

**Paper Reference 4GE1/02**  
**Pearson Edexcel**  
**International GCSE (9–1)**

# **Geography**

## **PAPER 2: Human geography**

**Friday 24 November 2023 – Morning**

**Time: 1 hour 45 minutes**

# **Resource Booklet**

**Do not return this Resource Booklet with the Question Paper.**

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For some Figures there is a modified colour and modified black and white diagram. You may use whichever version is easier for you to view. Some diagrams are only in modified colour but you are then provided with a description of the diagram.

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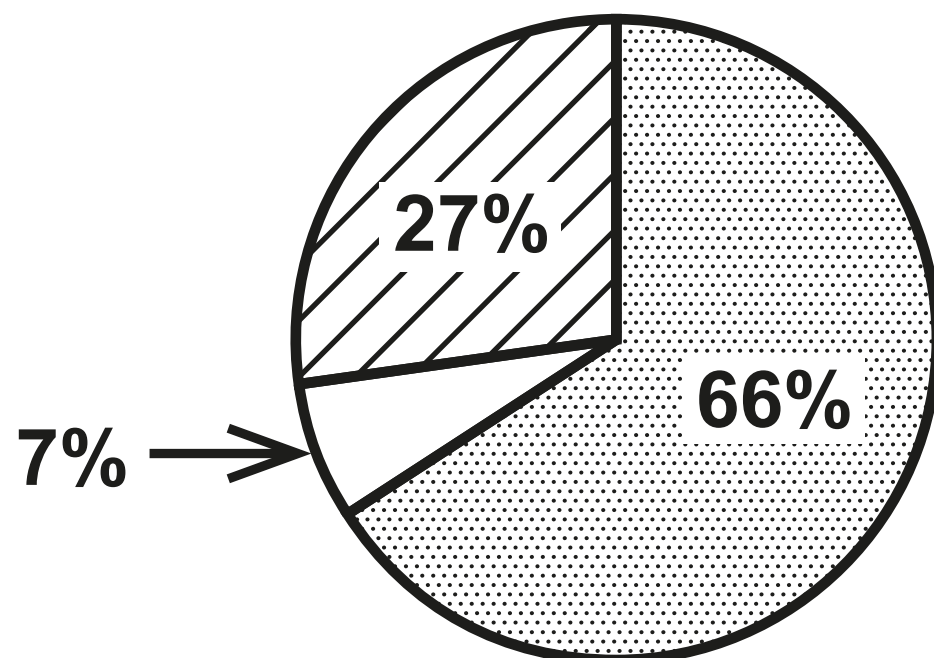
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Figure 1a

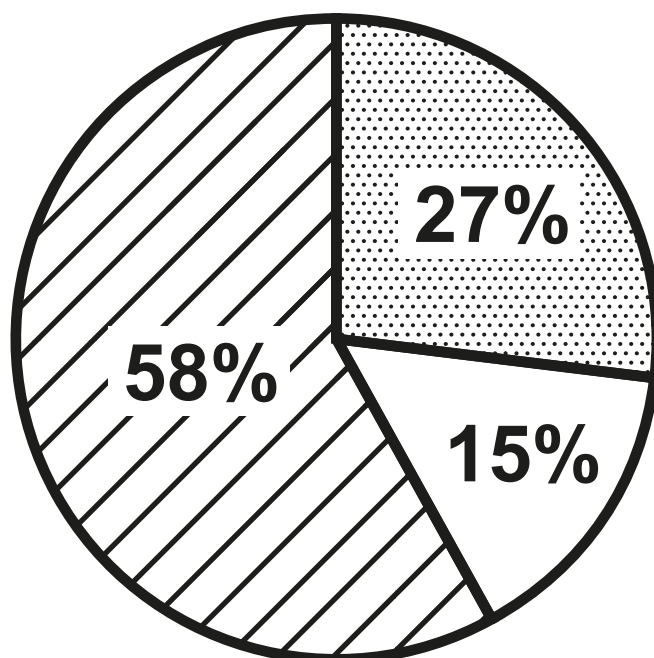
## Employment structure in selected countries

KEY:  Agriculture  Industry  Services

Zimbabwe



Peru



USA

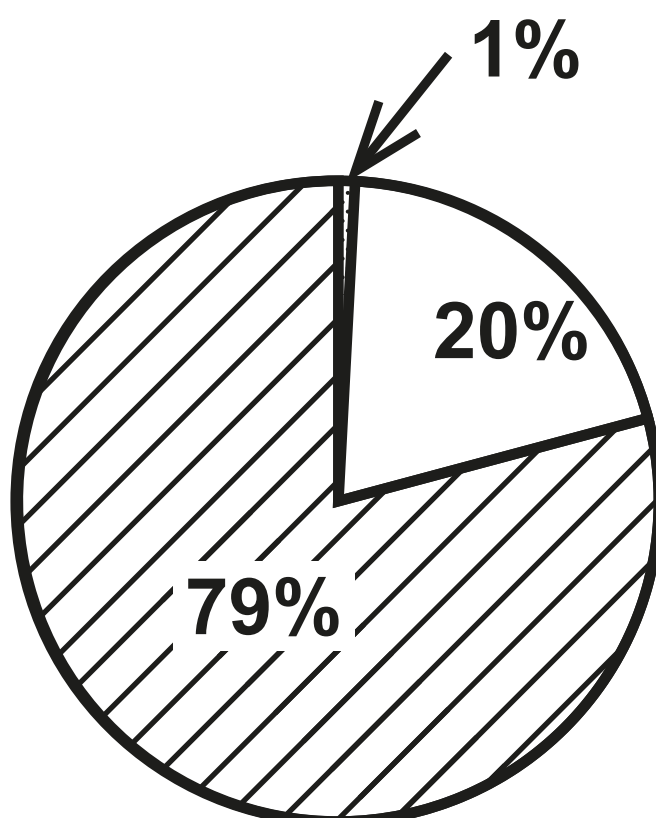
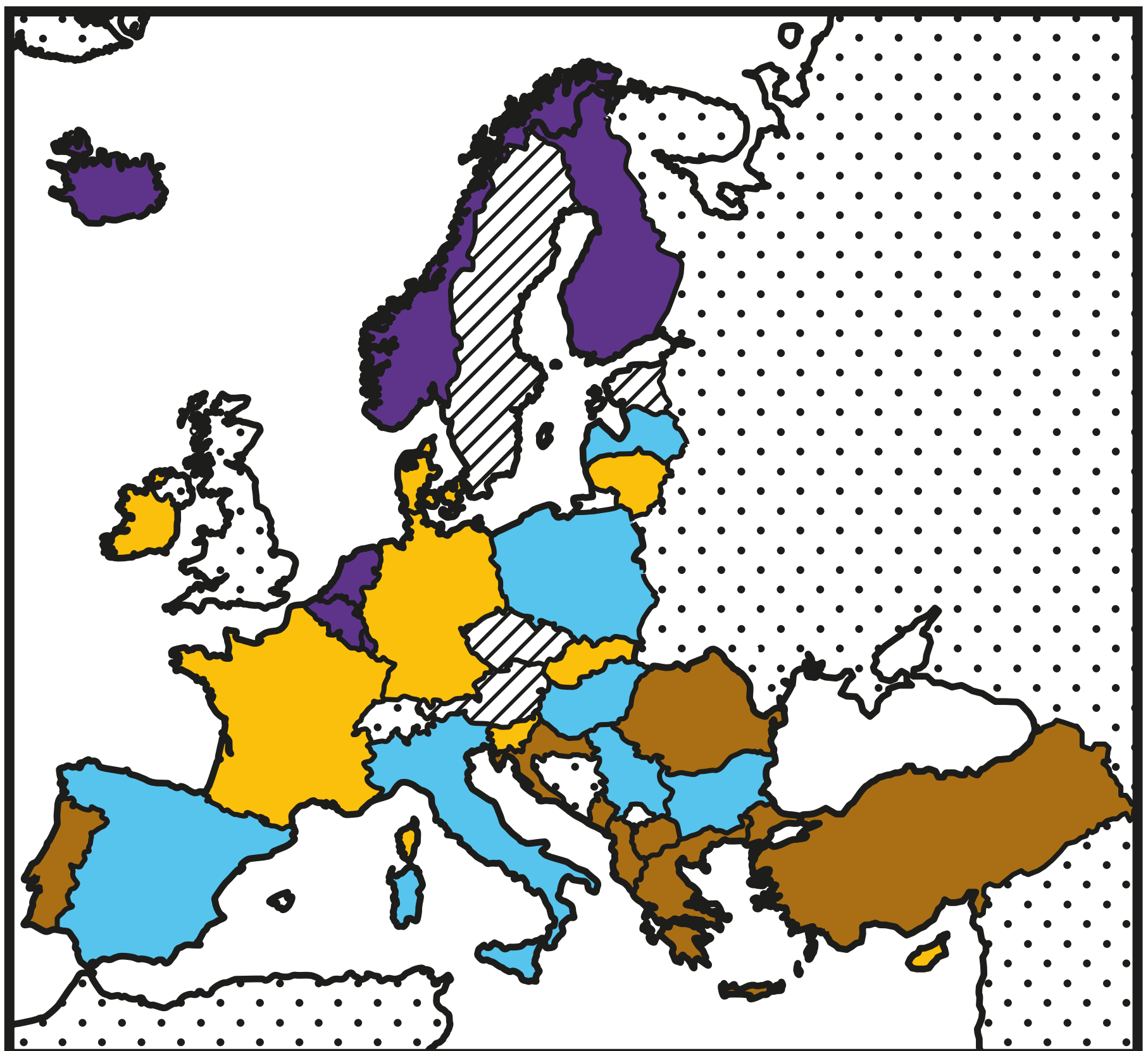
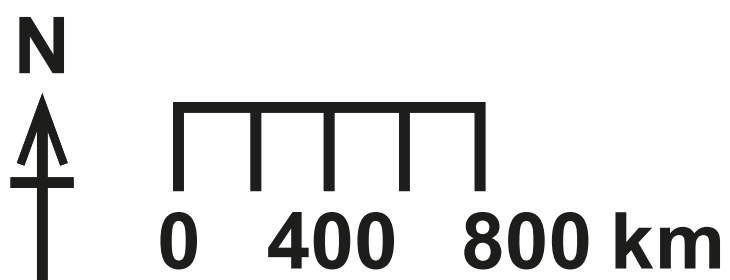
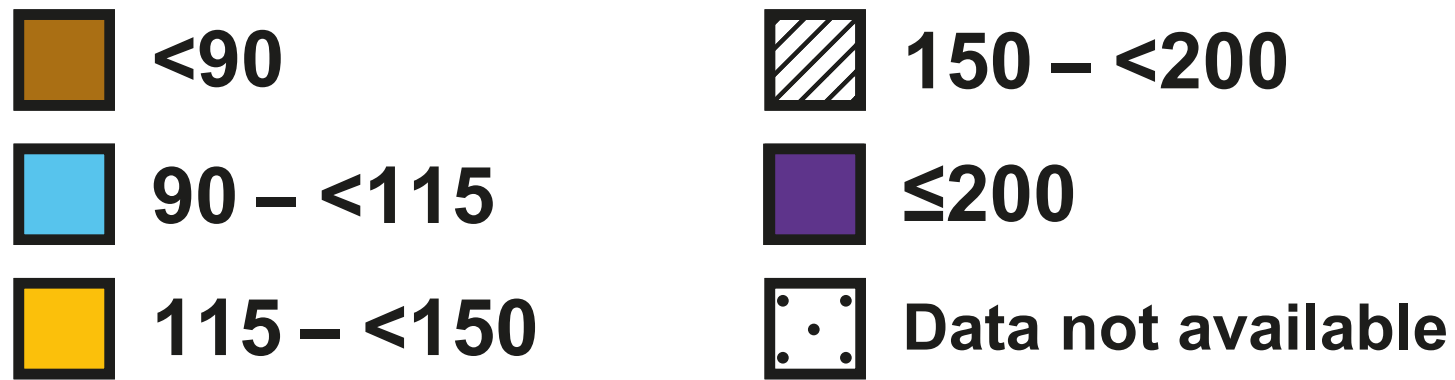


Figure 1b (Colour)

# Energy consumption intensity in the European Union, 2022

KEY: Energy consumption per capita, terajoules

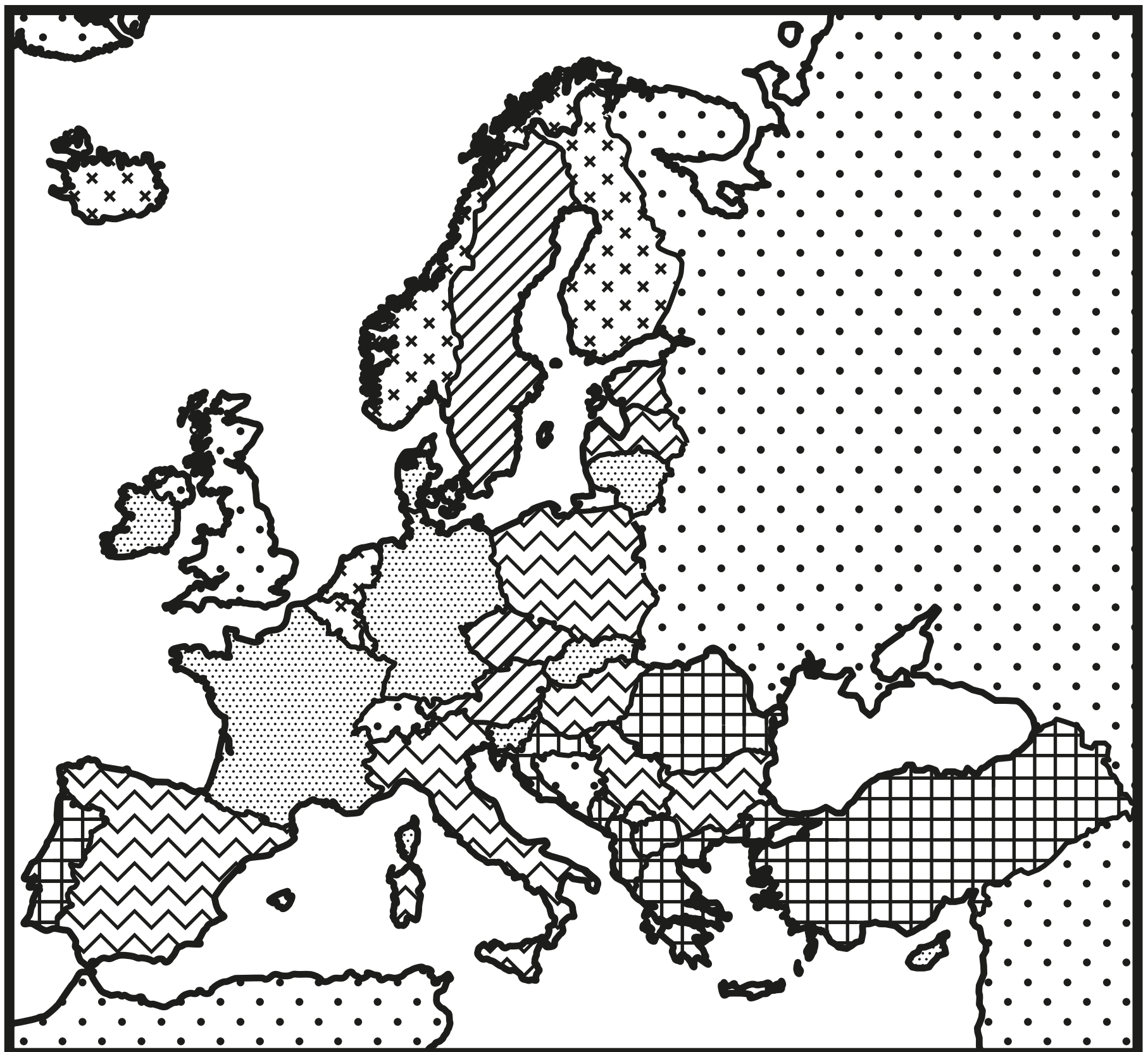
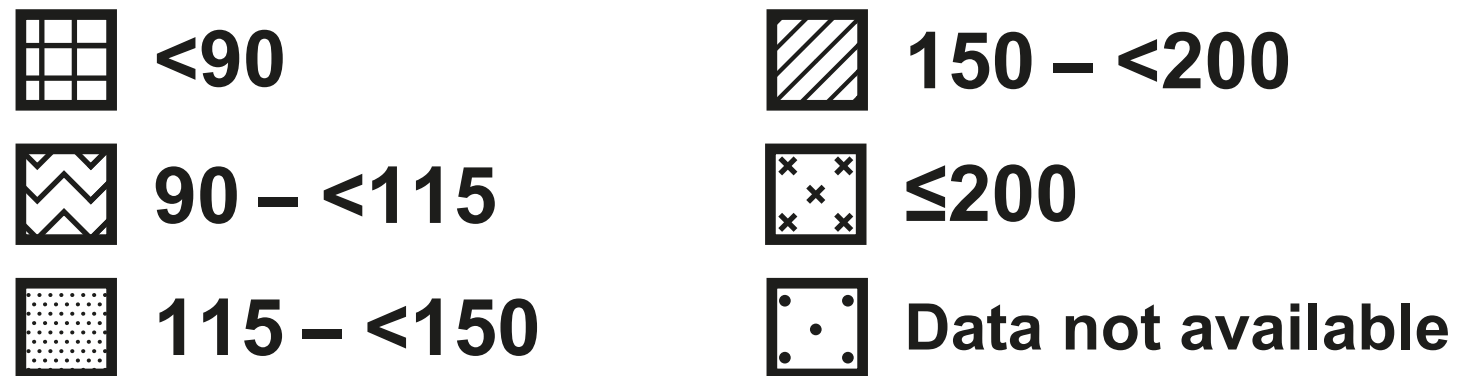


Turn over

Figure 1b (Black and White)

## Energy consumption intensity in the European Union, 2022

KEY: Energy consumption per capita, terajoules



## Figure 1c

### Efforts to make energy use more sustainable

**What can you do to reduce your carbon footprint?**








- **Install solar panels**
- **Choose reusable – ditch single-use**
- **Train, tram, bus, bike and walk more**
- **Reduce food waste**
- **Replace old lightbulbs with more energy efficient lightbulbs**
- **Buy local food**
- **Turn down thermostat from 25° to 20° in winter**



Figure 2a (Colour)

Map of selected biomes

KEY:

 Tropical Rainforest	 Savanna/Tropical Grassland
 Temperate Forest	 Freshwater
 Desert	 Marine
 Grassland	

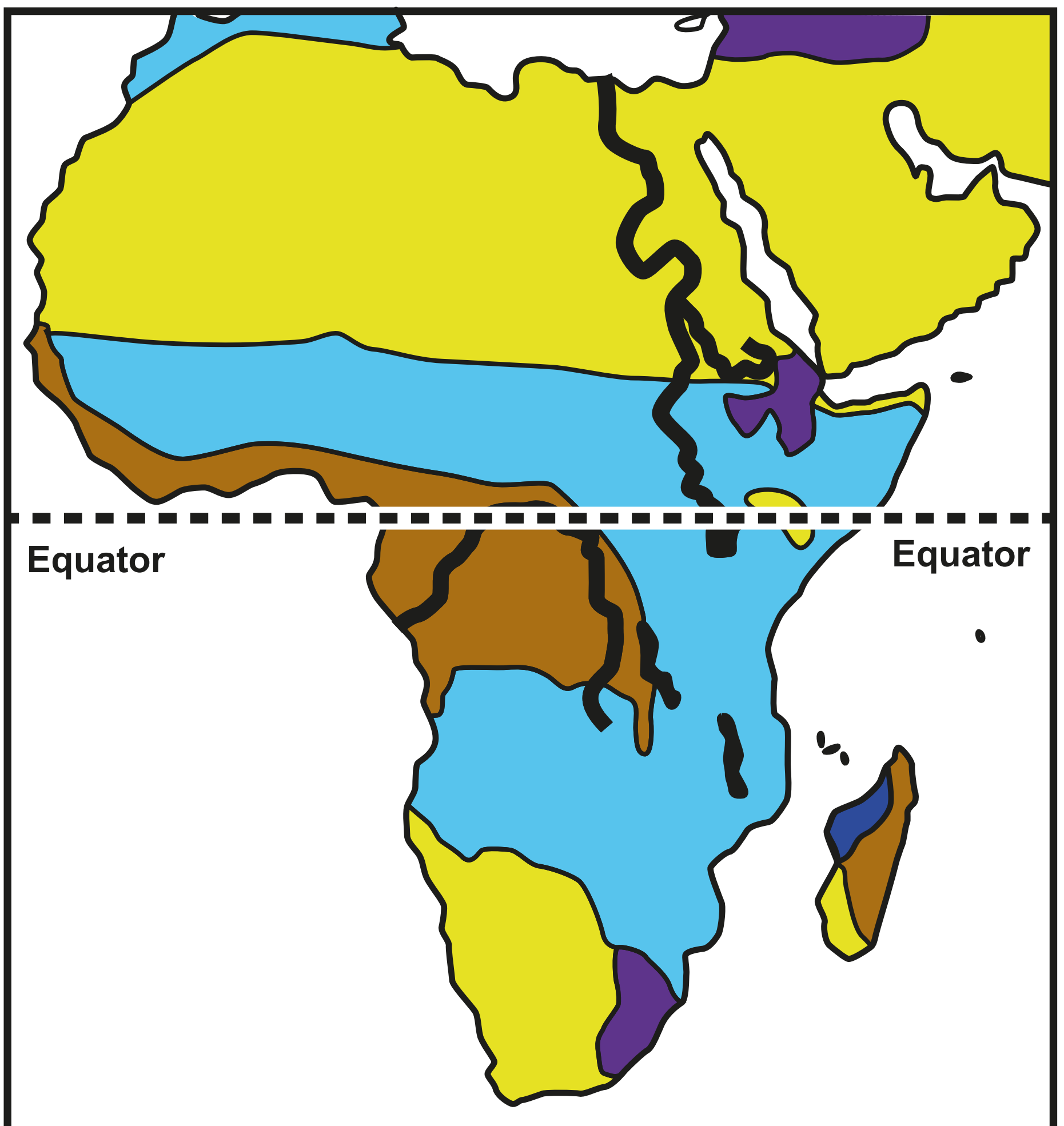


Figure 2a (Black and White)

Map of selected biomes

KEY:

- |   |  |
|---|--|
|  Tropical Rainforest |  Savanna/Tropical Grassland |
|  Temperate Forest    |  Freshwater                 |
|  Desert              |  Marine                     |
|  Grassland           |  |

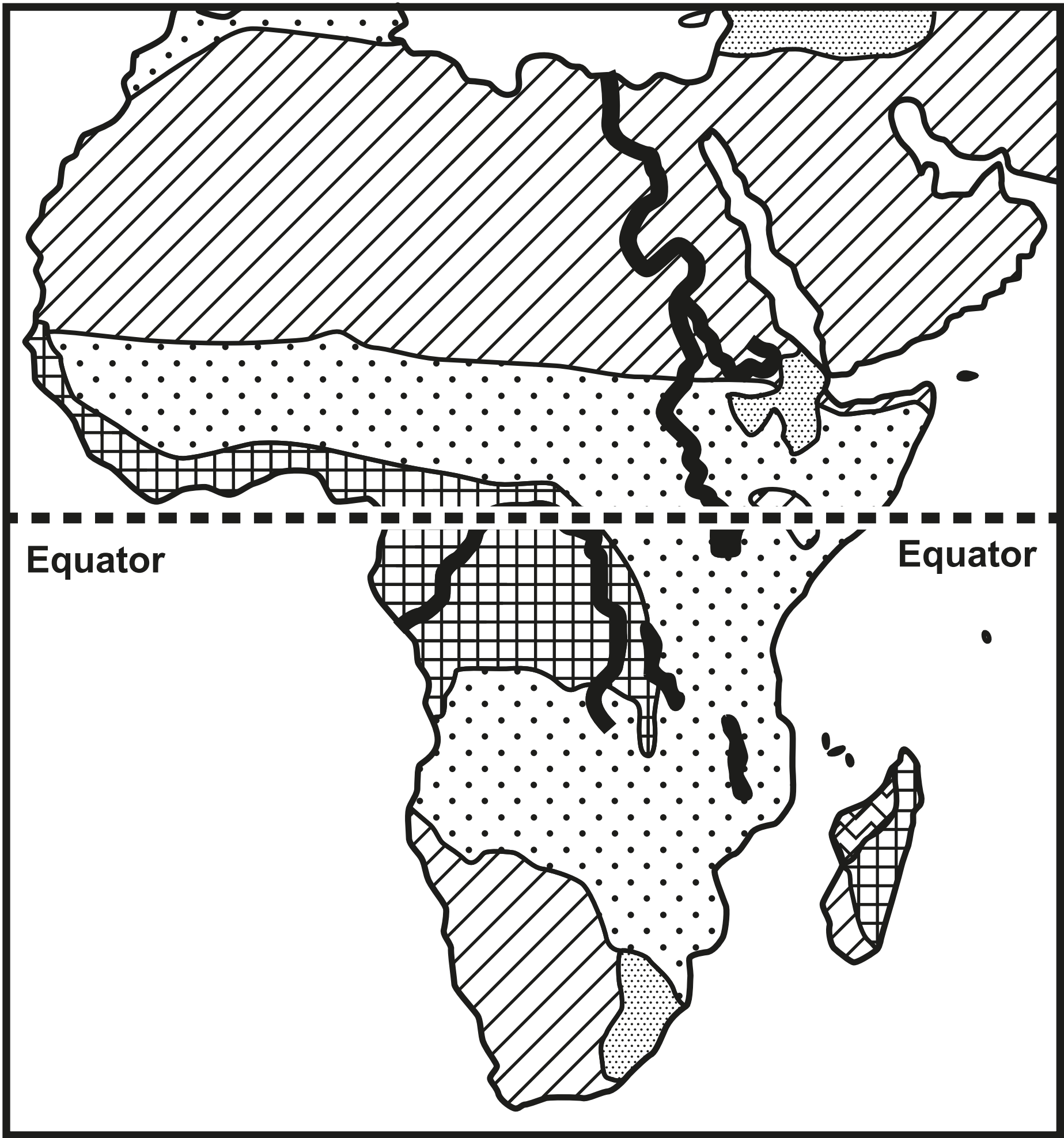
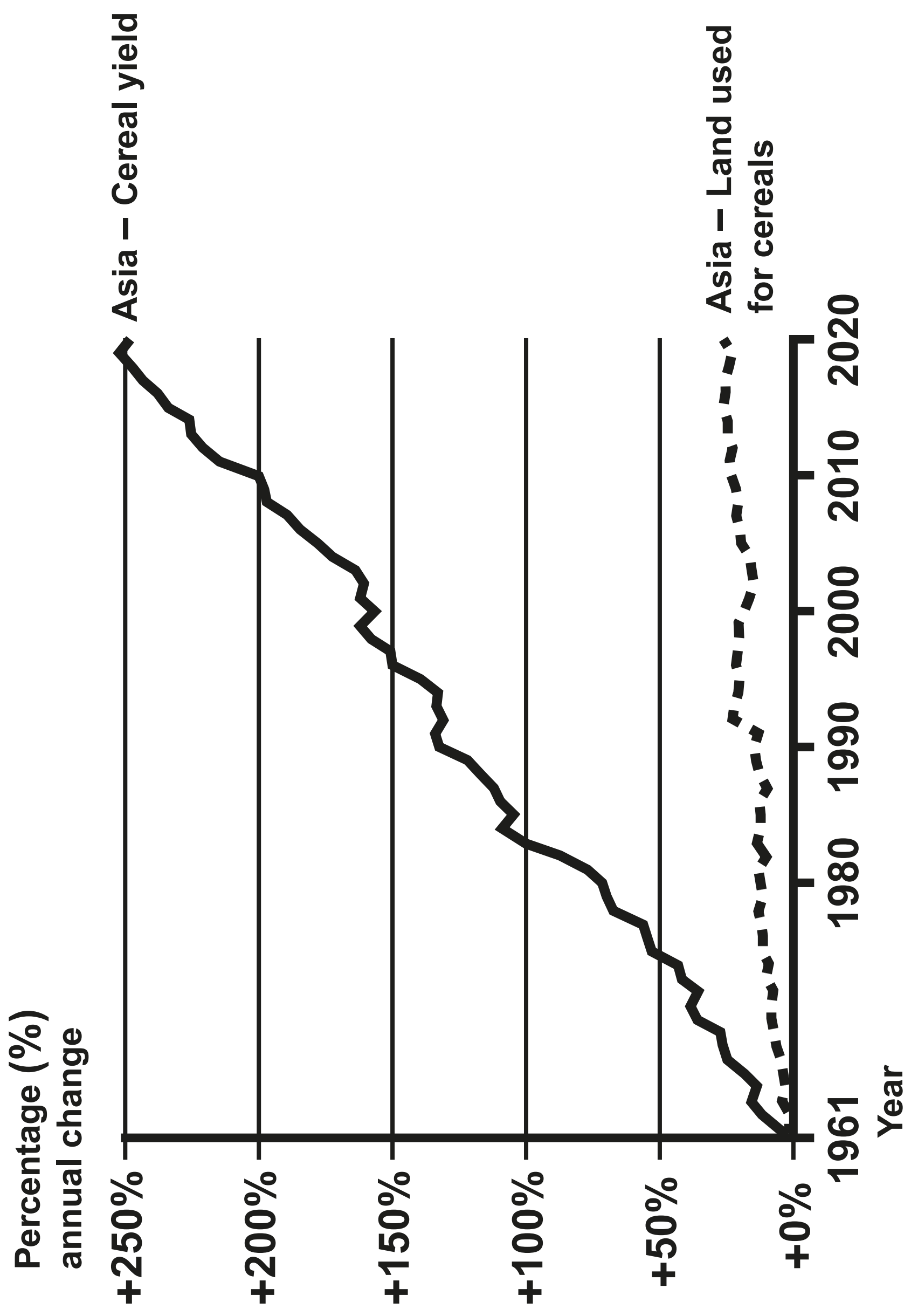


Figure 2b

Increase in percentage (%) of cereal yield and land used for growing cereals in Asia, 1961 to 2020



## Figure 2c

### The negative multiplier effect

#### The downward spiral

1. Deprived area



2. Little money to improve area



3. Few jobs and unemployment



4. Those able to move, move out



5. People have little money to spend



6. Services decline



7. More people leave



8. Further decline

Figure 3a (Colour)

## Land use map of an urban area in Virginia, United States

### KEY: Land Use Category

•• **M** •• Railway

==== Road

 Bus/Metro Station Mixed Use

 Retail Mixed Use

 Offices

 Residential/Retail

 Park/Open Space








Turn over

Figure 3a (Black and White)

Land use map of an urban area in Virginia,  
United States

KEY: Land Use Category

- **M** •• Railway
- ==== Road
-  Bus/Metro Station Mixed Use
-  Retail Mixed Use
-  Offices
-  Residential/Retail
-  Park/Open Space

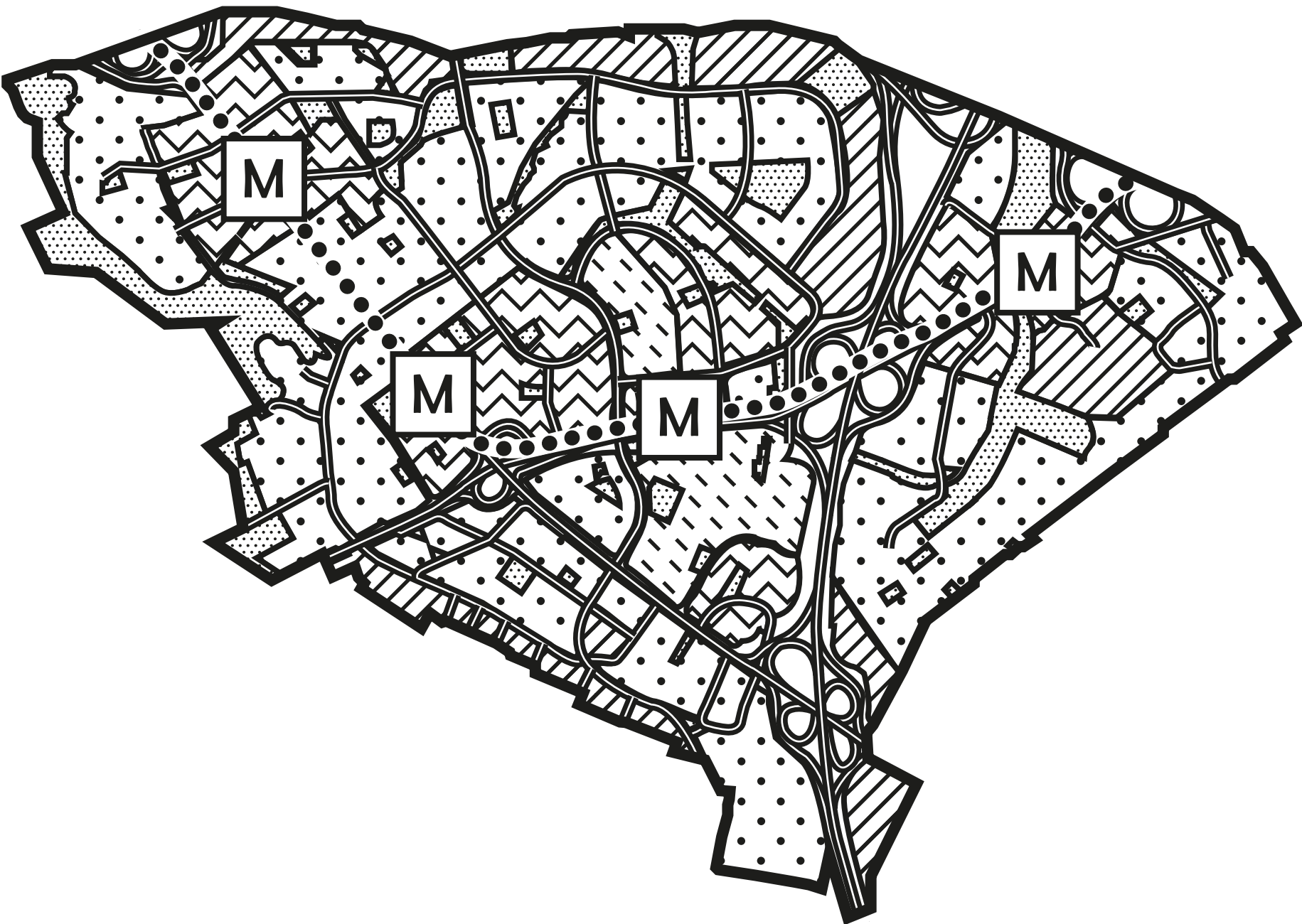
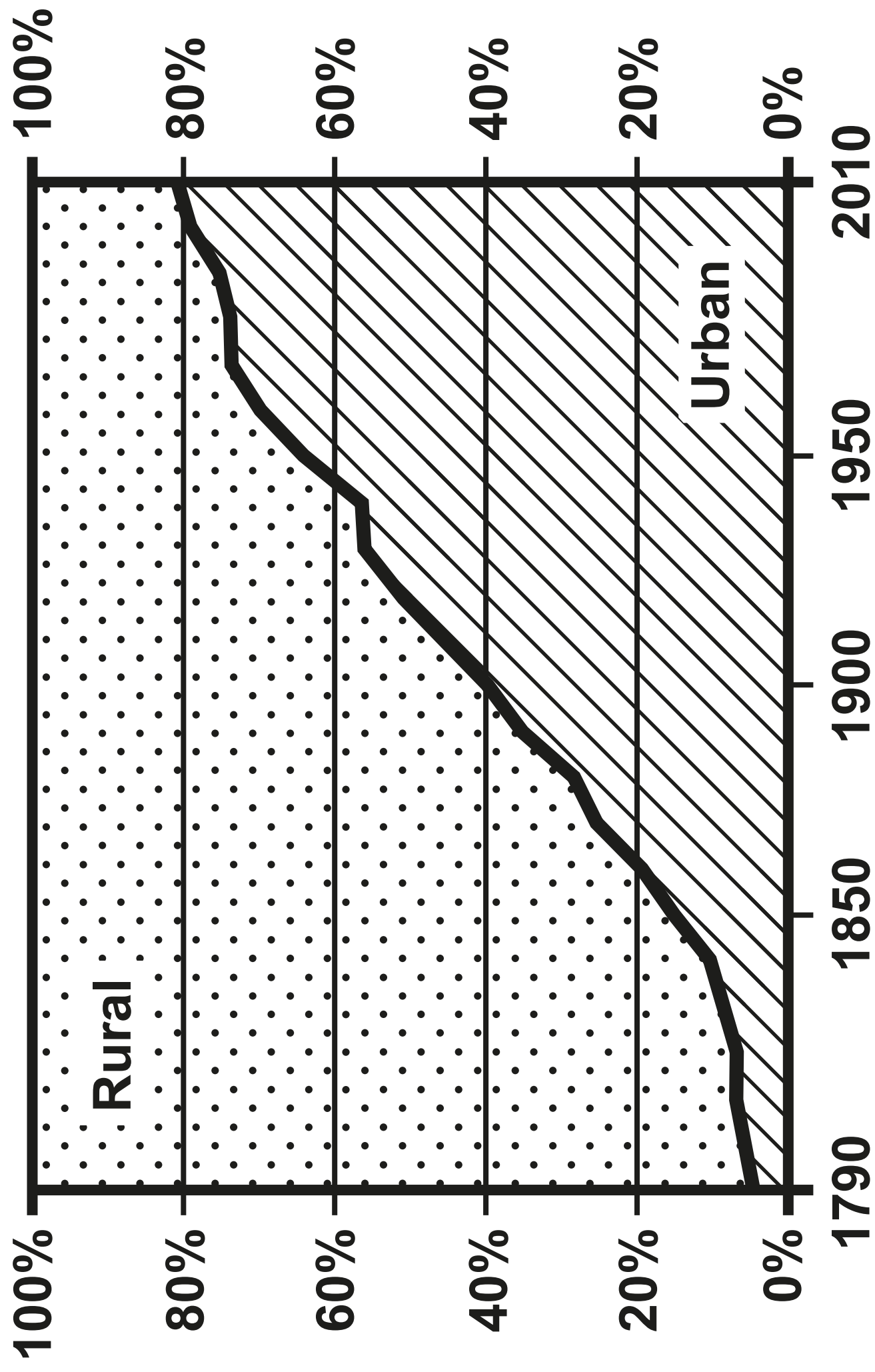


Figure 3b

Urban and rural populations in the United States, 1790–2010



## Figure 3c

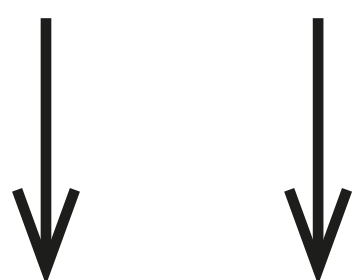
### Information about brownfield site developments in the United States

**Buildings and houses, empty and in poor condition**

**Old fuel stations**

**Abandoned factories**

**Polluted waterfronts**



**New buildings**

**Creating healthy and safe community spaces**

**Community gardens**

**Making it easier to get healthy foods**

**Parks and trails for walking and biking**

**Increasing physical activity and safety**



## Figure 4a

### **Information about the students' enquiry and primary data collection**

**Enquiry question: What are the impacts of a new solar farm on a local community?**

**Primary data collected:**

- **Observations of the solar farm and its surroundings**
- **Interviews with local residents**
- **Environment Quality Survey near the solar farm and in the local village**
- **Field sketches of the solar farm**

Figure 4b

Environmental Quality Survey data from site near the solar farm

Indicator	Negative	1	2	3	4	5	Positive
Buildings	Buildings are in poor condition					X	Buildings are in good condition
Traffic	Large amount of traffic				X		Low amount of traffic
Landscape	Landscape is unattractive					X	Landscape is attractive
Litter	Large amount of litter				X		Small amount of litter
Pavements	Pavements are in poor condition			X			Pavements are in good condition
Repair	Many features in need of maintenance				X		Few features in need of maintenance
Air quality	Poor air quality				X		Good air quality
Noise	High noise levels					X	Low noise levels

## Figure 5a

### **Information about the students' enquiry and primary data collection**

**Enquiry question: What are the impacts of a new small business park on the edge of a rural village?**

**Primary data collected:**

- **Observations of the business park and its surroundings**
- **Interviews with local residents**
- **Environment Quality Survey near the business park and in the local village**
- **Field sketches of the business park**

Figure 5b

Environmental Quality Survey data from site near the business park

Indicator	Negative	1	2	3	4	5	Positive
Buildings	Buildings are in poor condition					X	Buildings are in good condition
Traffic	Large amount of traffic				X		Low amount of traffic
Landscape	Landscape is unattractive					X	Landscape is attractive
Litter	Large amount of litter				X		Small amount of litter
Pavements	Pavements are in poor condition			X			Pavements are in good condition
Repair	Many features in need of repair				X		Few features in need of maintenance
Air quality	Poor air quality				X		Good air quality
Noise	High noise levels					X	Low noise levels

## Figure 6a

### **Information about the students' enquiry and primary data collection**

**Enquiry question: What are the impacts of new community garden in a city?**

**Primary data collected:**

- **Observations of the community garden and its surroundings**
- **Interviews with local residents**
- **Environment Quality Survey near the community garden and nearby**
- **Field sketches of the community garden**

Figure 6b

Environmental Quality Survey data from site near the community garden

Indicator	Negative	1	2	3	4	5	Positive
Buildings	Buildings are in poor condition					X	Buildings are in good condition
Traffic	Large amount of traffic				X		Low amount of traffic
Landscape	Landscape is unattractive					X	Landscape is attractive
Litter	Large amount of litter				X		Small amount of litter
Pavements	Pavements are in poor condition			X			Pavements are in good condition
Repair	Many features in need of maintenance				X		Few features in need of maintenance
Air quality	Poor air quality				X		Good air quality
Noise	High noise levels					X	Low noise levels



Figure 7a (Colour) – Part 2

Percentage (%) positive and negative change in CO<sub>2</sub> emissions, 2019

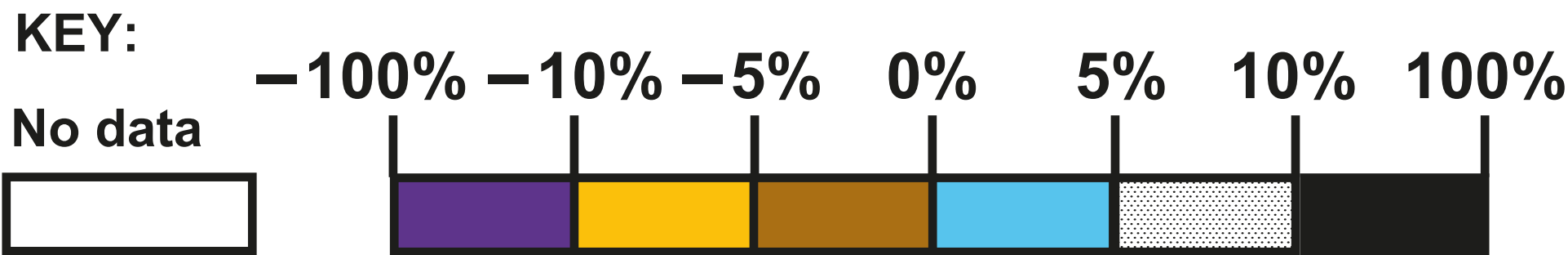




Figure 7a (Colour) – Part 3

Percentage (%) positive and negative change in CO<sub>2</sub> emissions, 2019

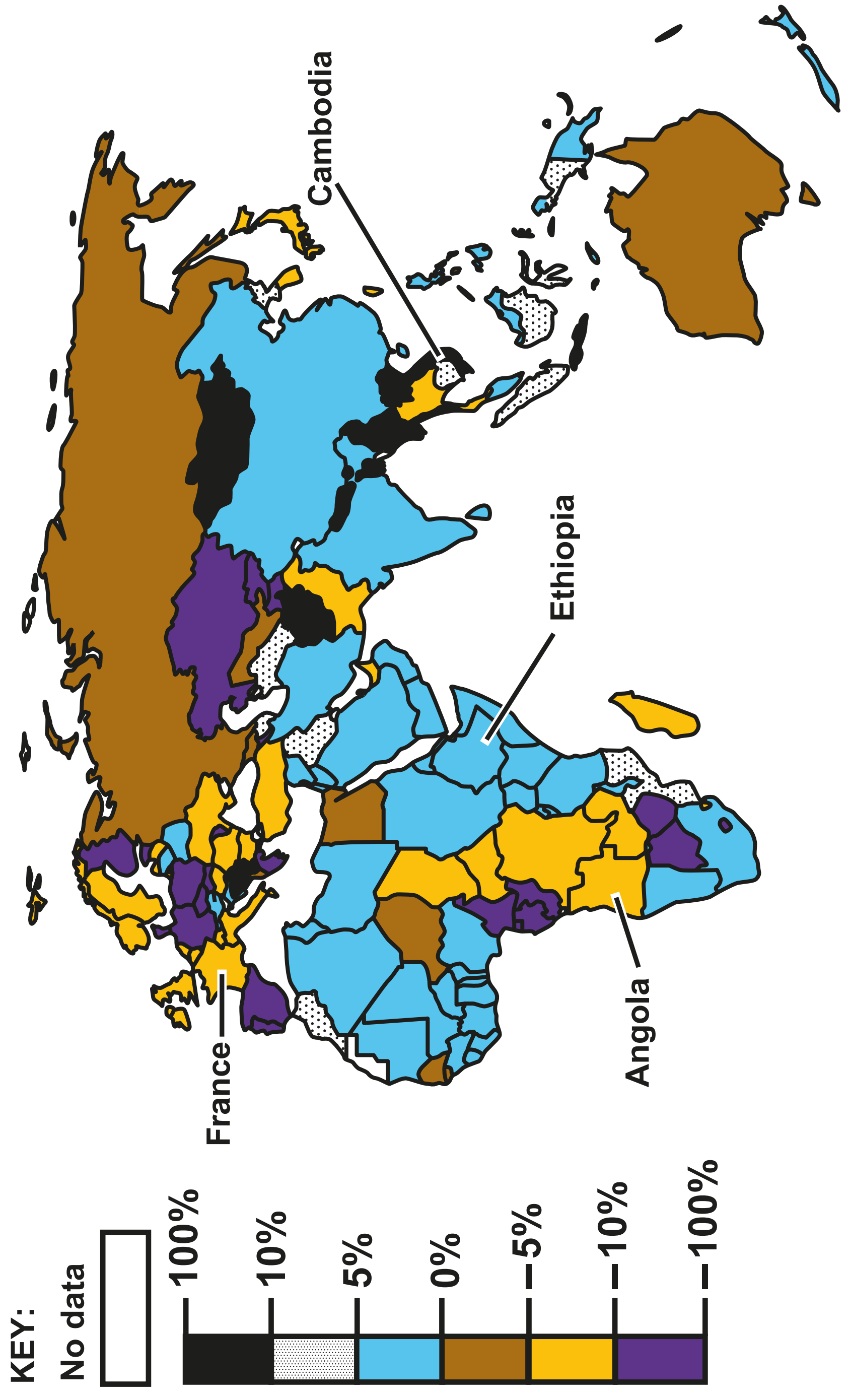


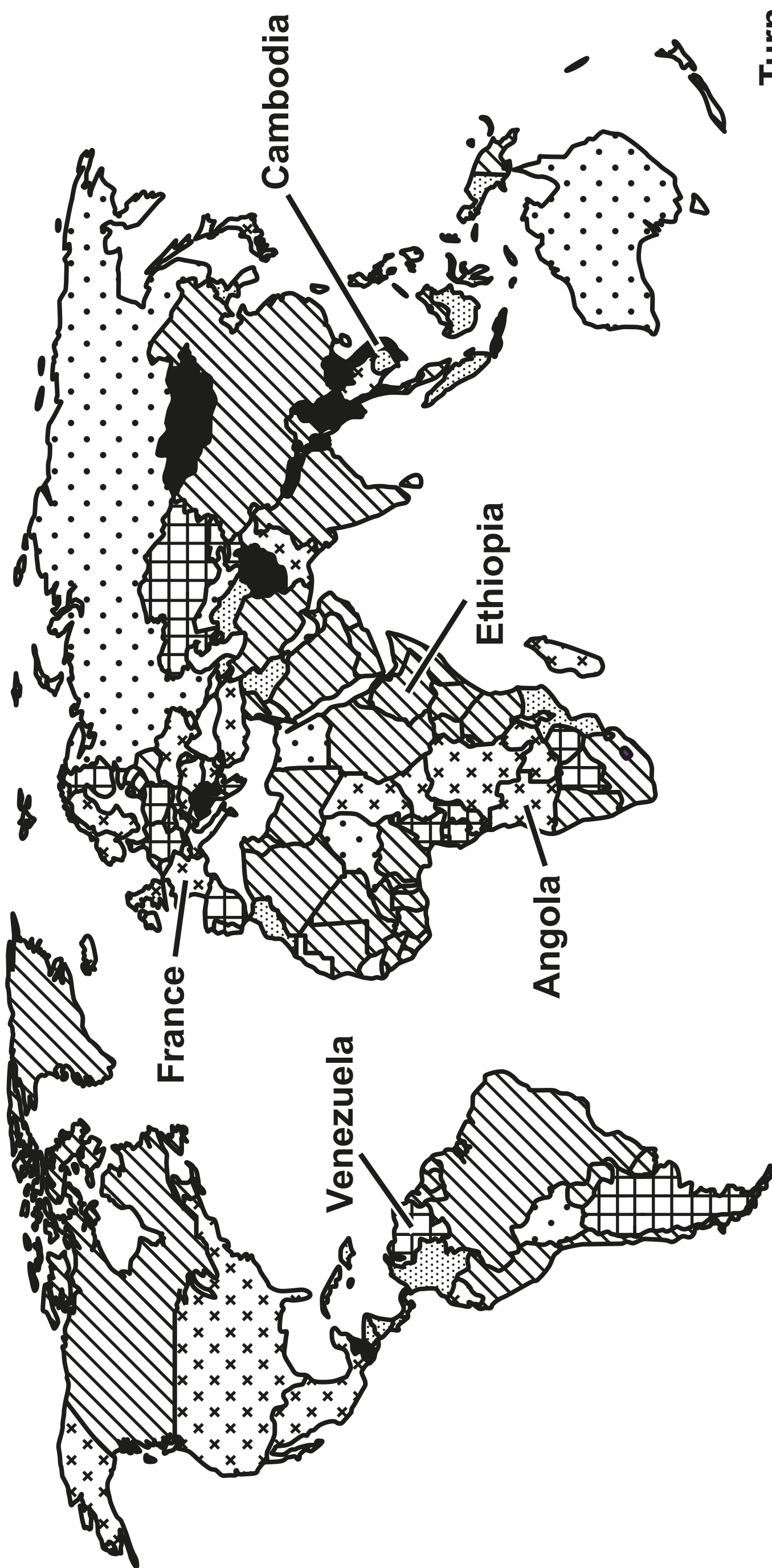
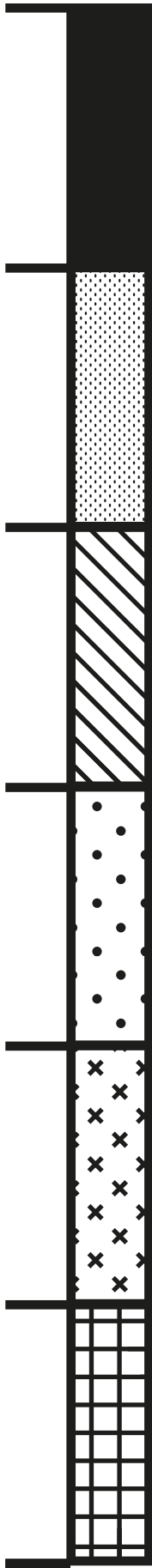
Figure 7a (Black and White) – Part 1

Percentage (%) positive and negative change in CO<sub>2</sub> emissions, 2019

KEY:

-100%   -10%   -5%   0%   5%   10%   100%

No data



**Figure 7a (Black and White) – Part 2**

**Percentage (%) positive and negative change in  
CO<sub>2</sub> emissions, 2019**

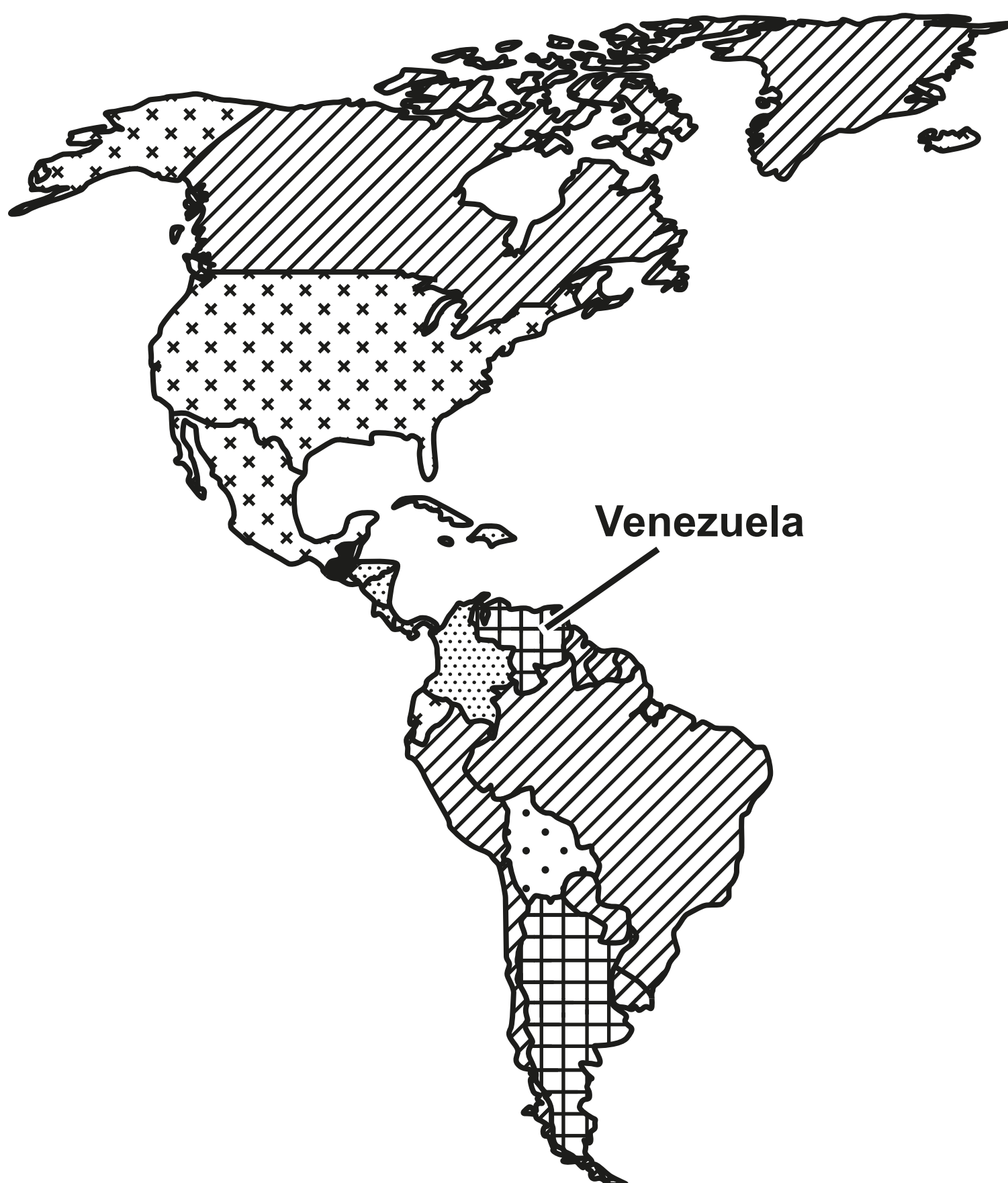
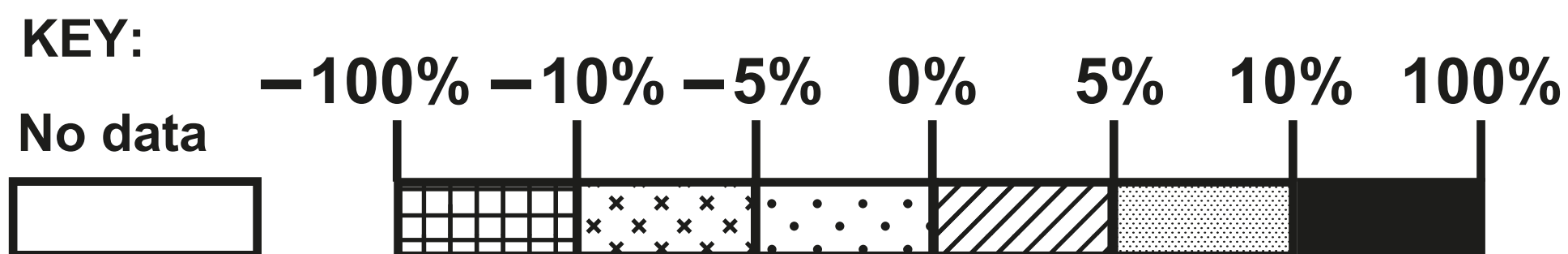
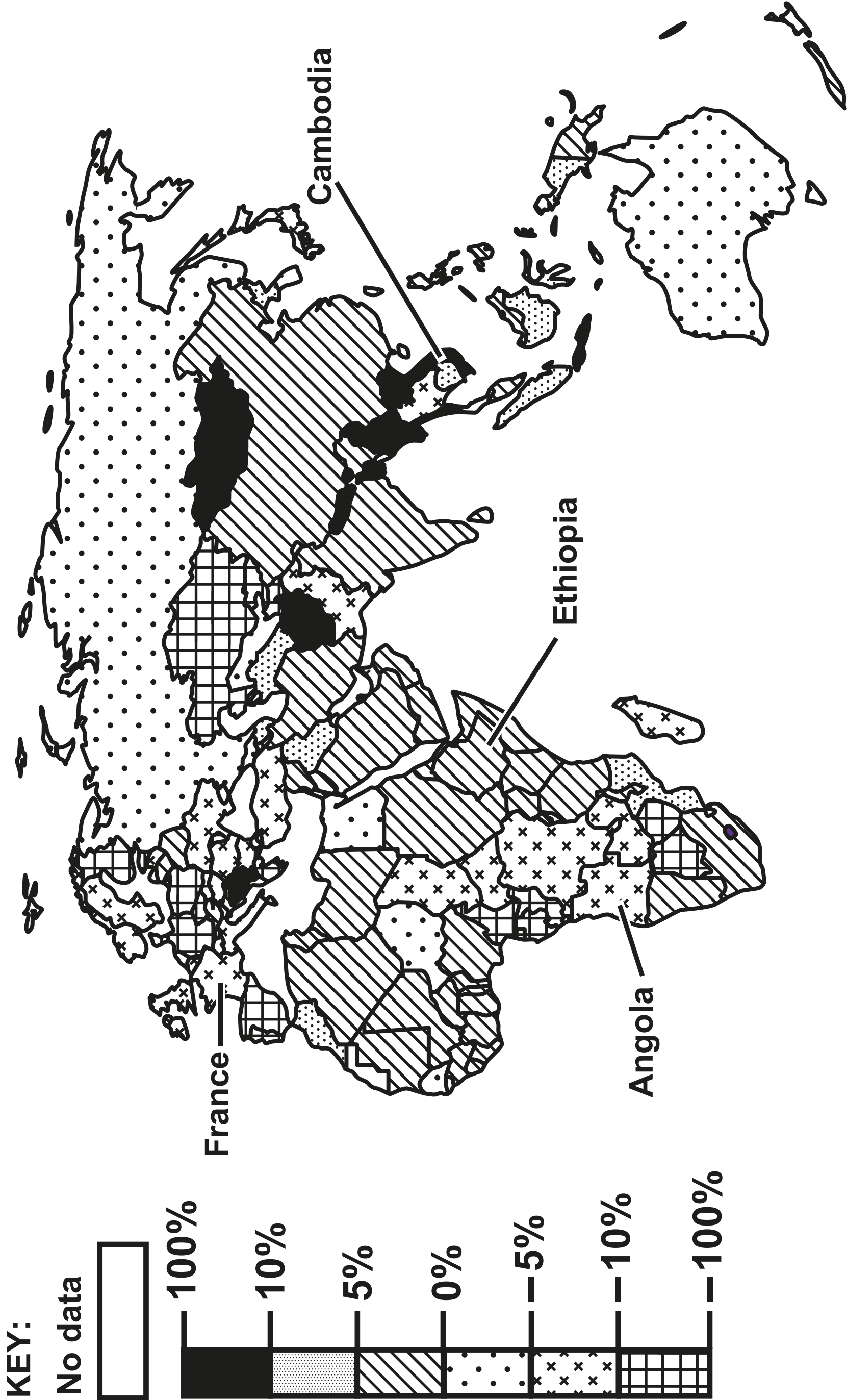


Figure 7a – Black and white (Part 3)

Percentage (%) positive and negative change in CO<sub>2</sub> emissions, 2019



## Figure 7b

### Strategies for reducing water shortage

#### Promoting sustainable water use

People are setting water-saving examples at home, school, and work, including:

- Taking shorter showers
- Installing low-flow toilets
- Collecting rainwater
- Reusing greywater (waste water)
- Fixing leaks quickly
- Investing in sustainable energy and water reduction initiatives

Figure 8a (Colour) – Part 1

Trade as a share of GDP, 2020

KEY:

No data

0% 20% 50% 100% 200% 500%

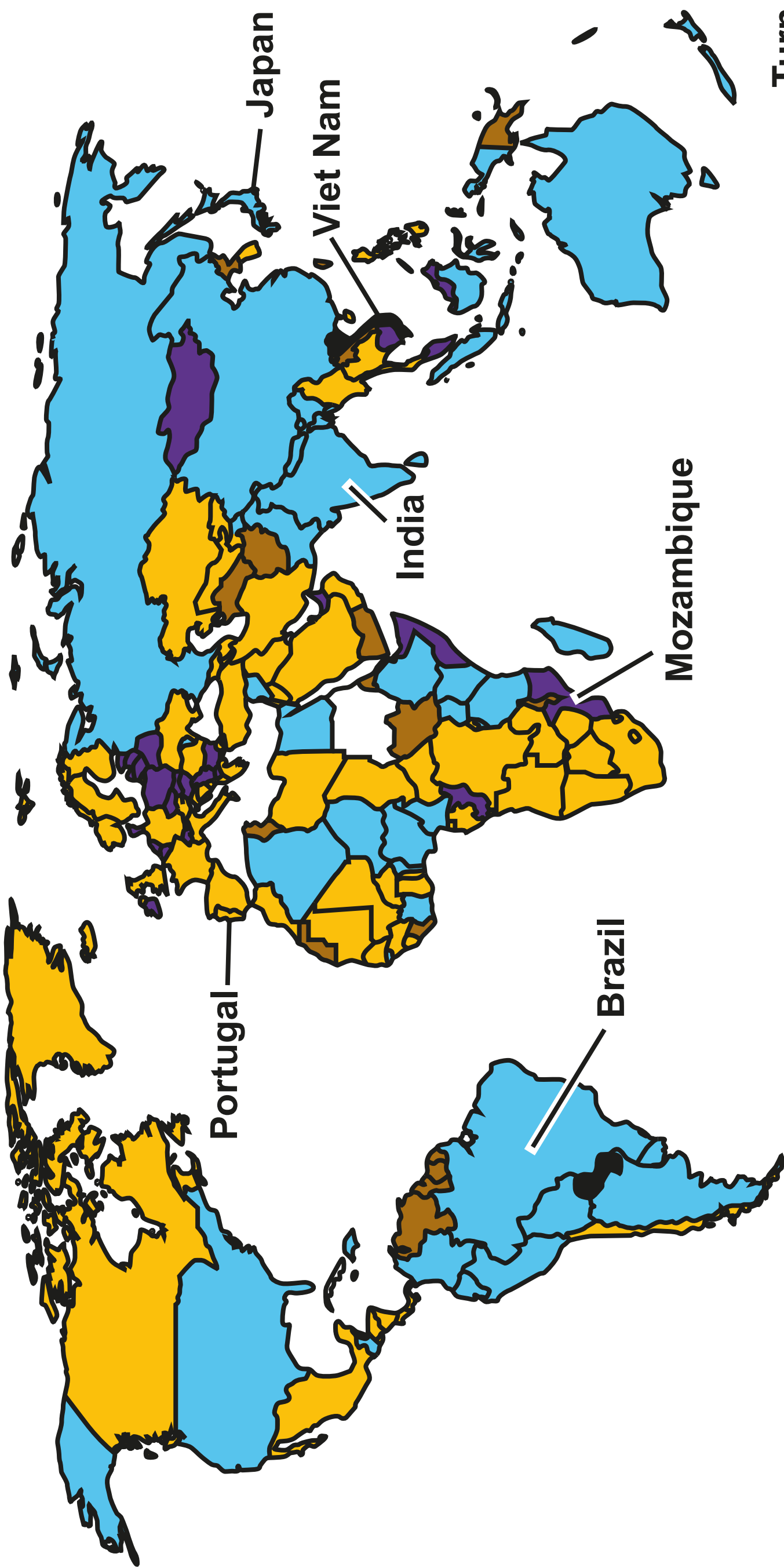
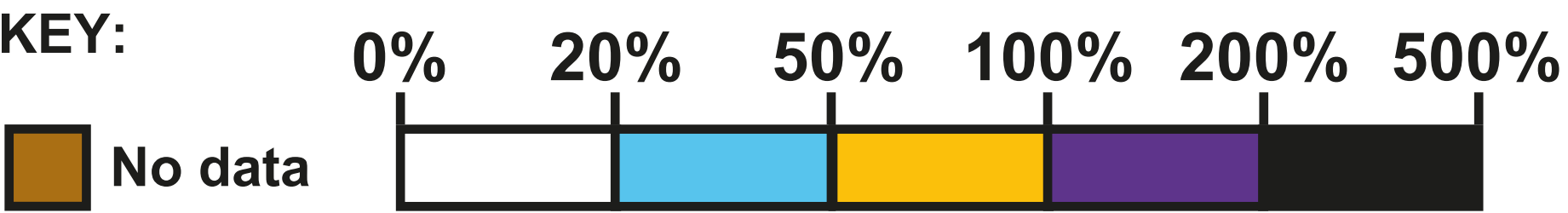




Figure 8a (Colour) – Part 2

Trade as a share of GDP, 2020



Brazil

Figure 8a (Colour) – Part 3

Trade as a share of GDP, 2020

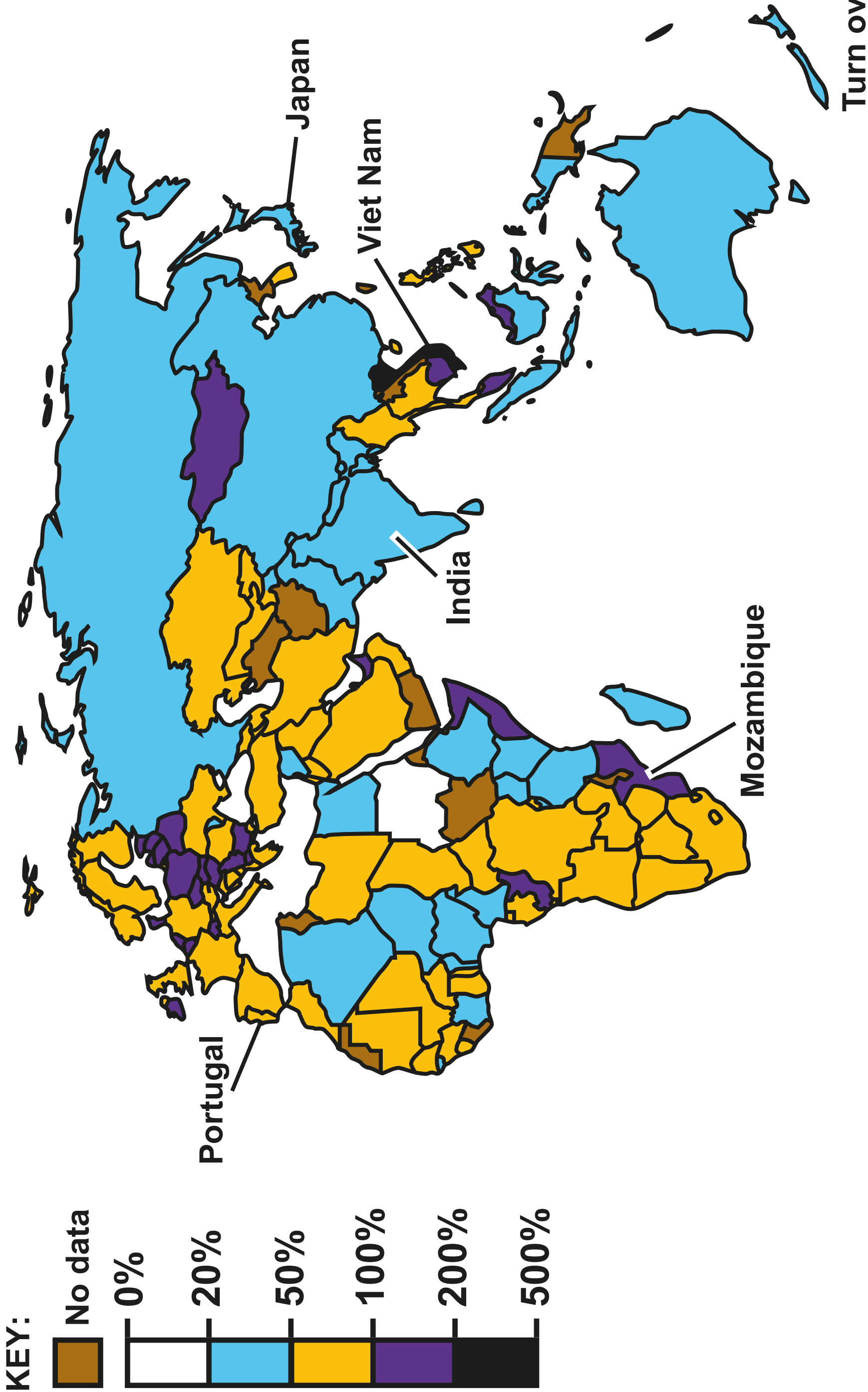




Figure 8a (Black and White) – Part 1

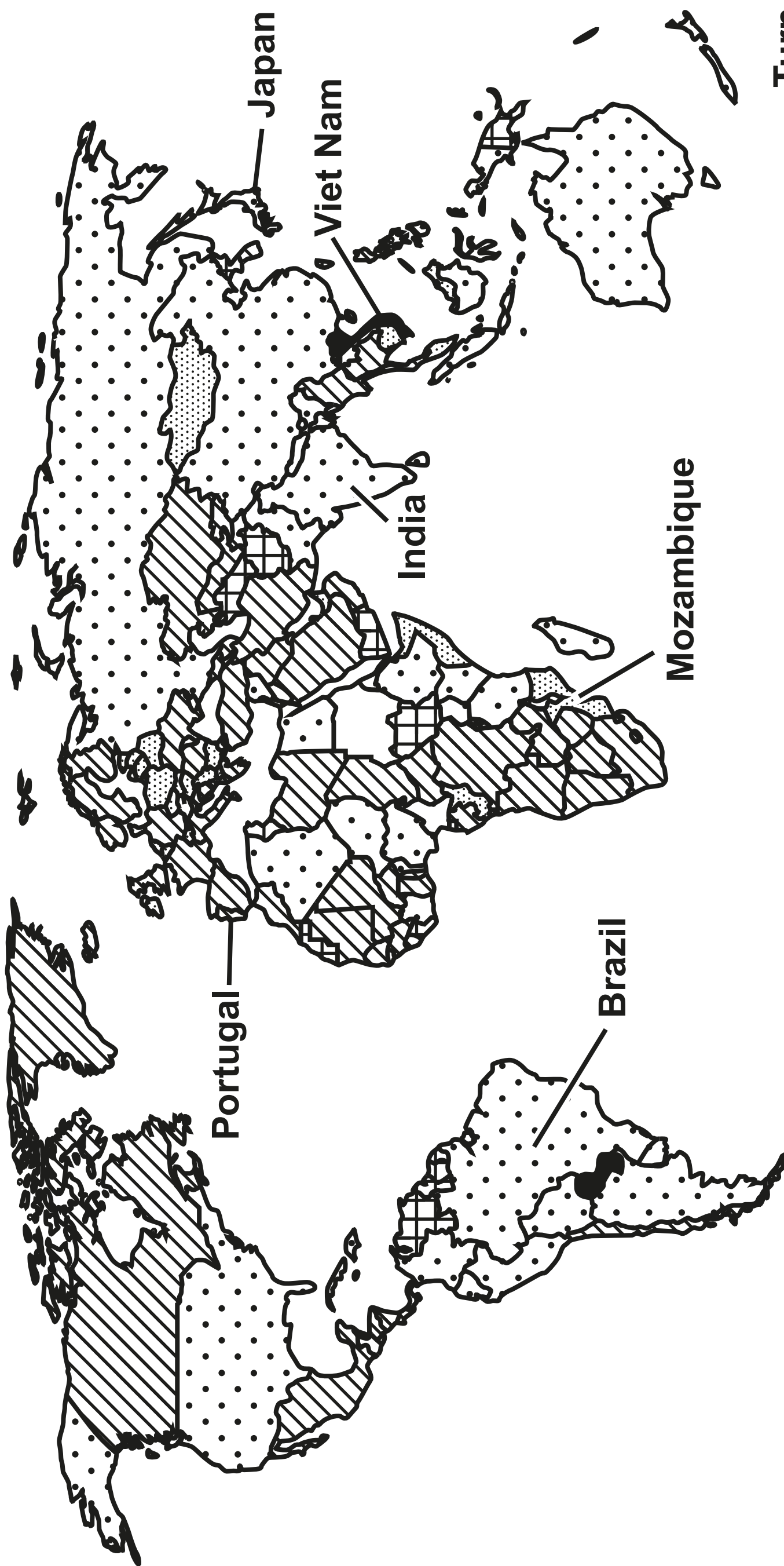
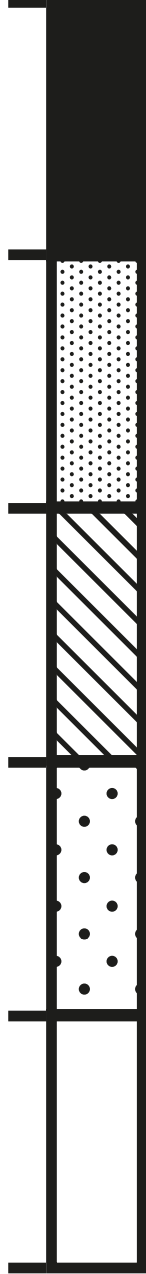
Trade as a share of GDP, 2020

KEY:

0% 20% 50% 100% 200% 500%



No data



Turn over

# Figure 8a (Black and White) – Part 2

## Trade as a share of GDP, 2020

KEY:

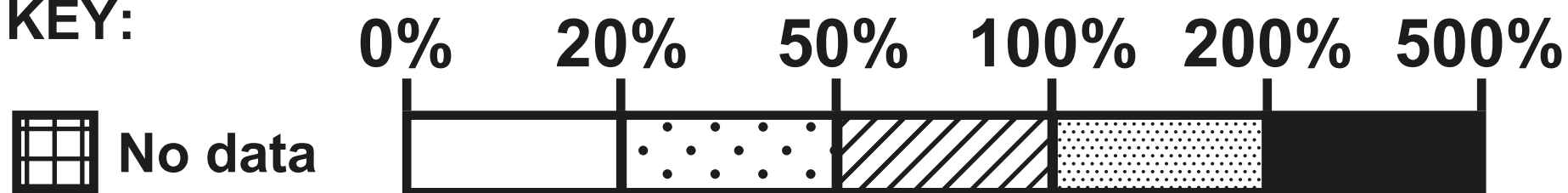
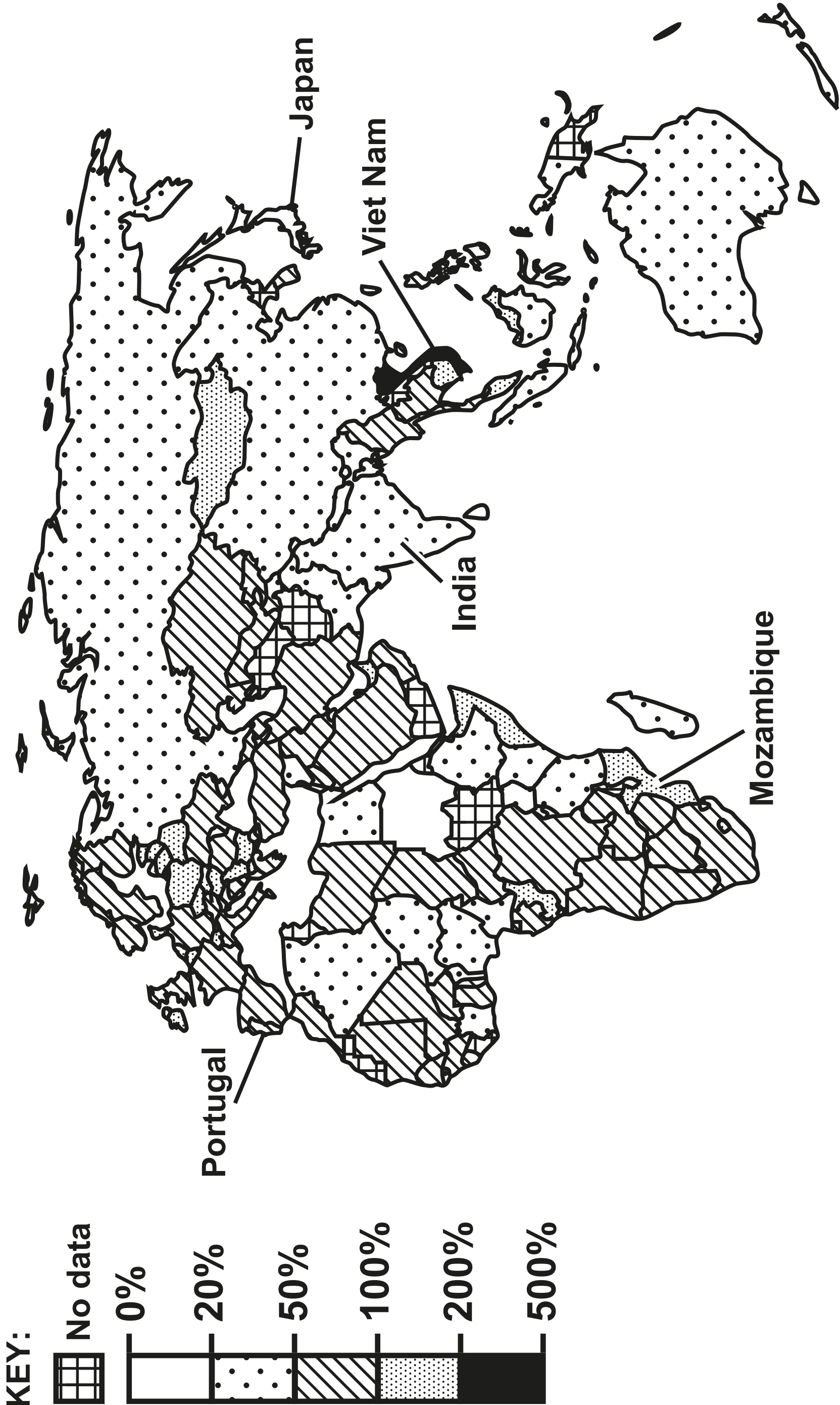


Figure 8a (Black and White) – Part 3

Trade as a share of GDP, 2020



## Figure 8b

### Infographic about international institutions

#### **The International Monetary Fund (IMF)**

provides loans to help countries that are experiencing challenges in meeting their economic needs.

#### **The United Nations (UN)**

is an organisation which aims to improve cooperation between countries and maintain international peace and security.

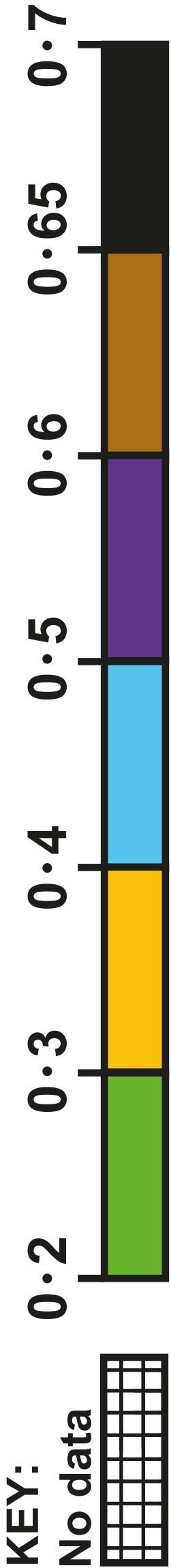
#### **The World Trade Organisation (WTO)**

works to ensure trade flows between countries are as smooth as possible.

#### **The World Bank**

aims to support long-term economic development and poverty reduction.

The Gini Equality Index, 2019



Note: the Gini Equality Index is a measure of inequality.

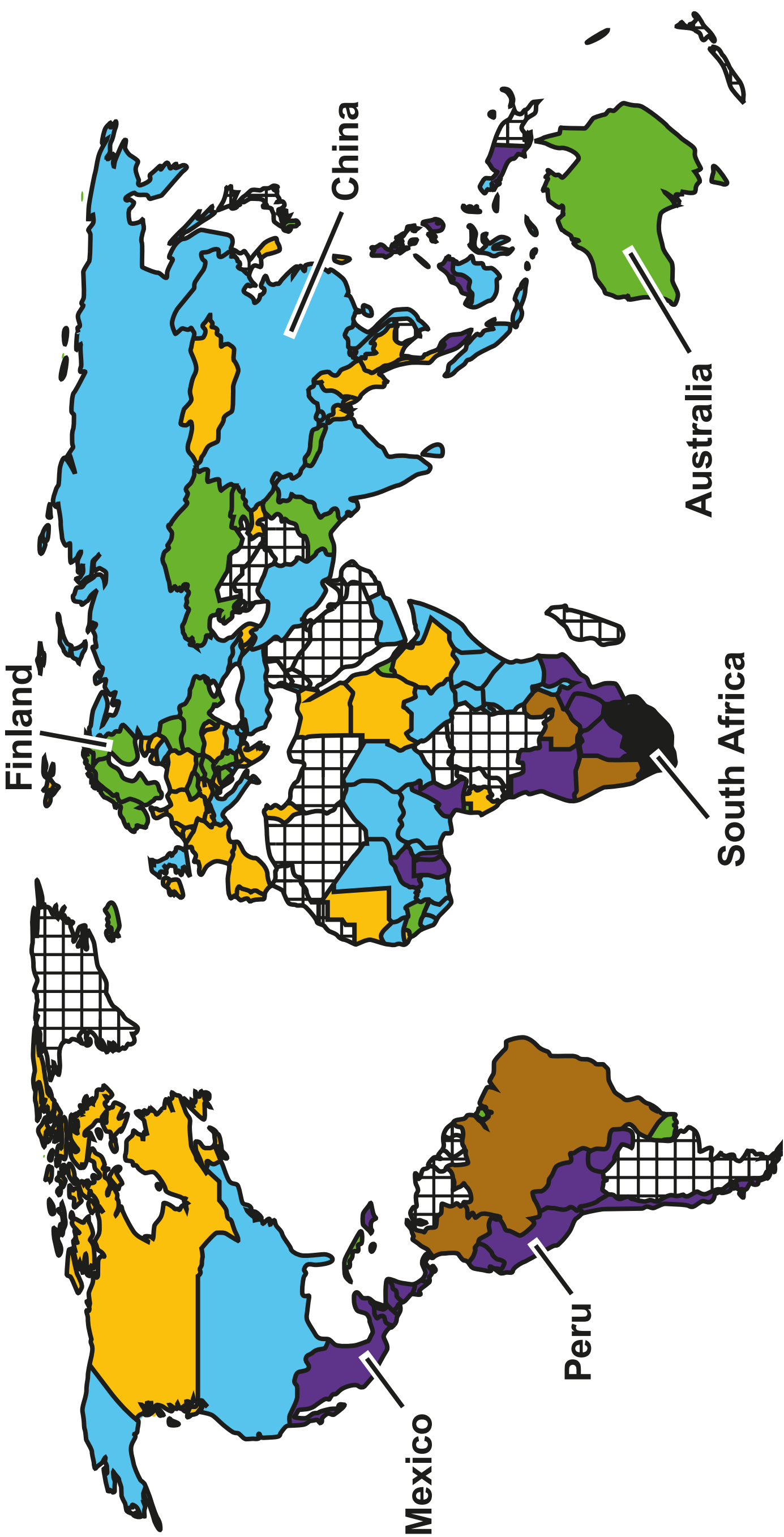
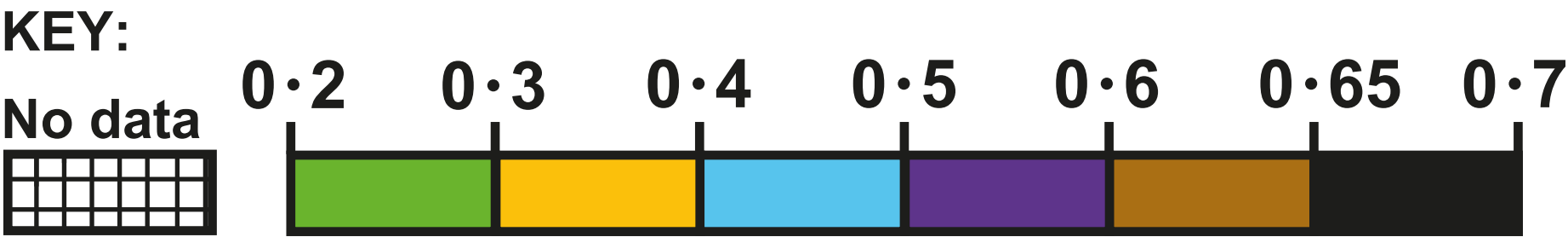


Figure 9a (Colour) – Part 2

The Gini Equality Index, 2019



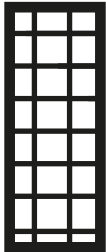
Note: the Gini Equality Index is a measure of inequality.





# The Gini Equality Index, 2019

KEY:



No data

0.2



0.3



0.4



0.5



0.6

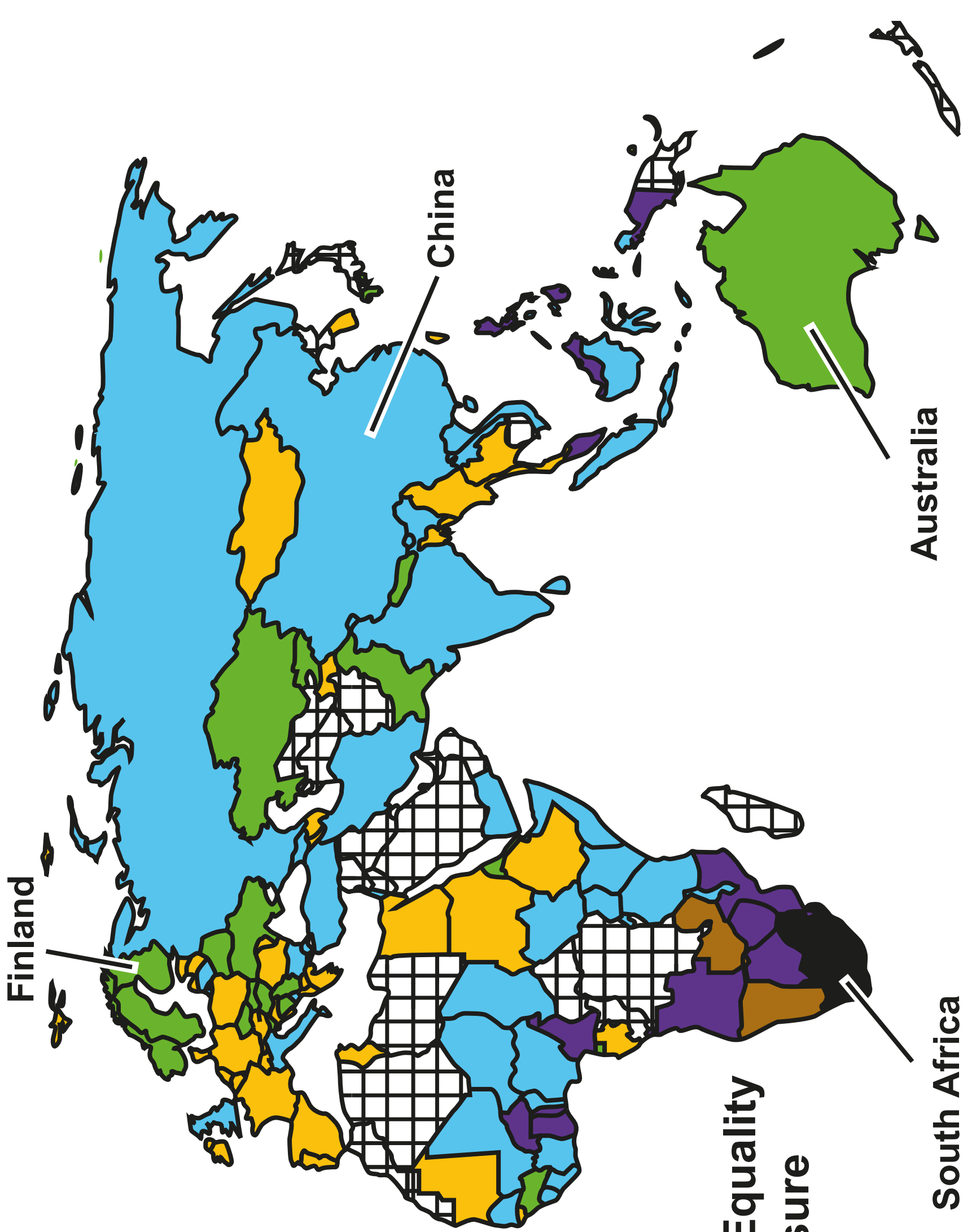


0.65



0.7

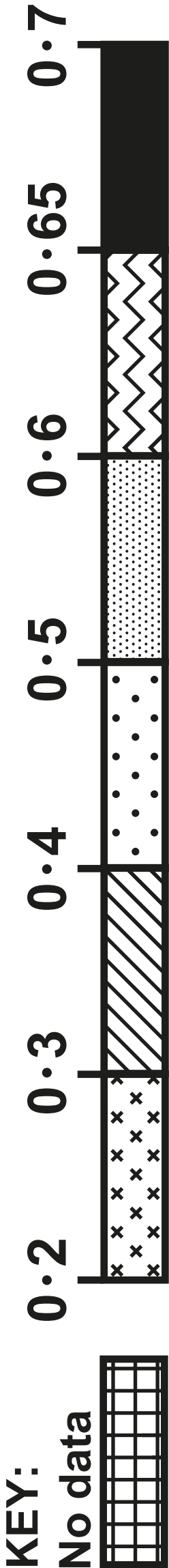
Note: the Gini Equality Index is a measure of inequality.



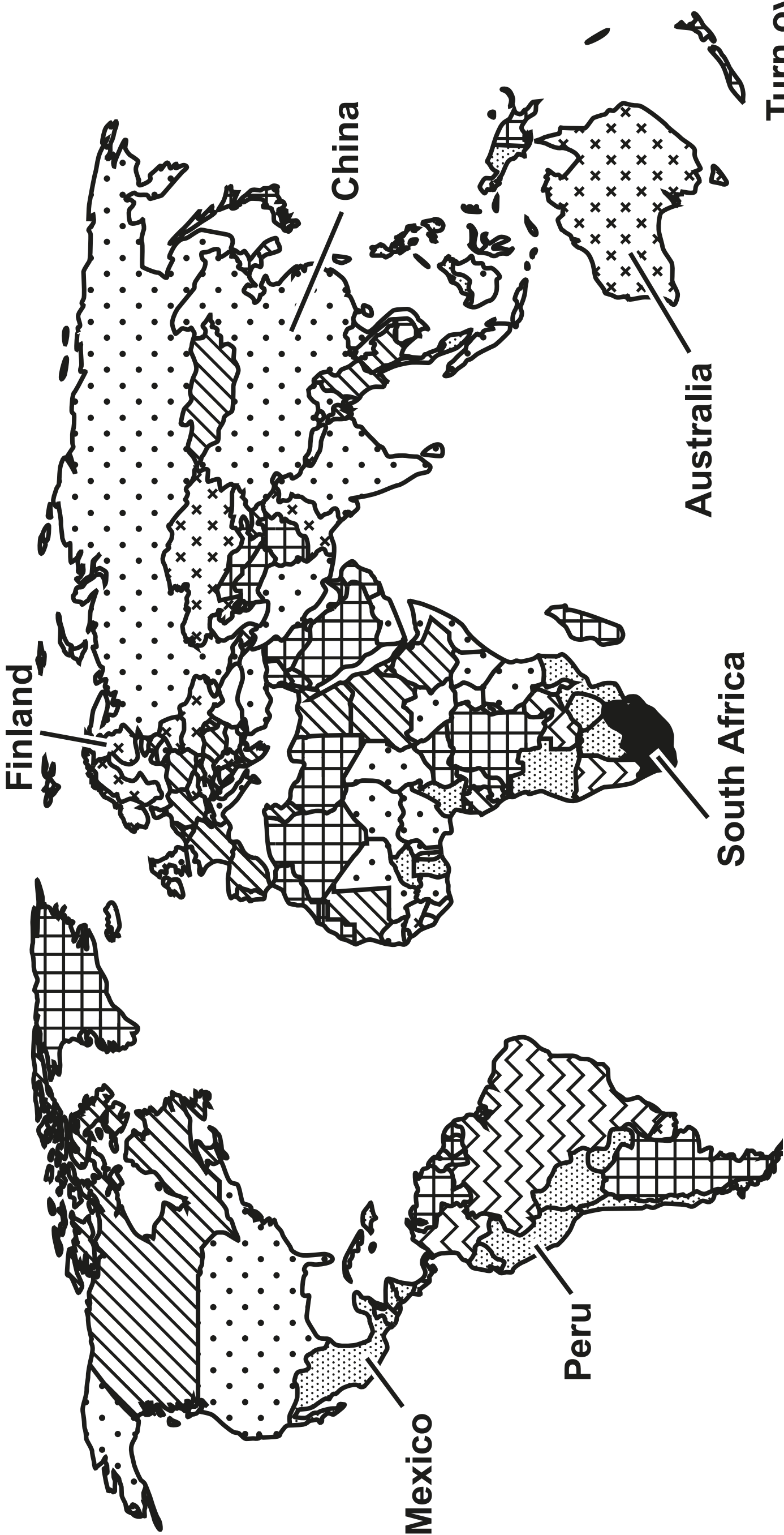
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Figure 9a (Black and White) – Part 1

The Gini Equality Index, 2019



Note: the Gini Equality Index is a measure of inequality.



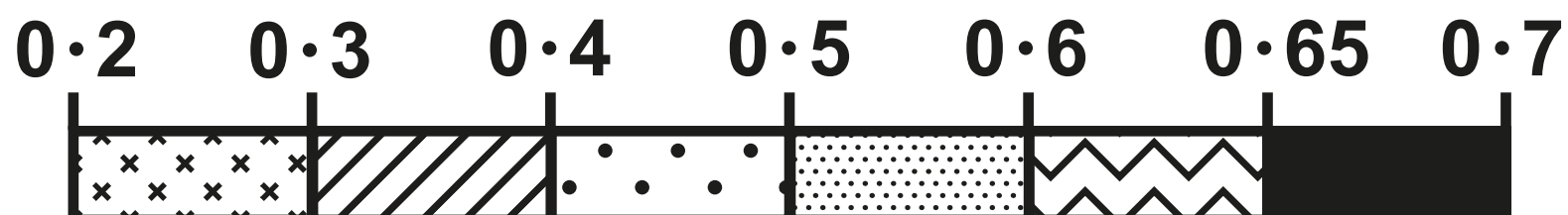


## Figure 9a (Black and White) – Part 2

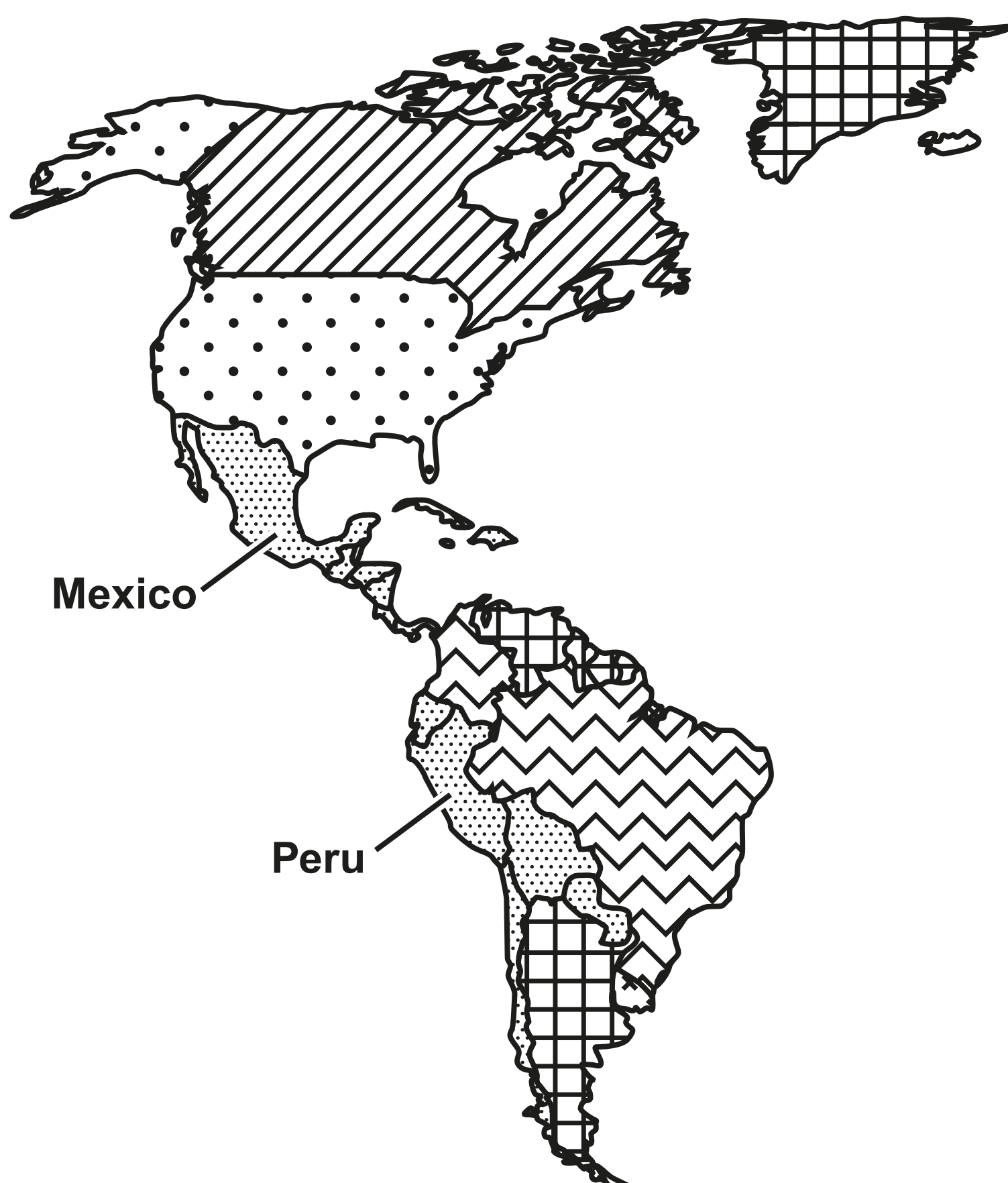
### The Gini Equality Index, 2019

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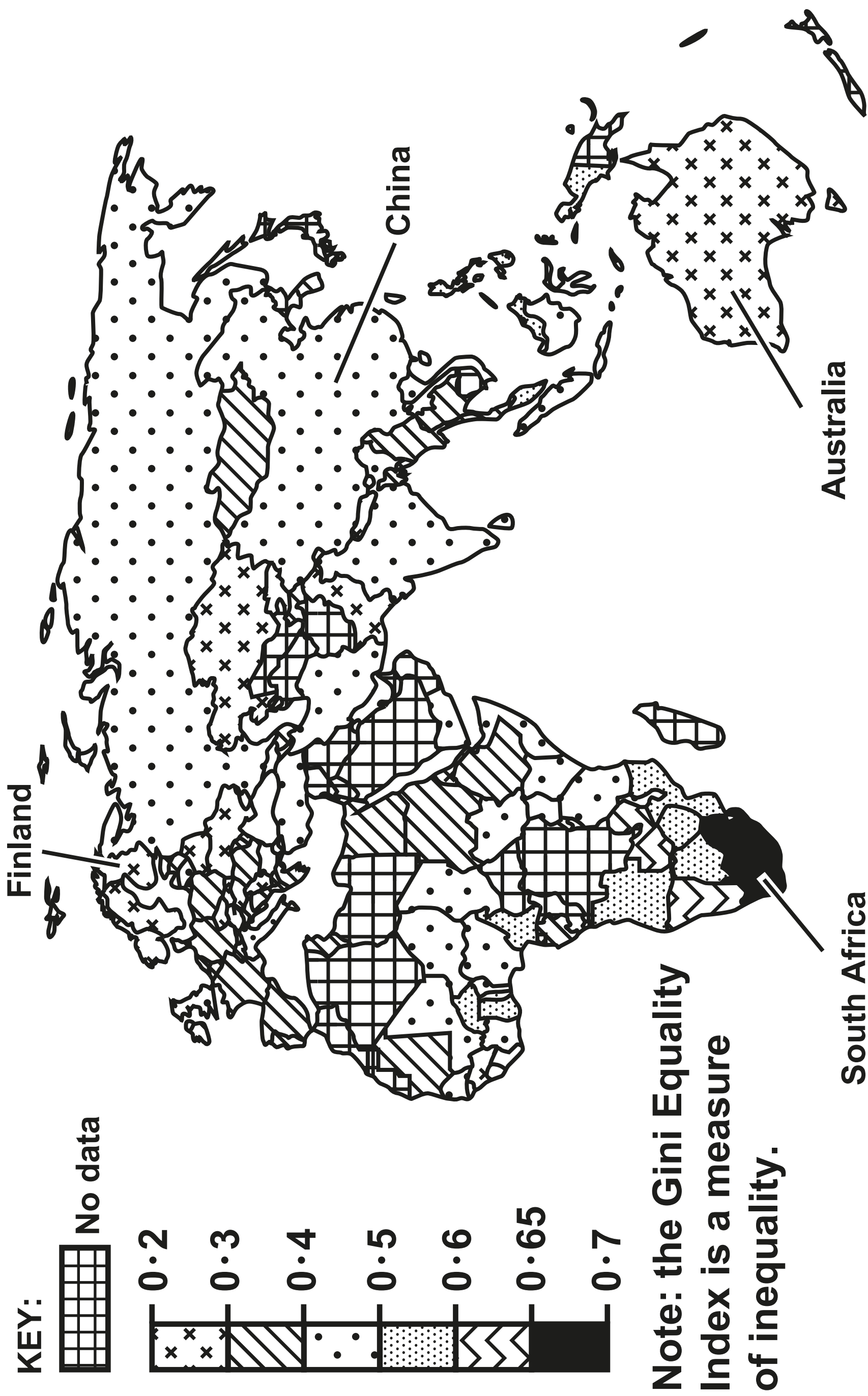
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**Note: the Gini Equality Index is a measure of inequality.**



## The Gini Equality Index, 2019



## **Figure 9b – Key**

### **Distribution of international aid by and within sectors, 2022**

#### **KEY:**

#### **Social Infrastructure and Services**

**A = Government and civil society**

**B = Education**

**C = Family planning and maternity services**

**D = Health**

**E = Water supply and sanitation**

**F = Other**

#### **Economic Infrastructure and Services**

**G = Transport and storage**

**H = Energy**

**I = Banking and financial services**

**J = Other**

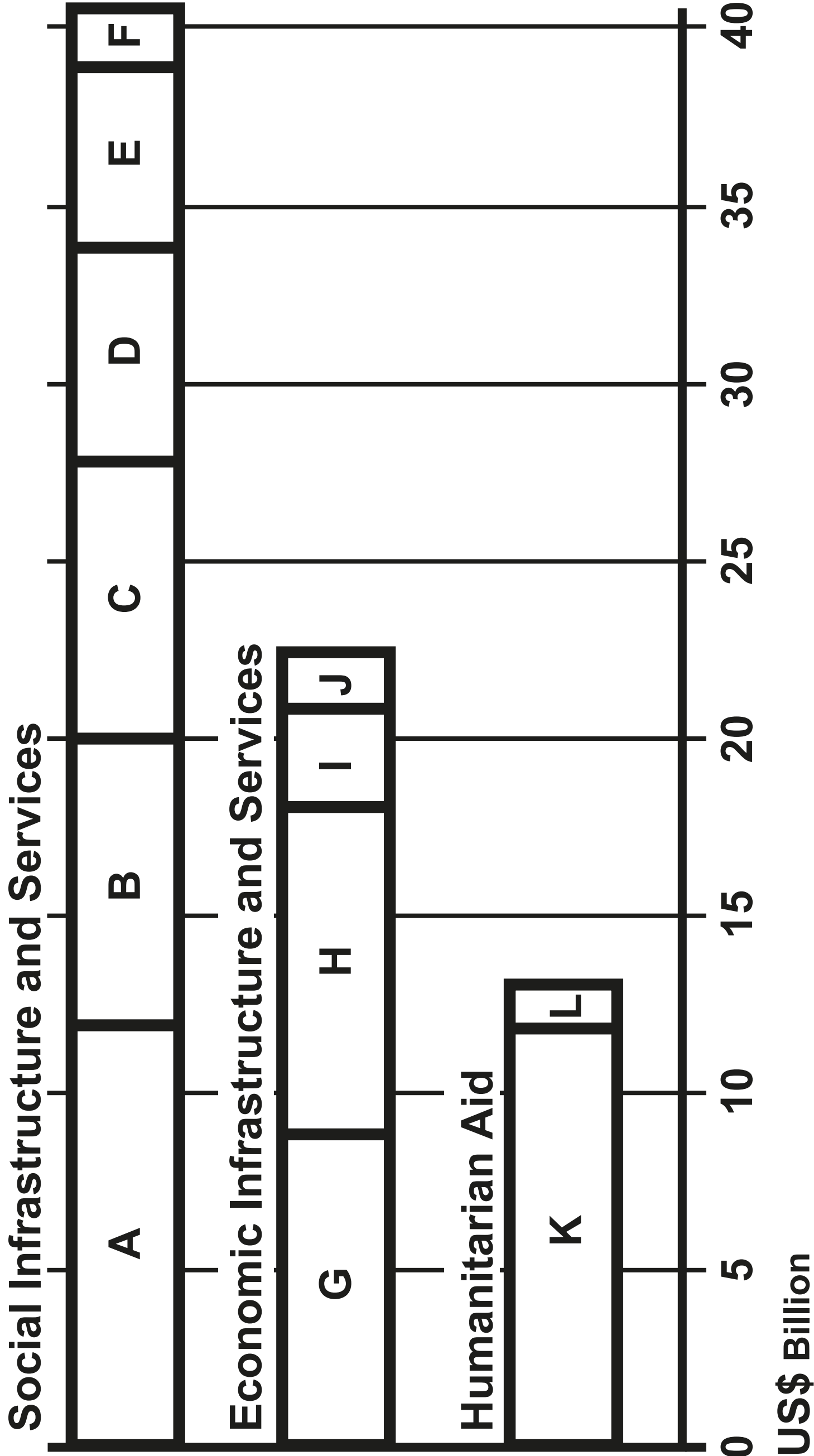
#### **Humanitarian Aid**

**K = Emergency response**

**L = Other**

Figure 9b – Diagram

Distribution of international aid by and within sectors, 2022



## Acknowledgements

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

Figure 1b: adapted from <https://ec.europa.eu/eurostat/>

Figure 1c: adapted from <https://www.gleneira.vic.gov.au/services/sustainable-living/what-can-i-do-to-reduce-my-carbon-footprint>

Figure 2a: Reproduced under Creative Commons Attribution-ShareAlike 3.0 license

Figure 2b: adapted from Food and Agriculture Organization of the United Nations [OurWorldInData.org/crop-yields](http://OurWorldInData.org/crop-yields)

Figure 2c: adapted from <https://geogramblings.com/>

Figure 3a: adapted from <https://toolkit.climate.gov/image/1991>

Figure 3b: adapted from <https://ourworldindata.org/grapher/urban-and-rural-populations-in-the-united-states>

Figure 3c: adapted from [https://www.cdc.gov/nceh/multimedia/infographics/redeveloping\\_brownfield.html](https://www.cdc.gov/nceh/multimedia/infographics/redeveloping_brownfield.html)

Figure 7a: adapted from <https://ourworldindata.org/co2-emissions>

Figure 8a: adapted from <https://ourworldindata.org/grapher/trade-as-share-of-gdp>

Figure 9a: adapted from <https://ourworldindata.org/grapher/economic-inequality-gini-index>

Figure 9b: adapted from <https://story.aidhedge.org/foreign-aid-infographics-851c8971ed7a>