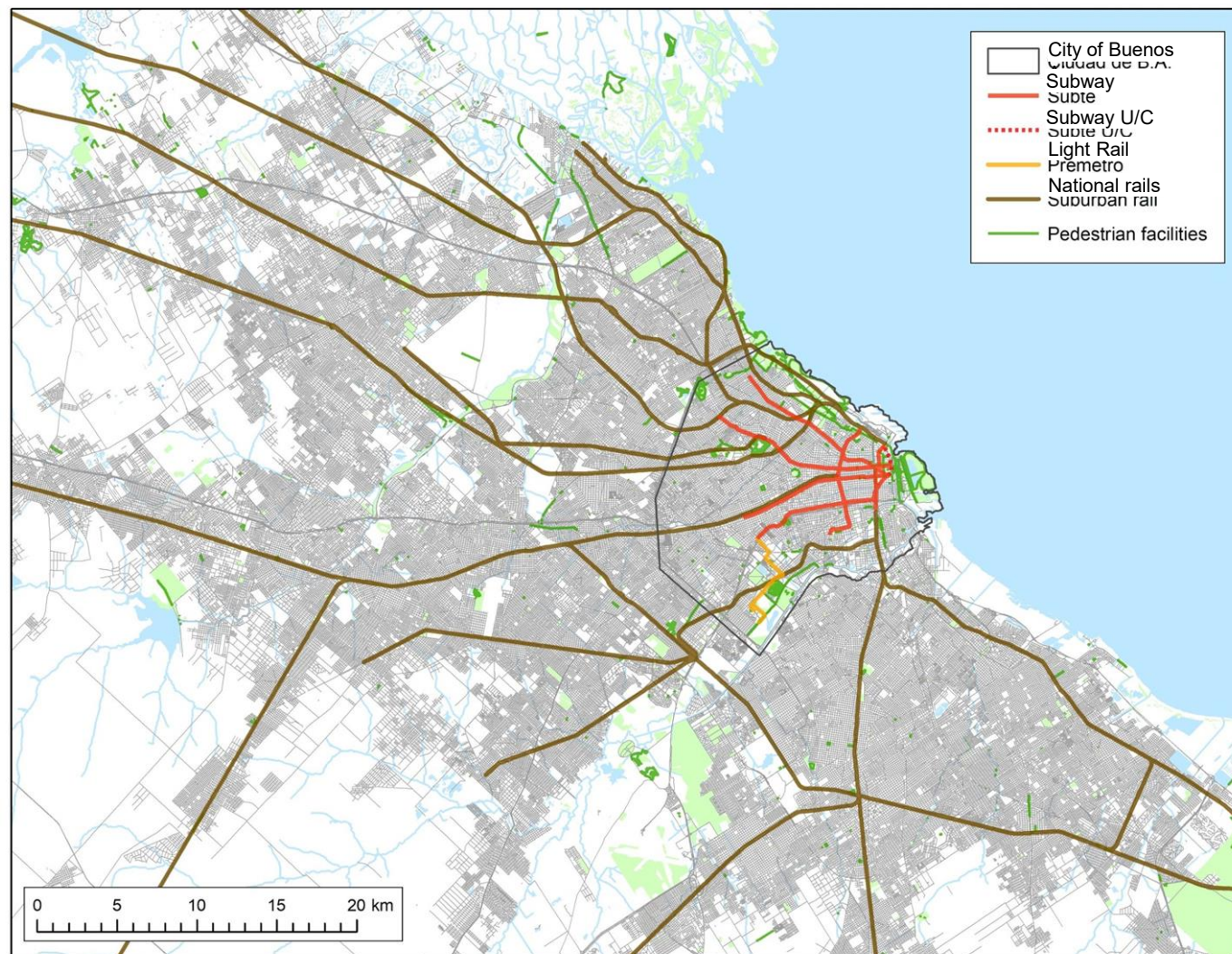
Q 13 Which geographic characteristic best explains the distribution of the world's major wheat-producing areas as shown on the map?

A Broad flatlands that support large-scale farming

B Close distance to international trade ports

C High population densities and urban centres

D Mountainous terrain that conserves soil nutrients

Food calories supply from wheat
Million kcal

	< 1
	1 - 5
	5 - 10
	10 - 25
	25 - 50
	50 - 100
	100 - 138
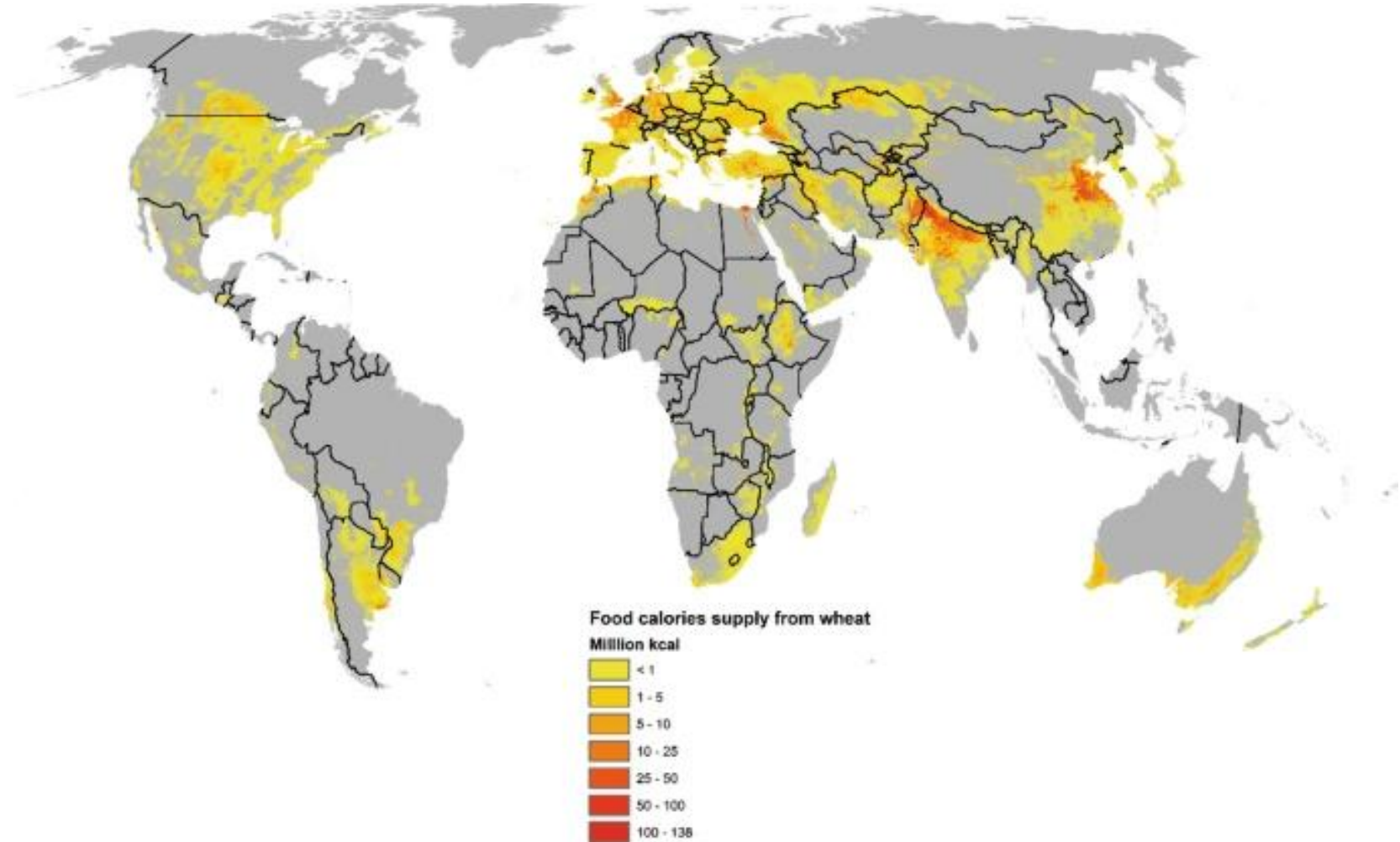
What urban issue is clearly illustrated by the spatial contrast shown in the aerial image?

Clear enforcement of urban green belt zoning policies

Effective launch of smart city development strategies

Deepening economic inequality and spatial segregation

Slowing rates of rural-to-urban migration

Q 15 Which statement is true about these images from Mars and Earth?

Source: https://science.nasa.gov/resource/rock-outcrops-on-mars-and-earth/
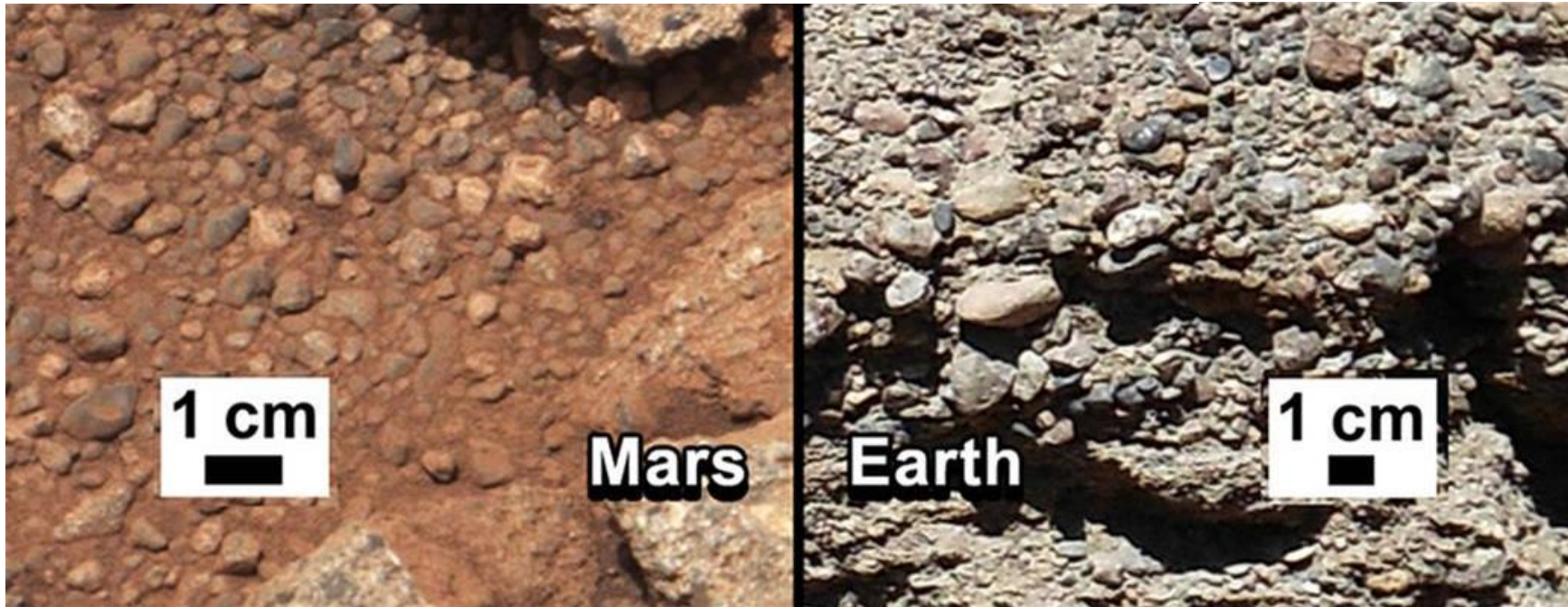
A	Both images show breccia rocks, indicating earthquake activity.
B	Both images show conglomerate rocks, indicating an abundance of liquid.
C	Both images show granite rocks, indicating volcanic activity.
D	Both images show slate rocks, indicating contact metamorphism.

Q 16

The following diagram shows the global distribution of a landform. What is the specific type of landform?

Source: https://www.researchgate.net/figure/Global-distribution-of-fjords_fig1_339626378

A Drumlins

B Fjords

C Nunataks

D Yardangs
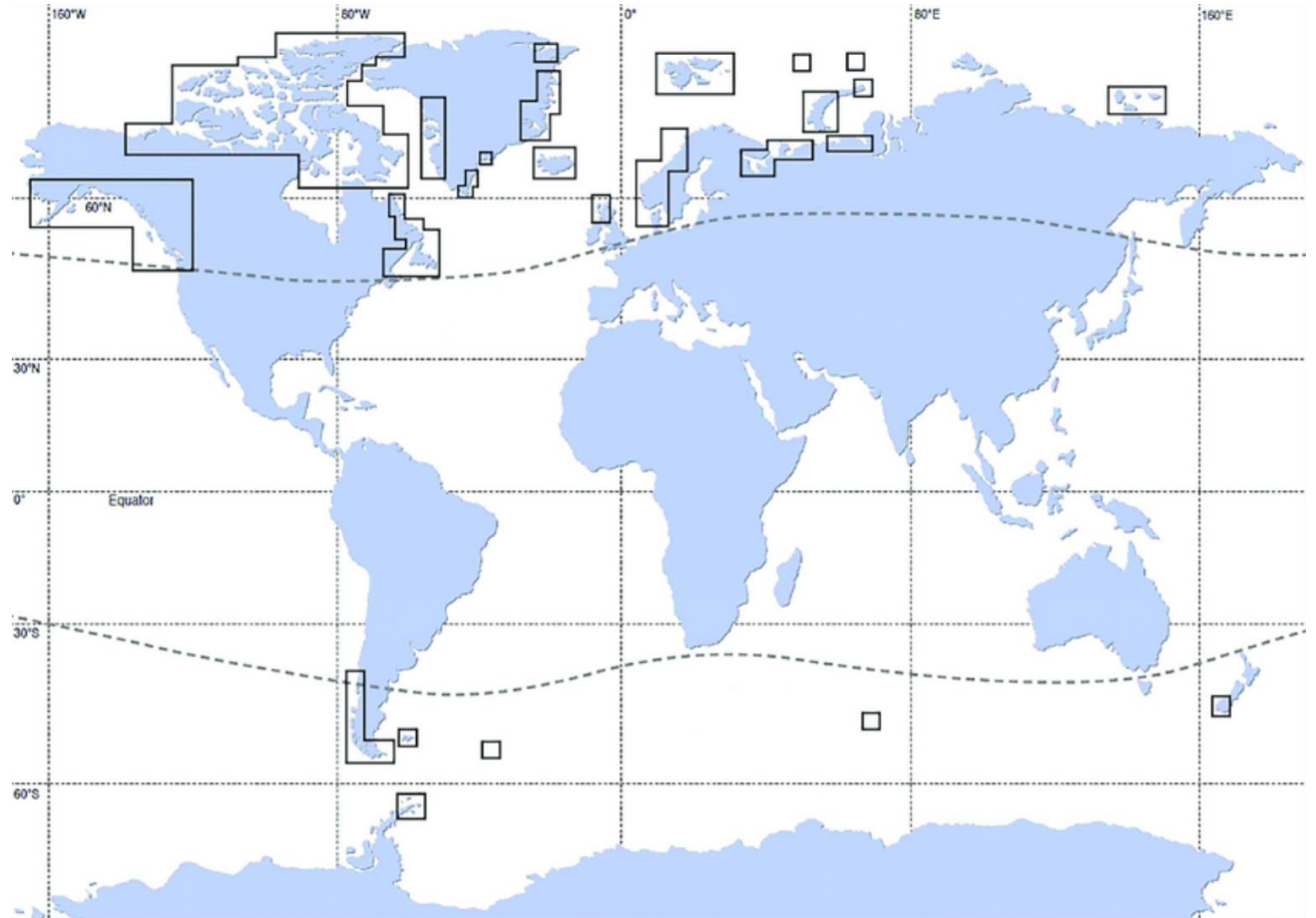
Q 17 What environmental factor likely influenced the site selection for this solar project?

Source: http://en.sasac.gov.cn/2019/01/31/c_813.htm

A Arid climate allows consistent energy output

B Mountainous site for wind energy potential

C Remote site to avoid town conflicts

D Rocky ground supports large structures

Q 18 Which of the following spaces best fulfils Oldenburg's definition of a "Third place"?

A A shared workspace that requires registration to access

B A community café where people from different walks of life gather spontaneously

C A residential garden courtyard shared by tenants, especially families

D A university study zone designed for focused, individual work and quietude.
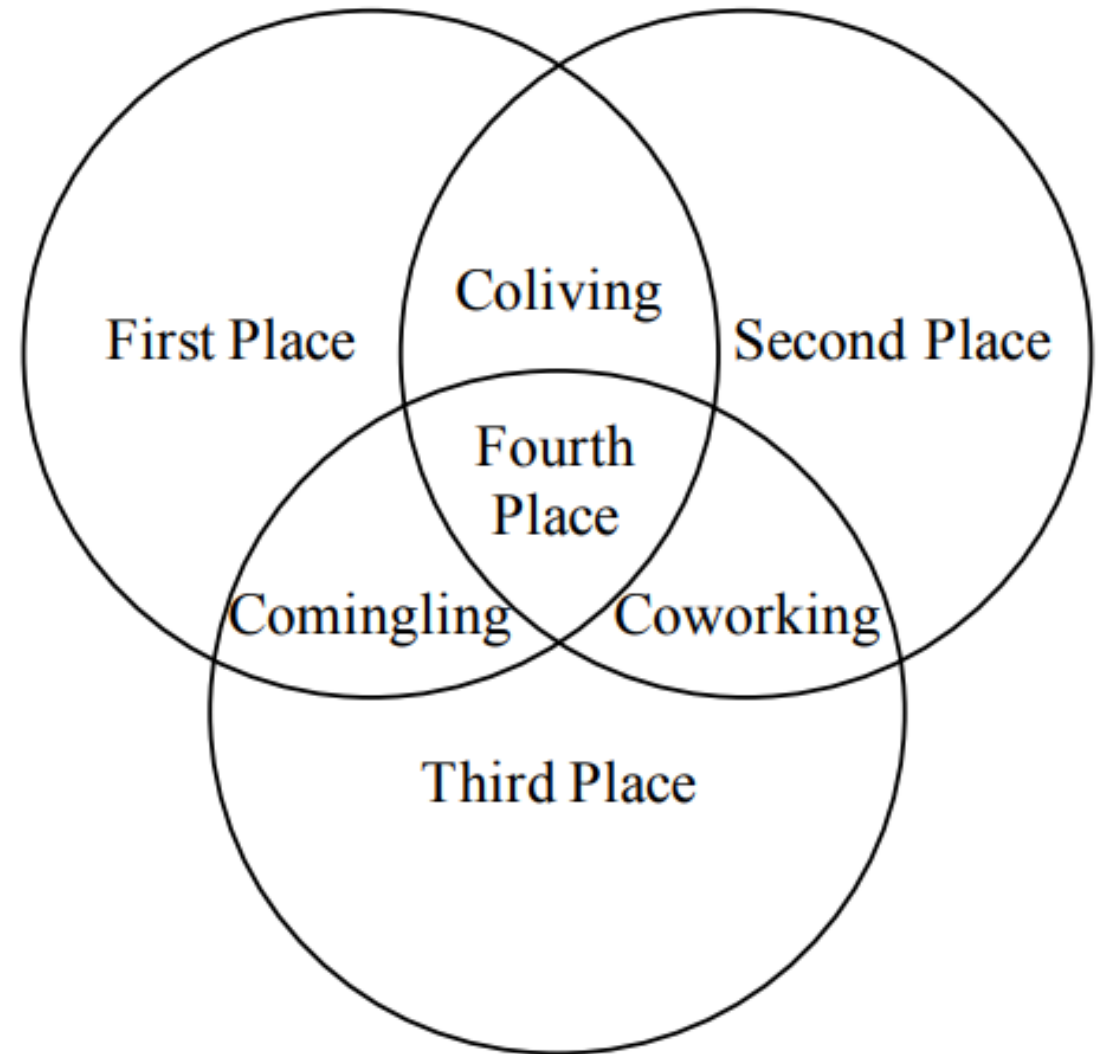
Q 19 The map shows an urban system where one city dominates in size relative to others. Based on this spatial pattern, if current growth trends continue, which economic effect is most likely to occur?

Source: https://commons.wikimedia.org/wiki/File:Proportional_circle_Turkey_city_town_population_map_2012.png
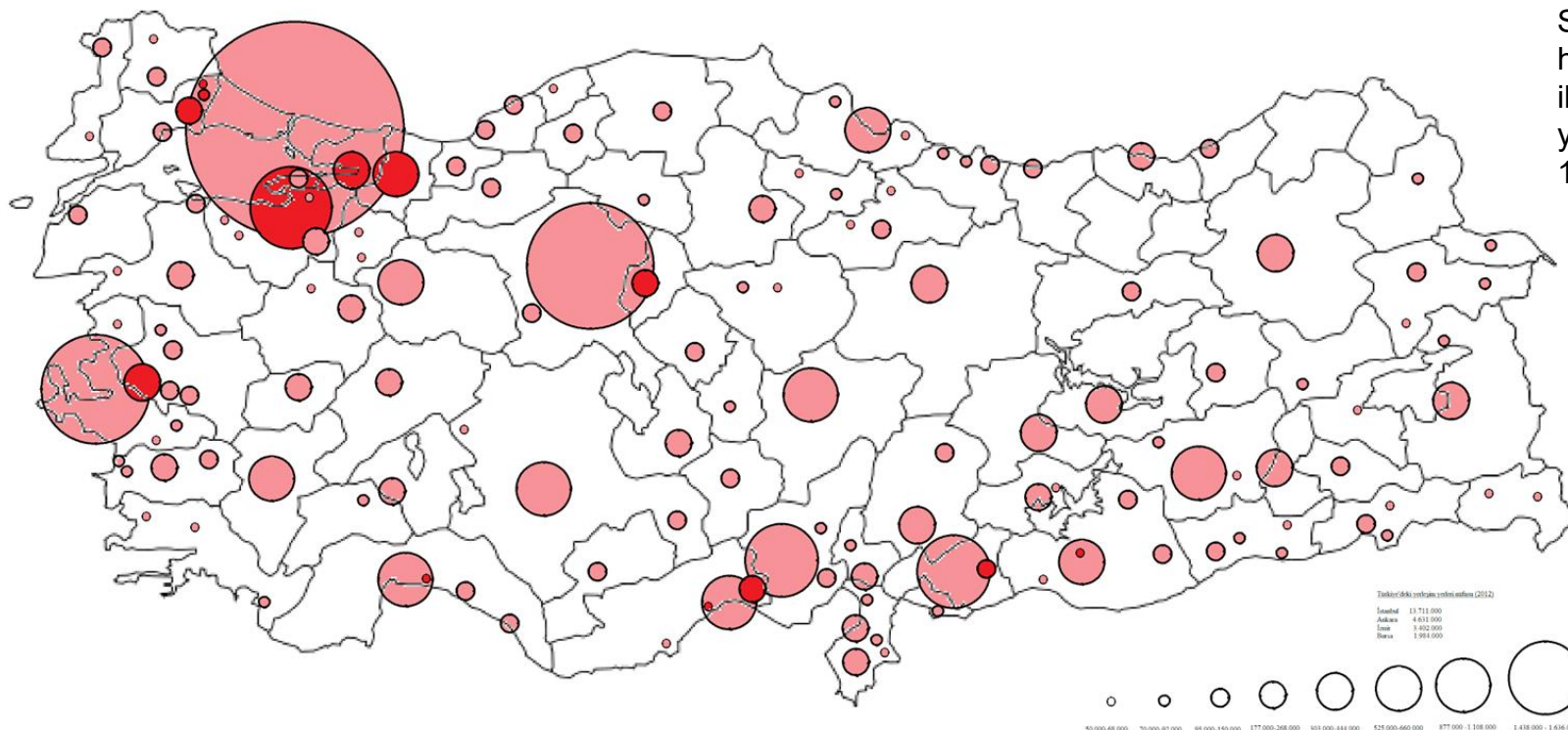
A Amplification of regional inequality due to uneven capital and labour flows

B Greater integration of outlying cities into a balanced urban network

C Increased innovation in smaller cities as they compete for investment

D Stabilisation of growth in the dominant city due to decentralisation pressures

Q 20 What geographic topic is referred to in this song?

Source: https://www.youtube.com/watch?v=4xwGO2Qkwww
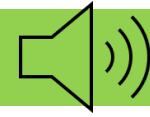
A Erosion

B Mass movement

C Plate tectonics

D Volcanic activity

Q 21 Which geographical concept best explains the human response to destruction in the image?

A Adaptive use of transitional environments

B Community resilience to disrupted spaces

C Irregular housing patterns in cities

D Negative labelling of conflict zones

Q 22

What is the barometric pressure at Reykjavik, Iceland?

A **1000mb**

B **1007mb**

C **1021mb**

D **1028mb**
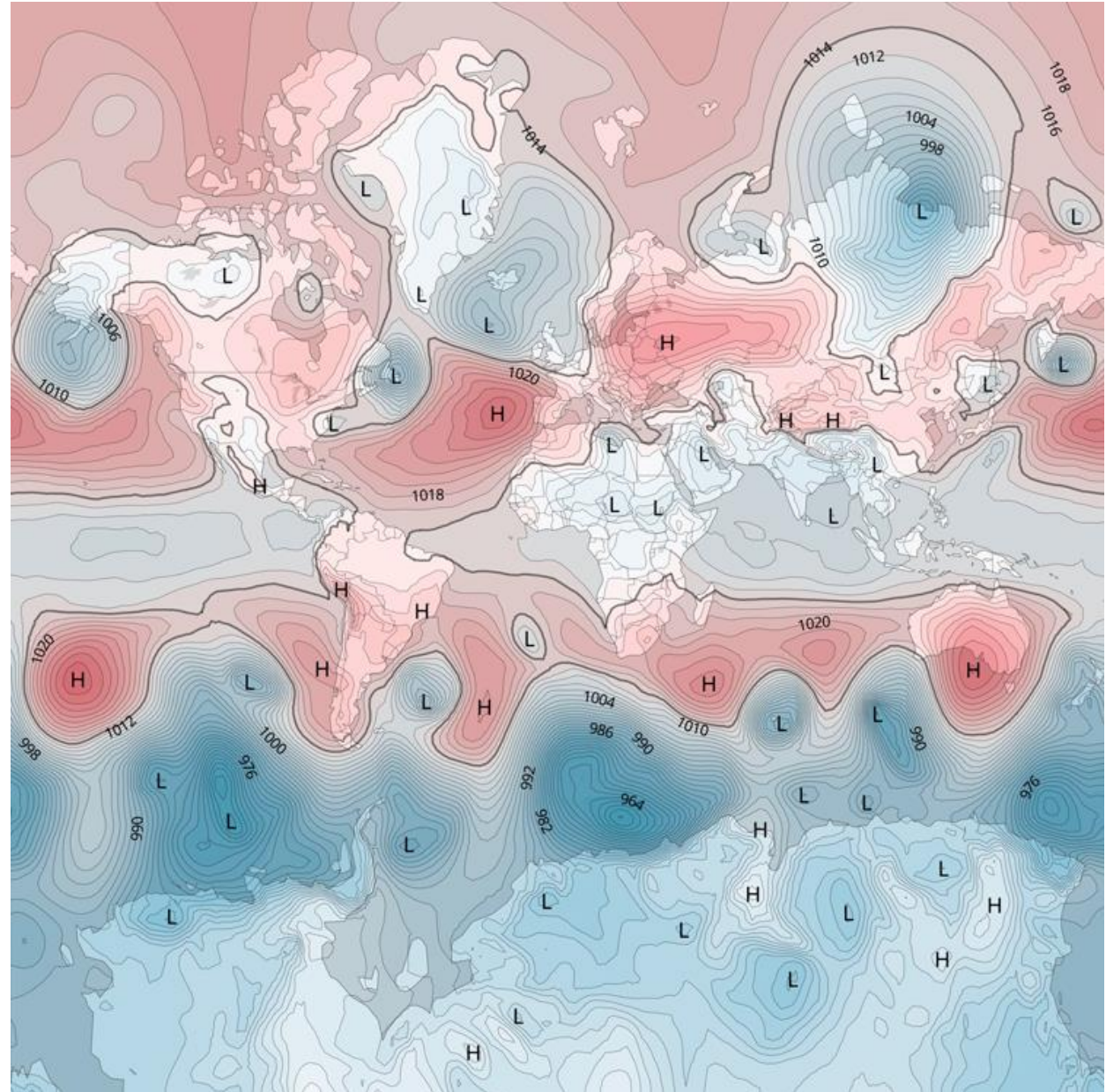
Q 23 Which statement about the weather and geographical features in this landscape is most likely correct?

A Advance of a cold front over a downstream part of a river.

B Advance of a cold front over an upstream part of a river.

C Advance of a warm front over a downstream part of a river.

D Advance of a warm front over an upstream part of a river.

Q 24 Which of the options provided explains the cross-cultural process represented by BLACKPINK's incorporation of a 19th-century Western classical violin theme into a 21st-century K-pop track?

Blackpink Shut Down

Niccolò Paganini "III. Rondo à La Clochette"

Sources: https://www.youtube.com/watch?v=POe9SOEKotk
https://www.whosampled.com/Niccol%C3%B2-Paganini/III.-Rondo-%C3%A0-La-Clochette/

A Cultural appropriation

C Cultural hegemony

B Cultural ascendency

D Cultural hybridisation

Q 25 This NASA satellite image, described as showing "rivers of gold," is linked to human activity in a tropical region. What is the most likely environmental impact associated with this activity?

A Accelerated desertification due to wind erosion.

B Contamination of waterways due to mercury usage in mining.

C Increased glacial melting due to greater solar radiation absorption.

D Increase of mangrove area due to extra natural fertilization.

The graphs illustrate changes in water levels at three sites over a 24-hour period. What do these graphs portray?

Source: https://www.algebralab.org/practice/practice.aspx?file=Reading_Tides.xml
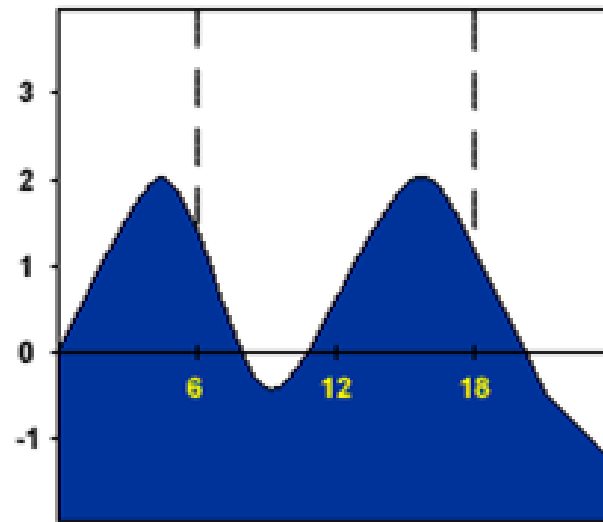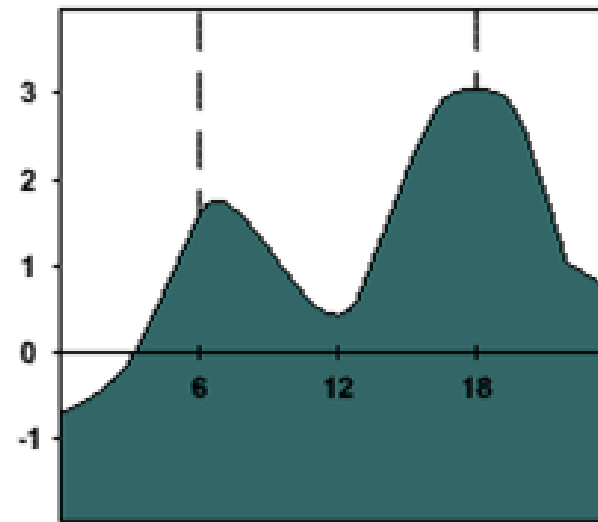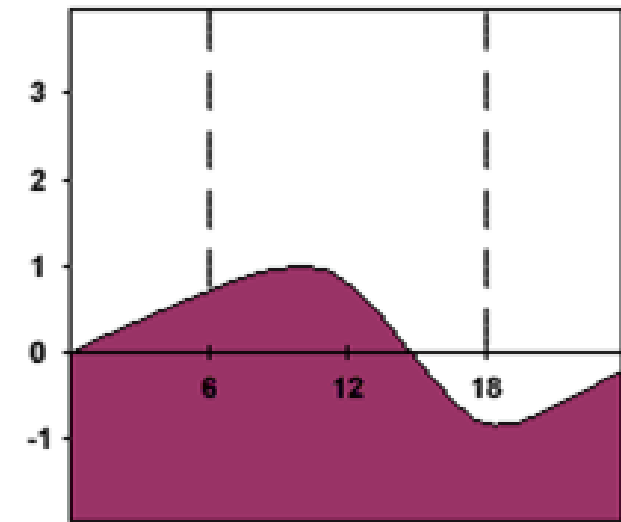
Time (hrs)　　　Time (hrs)　　　Time (hrs)

A Daily flood peaks during the monsoon season

B Fluctuations in water surface levels due to thermal expansion

C Variations in sea surface temperature across regions

D Tidal height patterns across different coastal areas

Source: https://www.geocurrents.info/blog/2012/07/04/mapping-renewable-electricity-generation/

A % of electricity generation from renewable sources

B % of people speaking local dialects

C % of households with internet access

D % of population living in urban areas

Legend:
- 90-100
- 80-89.9
- 70-79.9
- 60-69.9
- 50-59.9
- 40-49.9
- 30-39.9
- 20-29.9
- 10-19.9
- 0-9.9
- No Data
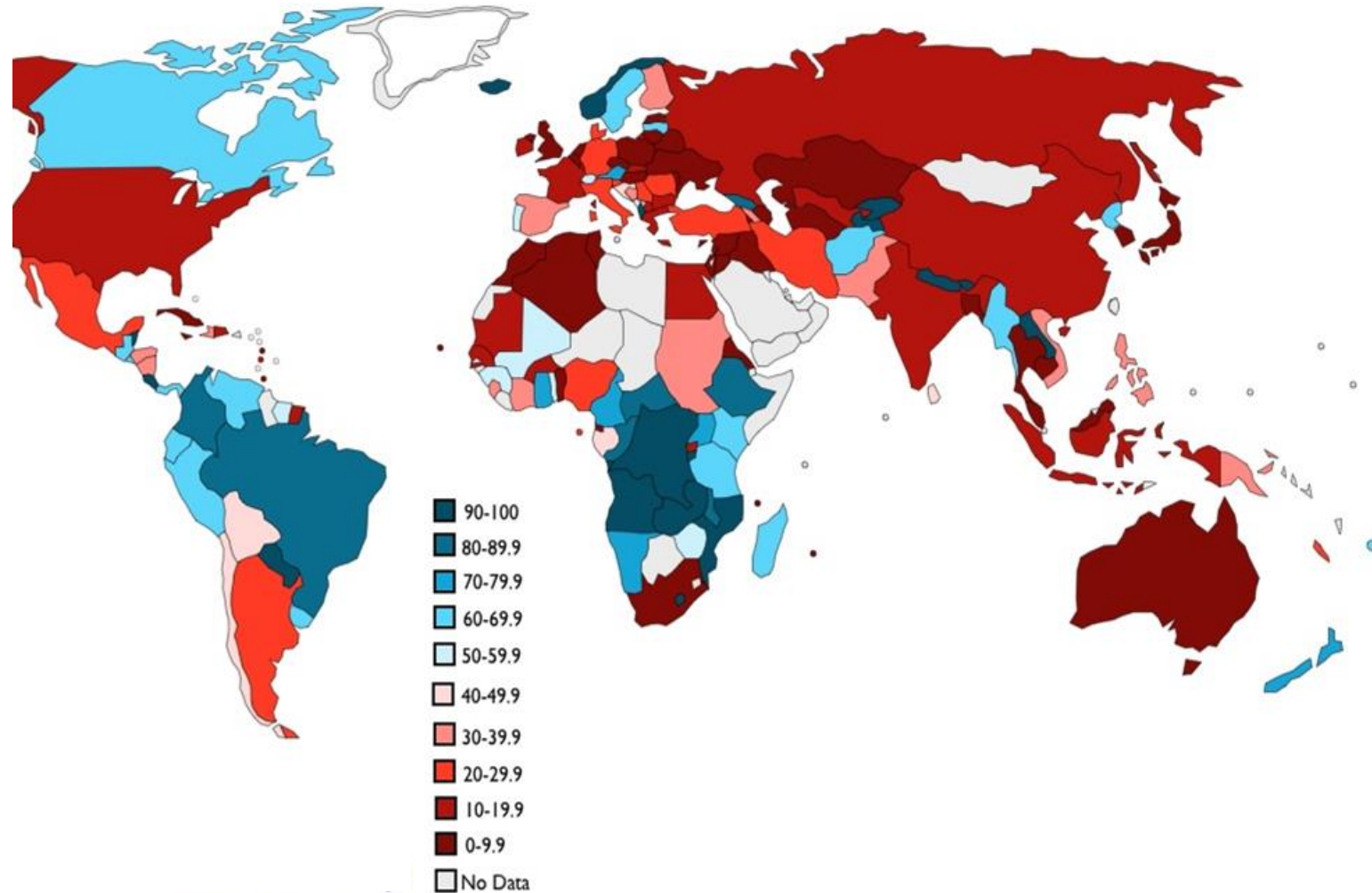
Q 28

Based on the image, which option describes the time of day and season for New Zealand?

Source: https://science.nasa.gov/earth/earth-observatory/how-on-earth-was-this-image-made/

A Summer afternoon

B Summer morning

C Winter afternoon

D Winter morning

Based on the geological features and labelled structures on the map, which of the following volcano classifications best describes Santorini?

Source: https://www.researchgate.net/figure/A-Seismotectonic-map-for-the-region-of-Southern-Aegean-B-Active-faults-of-the_fig1_270293778

A Cinder Cone

B Lava Plateau

C Shield Volcano

D Stratovolcano
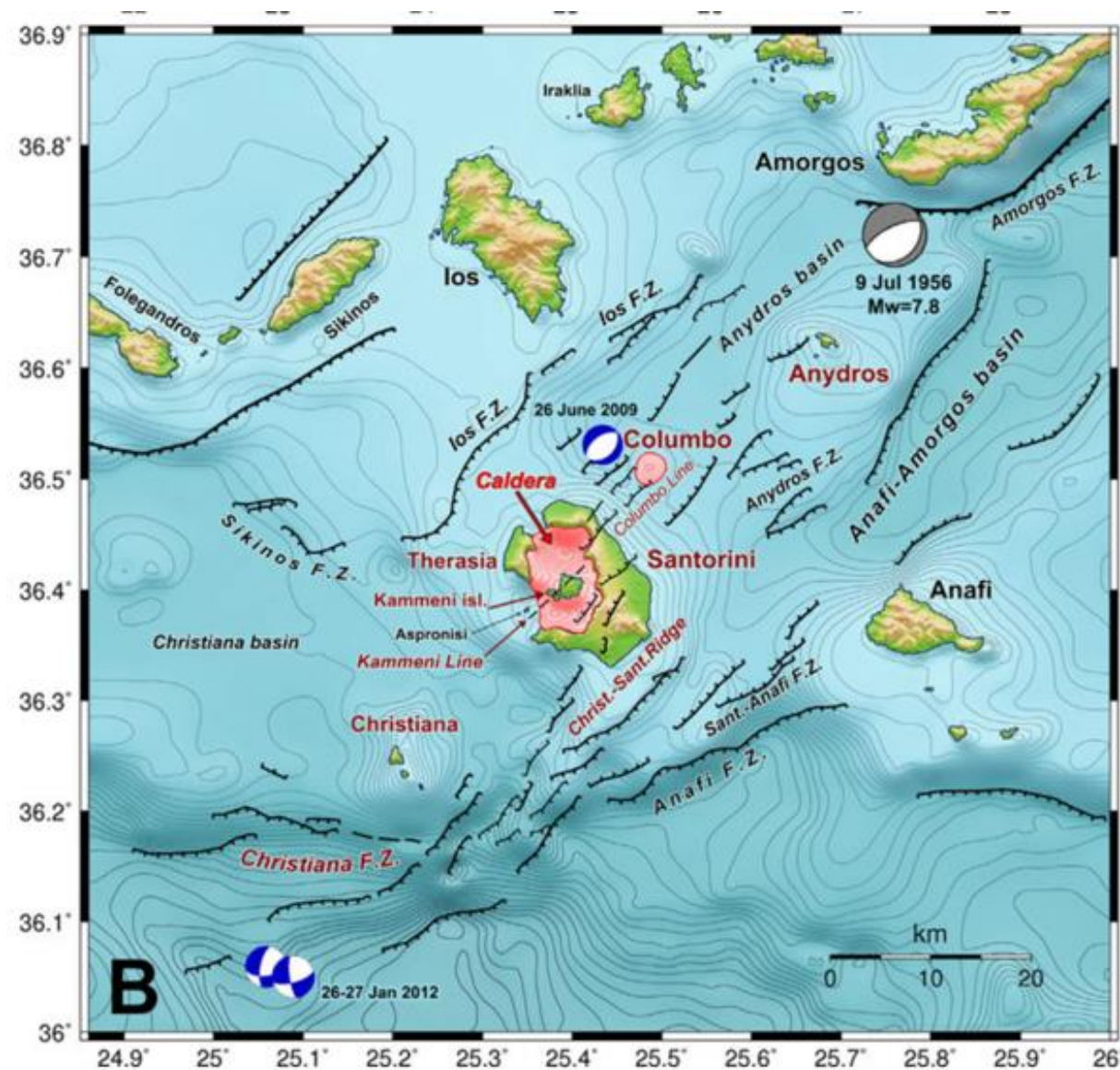
What do the images suggest about the impact of global efforts to address ozone depletion?

Source: https://science.nasa.gov/earth/earth-observatory/watching-the-ozone-hole-before-and-after-the-montreal-protocol-79198/

A Ozone loss slowed after 2000, showing policy impact.

B Ozone levels stayed constant with little change.

C Ozone kept thinning with no signs of recovery.

D Recovery started right after 1980s agreements.

1979   1987

2006   2011

Total ozon (Dobson units)

0   100   200   300   400   500   600   700
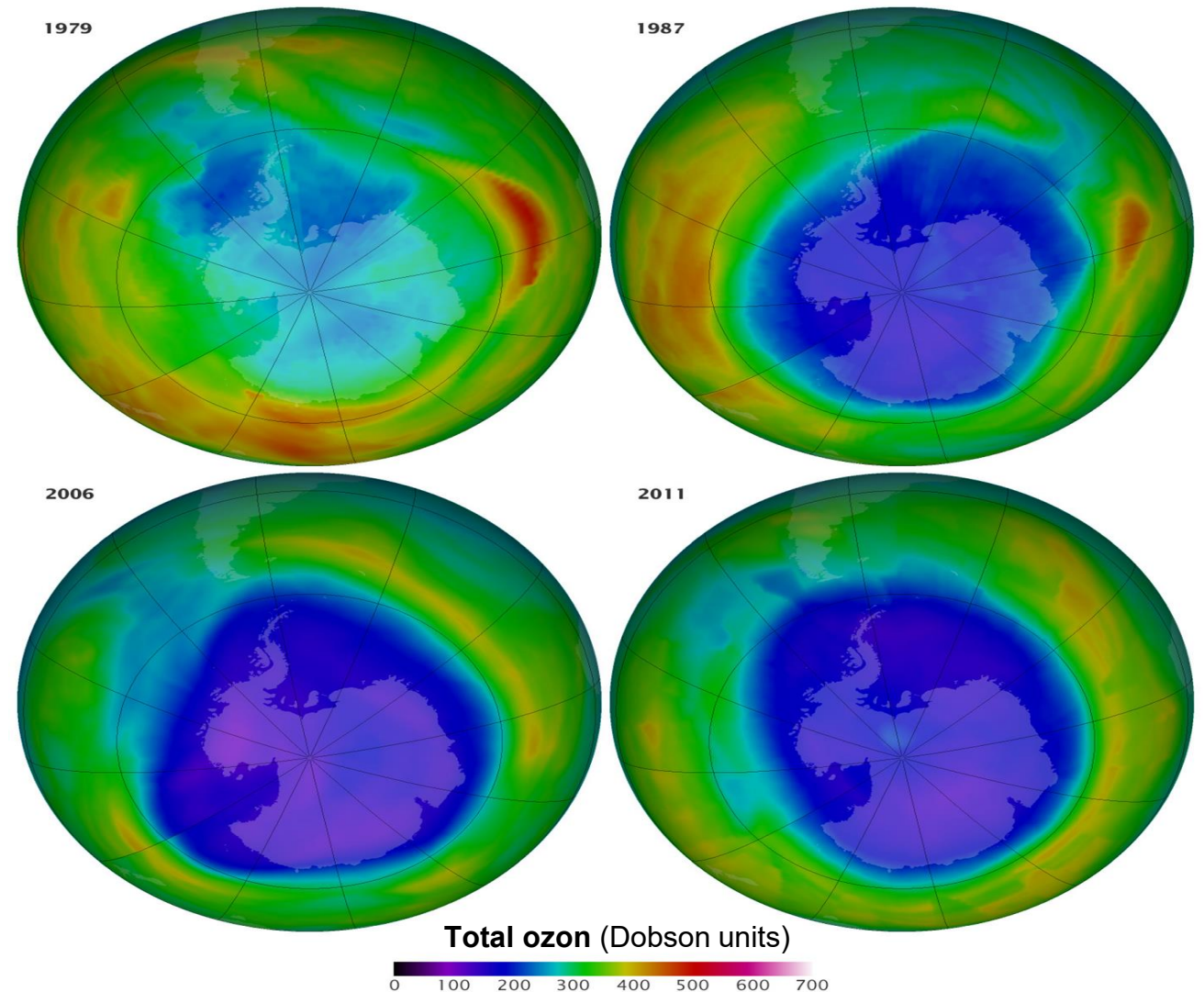
Q 31 What thematic information is represented by the patterns and regional groupings on this map of Europe?

A Areas of different seismic risk across Europe

B Climate zones defined by temperature and precipitation

C Soil types based on composition and regional geography

D Vegetation types shaped by climate and land use
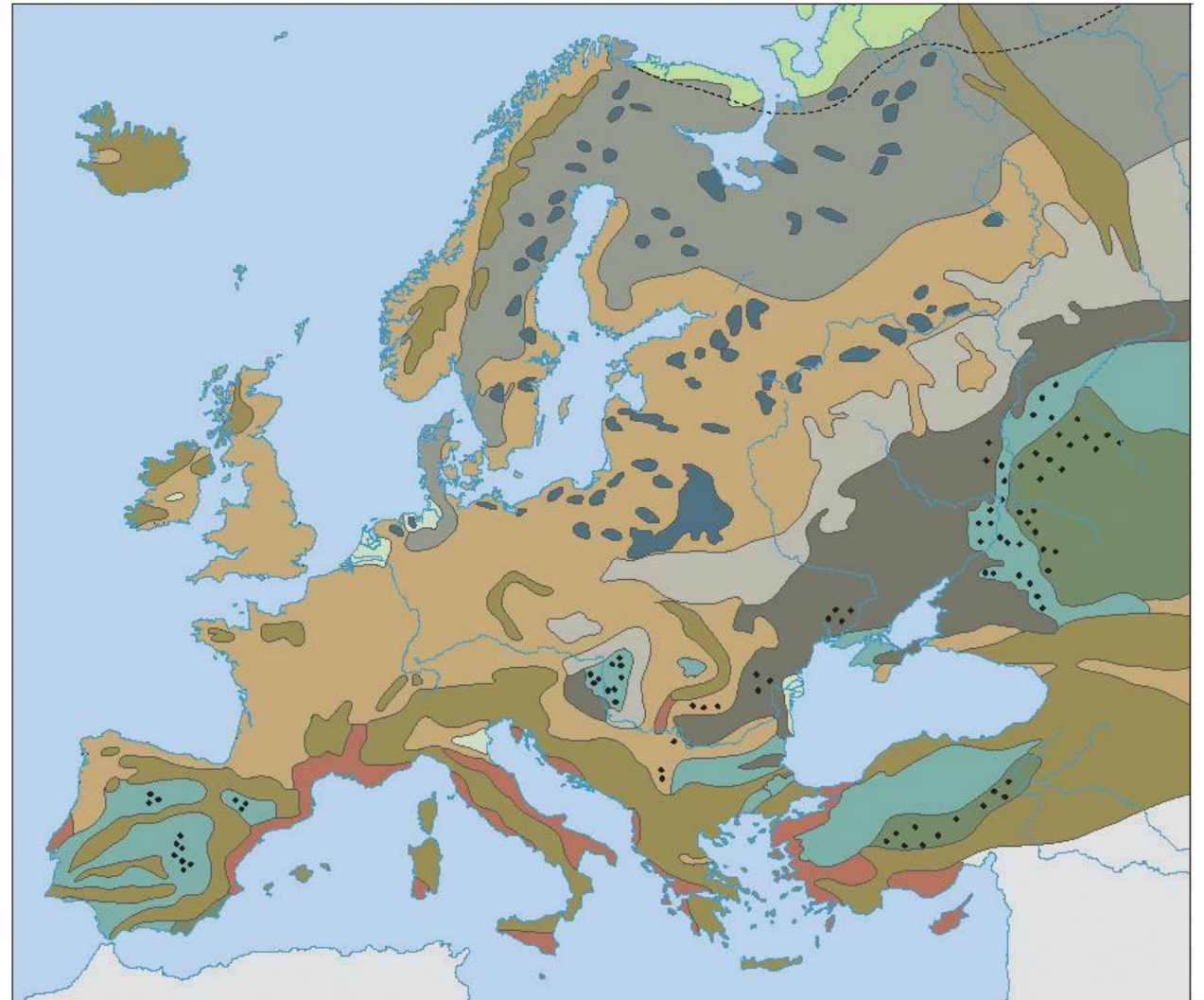
Which of the following is <u>NOT</u> an outcome of gentrification affecting the urban poor?

Source: https://truthout.org/art/summer-refreshment-gentrification/

A New middle-class residents will make daily goods and services less affordable for poorer residents.

B Higher income newcomers raise rental costs, displacing original residents.

C More businesses boost the local economy and improve employment opportunities.

D Upscale food establishments increase food variety and accessibility for the urban poor.
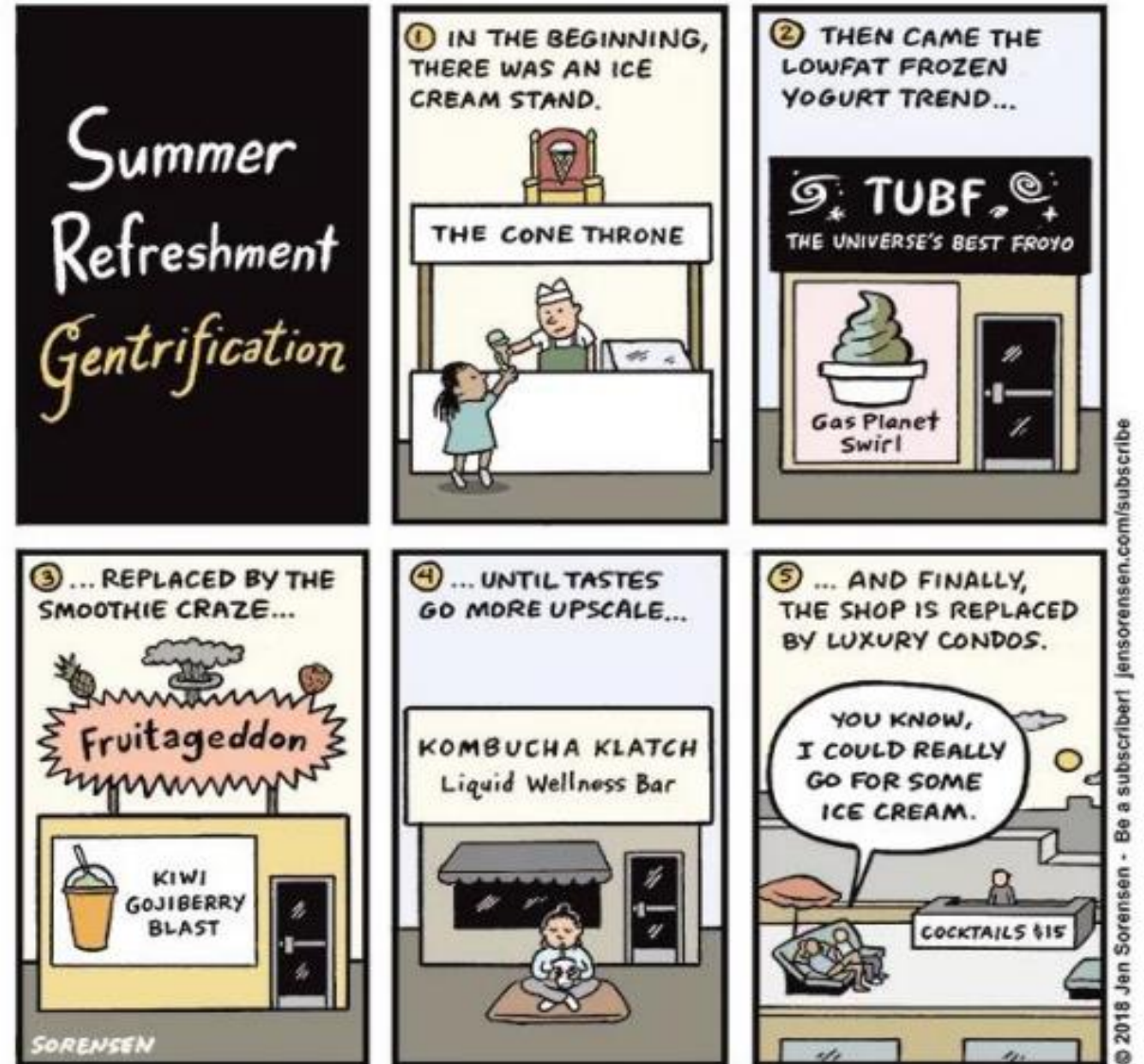
Q 33 The map shows the fertility rate in 2023. Which of the following conclusions is supported by the map?

Source: https://ourworldindata.org/fertility-rate

No data   0 births   2 births   4 births   6 births

1 births   3 births   5 births   7 births
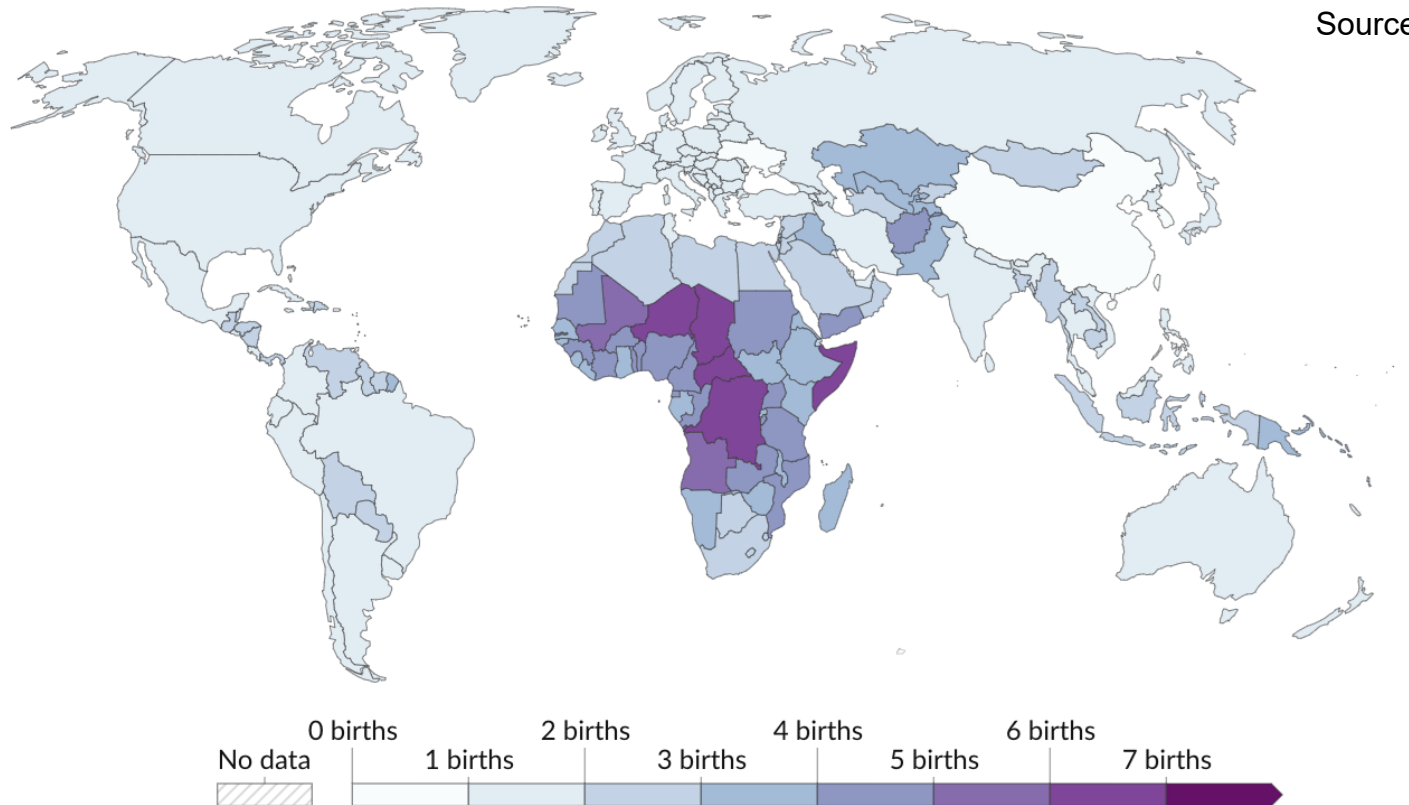
A Most Asian countries have fertility rates between 2 and 4 births per woman.

B Most countries in Europe have fertility rates below the replacement level.

C The highest fertility rates are concentrated in Sub-Saharan Africa.

D Globally, the majority of countries have fertility rates under 4 births per woman.

Which satellite image is illustrated with the correct weather symbols?

A

Source:
https://www.severe-weather.eu/global-weather/wet-cold-australian-winter-defying-el-nino-alert-official-winter-weather-forecast-bh/

B

C

D
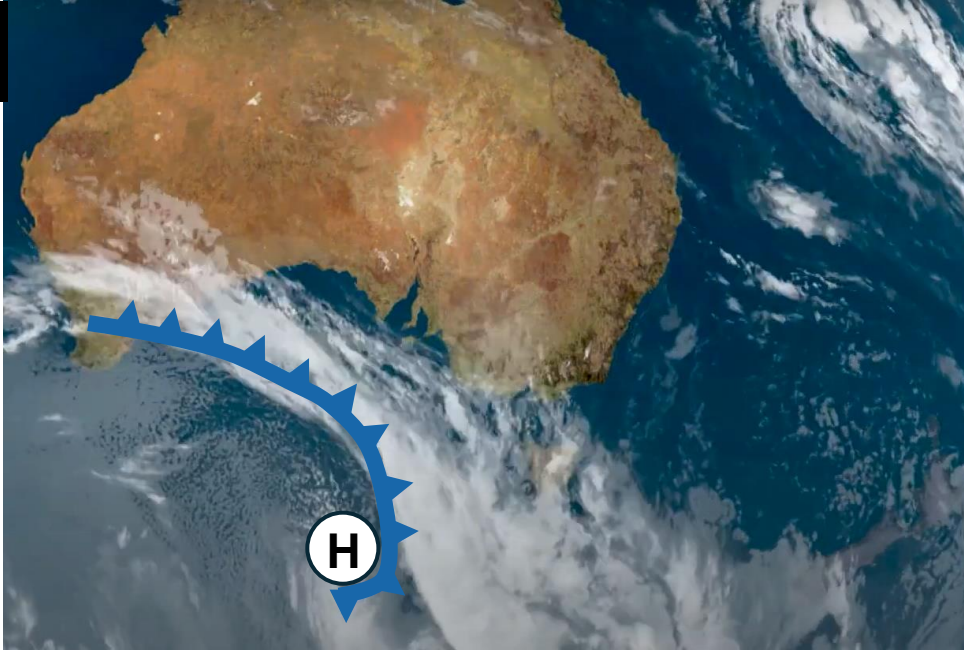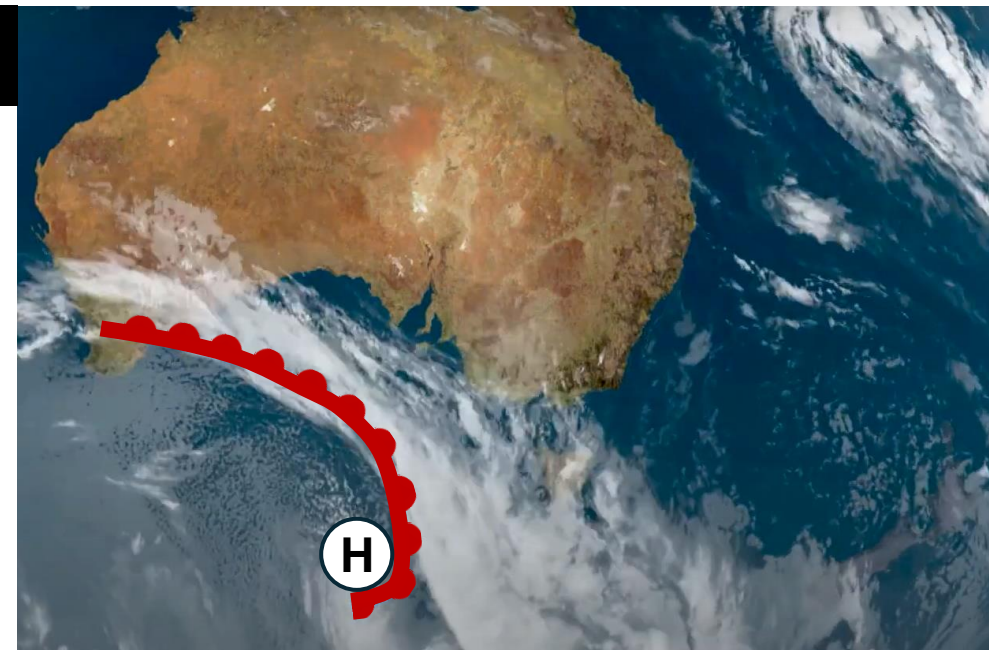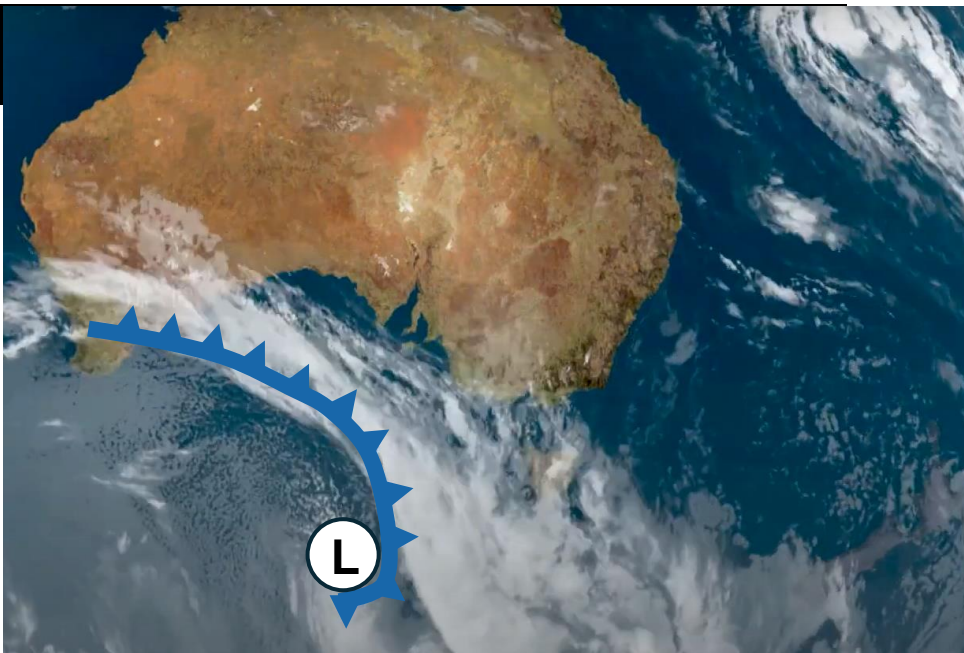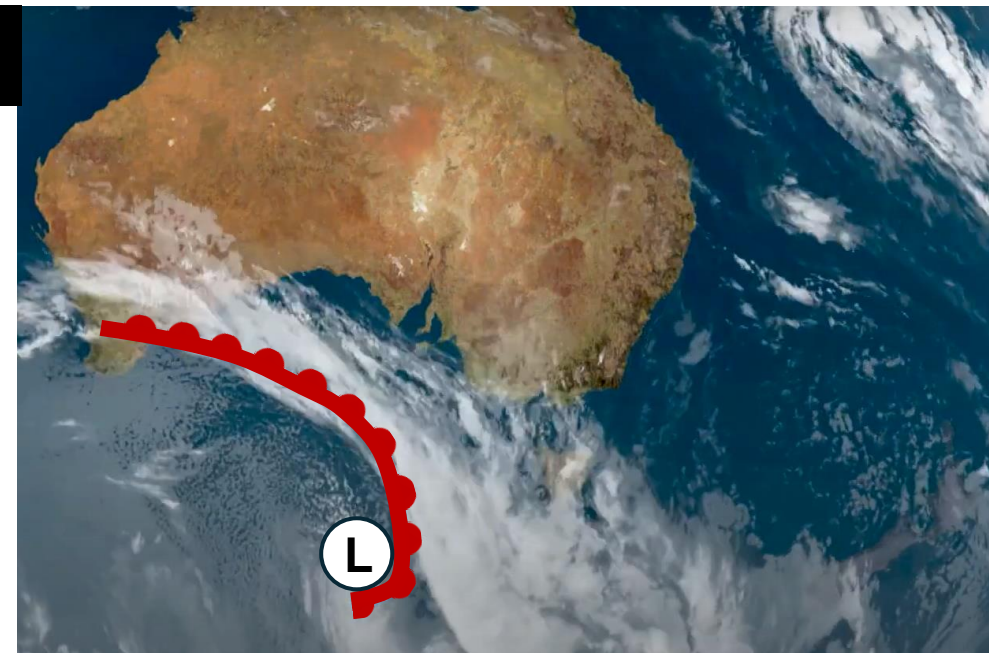
What type of resource is shown on the map provided?

Source:
https://www.researchgate.net/figure/Map-
showing-the-AUs-of-the-CARA-is-color-coded-
for-mean-estimated-undiscovered-oil-
Only_fig3_26249371

A Conditional resource

B Proven resource

C Renewable resource

D Speculative resource

Q 36 Based on the Global Growth Forecasts for 2024, which general statement about regional economic projections is most accurate?

A Economies in the Asian continent are projected for uniformly high growth

B Many established European economies are forecast to experience relatively modest growth

C North American nations are largely anticipating significant economic expansion

D South American economies are expected to universally outperform other continents.

Global Growth Forecasts
BY GDP IN 2024

Real GDP Growth Annual % Change

Due to the resilience of major economies, achieving a soft landing looks increasingly likely.

As inflation eases, the IMF forecasts a 3.1% increase in global GDP in 2024.

Data not available.

Amid high energy costs and a cooling labor market, **Sweden** is forecast to see weak growth.

Foreign investors have pulled $250B in direct investment from **Russia** since the war.

U.S. GDP growth is projected to slow as the labor market softens and consumer savings decline.

Chile, Brazil, and **Peru** lowered interest rates in 2023, with further cuts expected this year.

Tourism-hotspot **Macau** is projected to see the highest growth globally.

Norway 1.5%
Iceland 1.7%
UK 0.6%
DK 1.4%
SE 0.6%
FI 1.0%
Poland 2.3%
1.3%
Ireland 3.3%
DE 0.5%
0.8%
3.2%
France 1.8%
1.0%
RO 3.8%
TR 3.0%
3.2%
Russia 2.6%
PT 1.5%
Spain 1.5%
Italy 0.7%
Greece 2.0%
Libya 7.5%
Canada 1.4%
U.S. 2.1%
Mexico 2.7%
Puerto Rico -0.2%
1.9%
3.0%
2.5%
2.7%
4.2%
4.5%
KR 2.2%
Japan 0.9%
China 4.6%
India 6.5%
3.0%
Macau 27.2%
Palau 12.4%
6%
PH 5.9%
ID 5.0%
PG 5.0%
Guyana 26.6%
CO 2.0%
5.3%
3.1%
4.8%
11.1%
3.0%
3.6%
0.3%
2.7%
2.0%
3.2%
3.7%
Equatorial Guinea -5.5%
4.7%
6.1%
5.0%
6.2%
Peru 2.7%
Brazil 1.7%
1.8%
3.3%
3.6%
MG 4.8%
Australia 1.2%
Chile 1.6%
Argentina 2.8%
3.3%
South Africa 1.0%
New Zealand 1.0%

Source: https://www.visualcapitalist.com/gdp-growth-forecasts-by-country-in-2024/

Q 37 Which of the following options best explains the "decoupling" phenomenon illustrated in the graph?

Source: https://ourworldindata.org/peak-agriculture-land?utm_campaign=mb&utm_medium=newsletter&utm_source=chatgpt.com

A Technological advances improved crop yields

B Improved data tracking supported more efficient land use.

C Dietary shifts reduced land-intensive product demand

D Urbanization reduced agricultural land

Global decoupling of agricultural land and food production

Our World in Data

Agricultural land is the sum of cropland and pasture for grazing livestock.
Production is measured in constant 2015 international-dollars, which adjusts for inflation. Includes all crops and livestock.
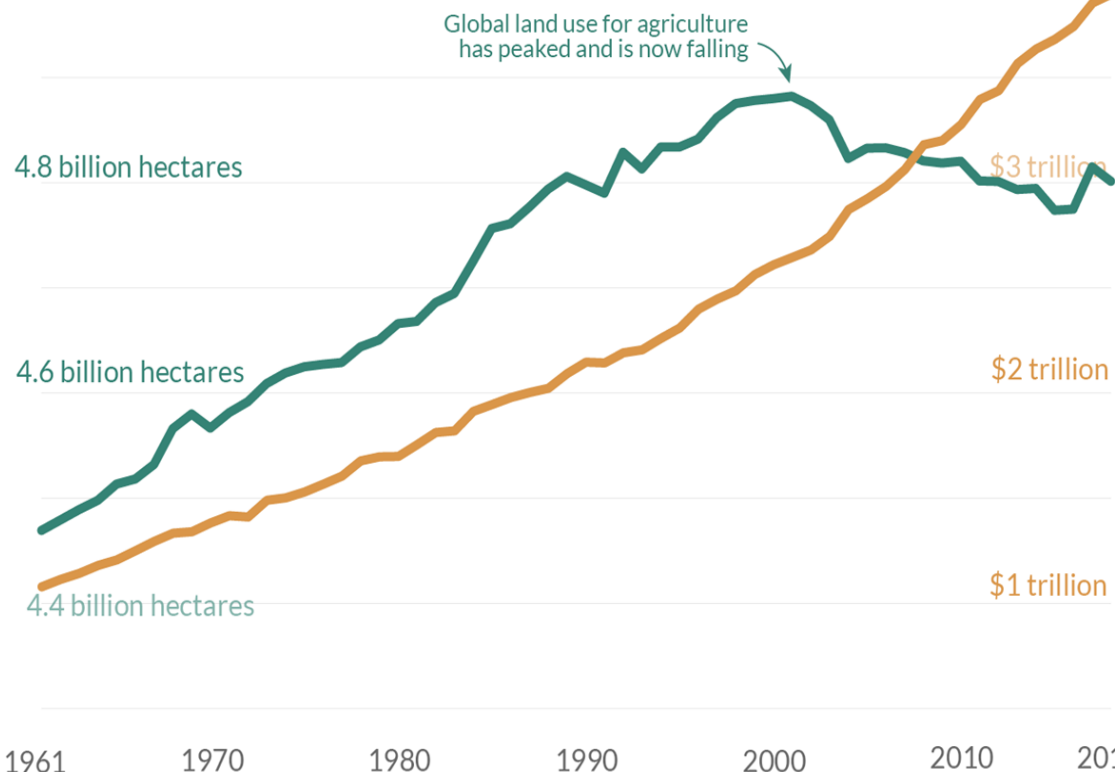
Global agricultural land use   **Global agricultural production**

5 billion hectares $4 trillion

Global agricultural production has continued to increase despite a reduction in land use

Global land use for agriculture has peaked and is now falling

4.8 billion hectares $3 trillion

4.6 billion hectares $2 trillion

4.4 billion hectares $1 trillion

1961   1970   1980   1990   2000   2010   2018

Data source: Food and Agriculture Organization of the United Nations.
OurWorldinData.org – Research and data to make progress against the world's largest problems.

Licensed under CC-BY by the author Hannah Ritchie.

What central tension regarding tourism does the cartoon highlight?

Source: https://www.pagina21.eu/emanuele-del-rosso-24/libex/

A The conflict between tourist demands for digital content versus local desires for economic growth.

B The challenges cities face in managing large tourist populations versus the need for urban development.

C The struggle between tourists' pursuit of perceived realism and local residents' experience of disruption.

D The differing expectations tourists and locals have regarding the pace and style of daily life in popular destinations.

Q 39 To engage the local community, a Geopark organized a geological dessert bake-off.
Which of these four culinary geological features relate to divergent plate movement?
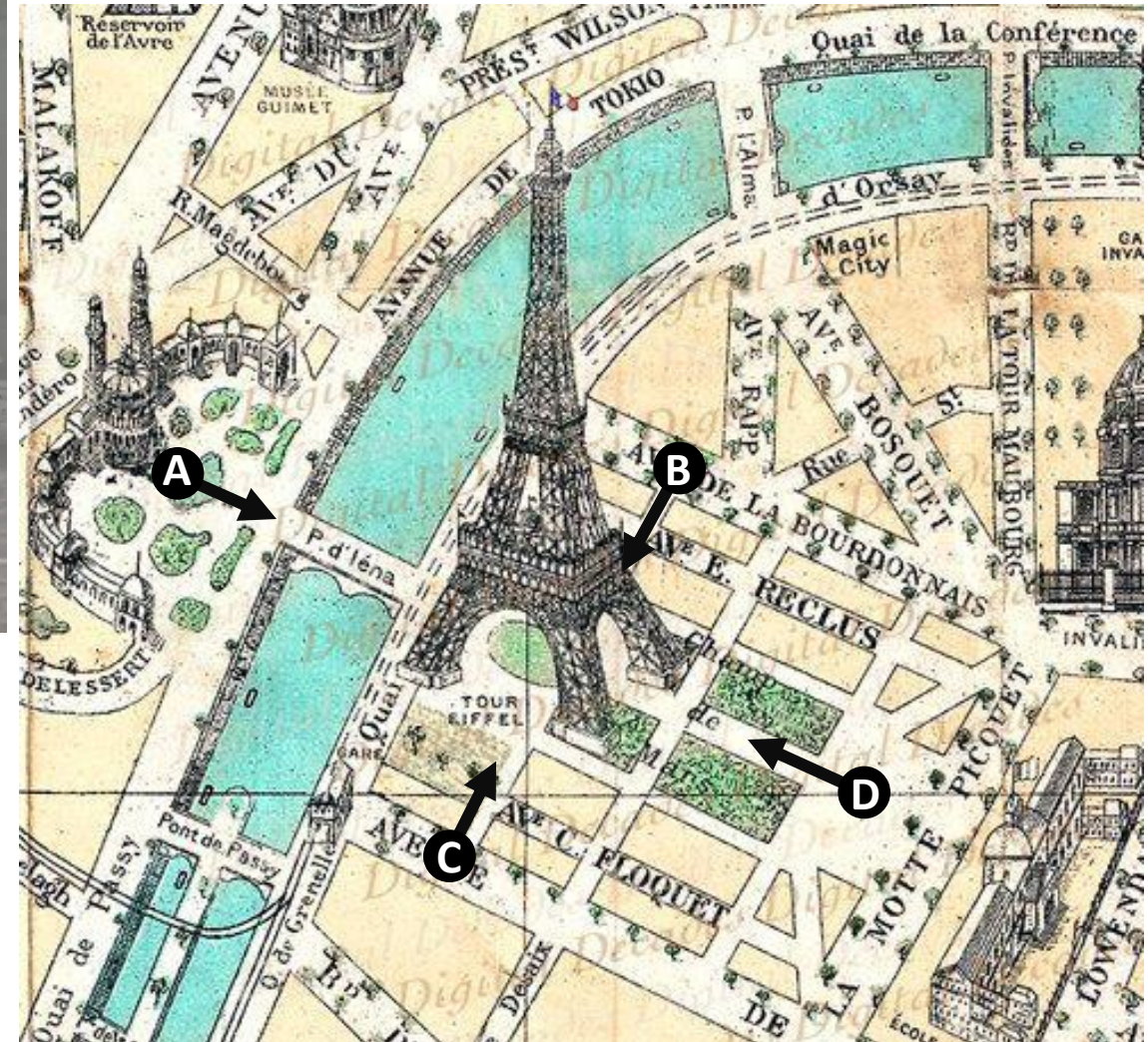
1

2

3

4

A 1 and 2

B 1 and 3

C 2 and 4

D 3 and 4

Q 40 Belgian Remco Evenepoel won the Olympic cycling road race at the 2024 Paris Olympics. **Where is the camera located?**
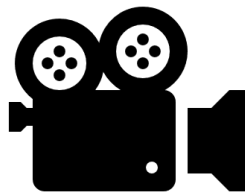

A

B

C

D

Sources: https://www.etsy.com/no-en/listing/79747098/map-champ-de-mars-france-french-paris
https://www.youtube.com/watch?v=H6Om072dfbU

- You have reached **the last slide** of the Multimedia Test.

- Click on the arrow (↑ ←) to go back to the page(s) if you want to check your answers

- **For fast navigation:**

  Click here to go back to question 1
  Click here to go back to question 10
  Click here to go back to question 20
  Click here to go back to question 30

- **Wait silently until the time is over.**
  DO NOT CLICK ON THE ESCAPE BUTT
  THAT ENDS THE PRESENTATION.

The End