

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

# **Geography**

## **PAPER 2: Human geography**

**Wednesday 5 June 2024 – Morning**

**Time: 1 hour 45 minutes**

# **Resource Booklet**

**DO NOT RETURN THIS RESOURCE BOOKLET WITH  
THE QUESTION PAPER.**

## Contents

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.

## Page

### SECTION A

5	Figure 1a
6	Figure 1b
7	Figure 1c
8	Figure 2a
9	Figure 2b
10	Figure 2c
11	Figure 3a
12	Figure 3b
13	Figure 3c – Key
14	Figure 3c – Diagram

(continued on the next page)



**Contents continued.**

**Page**

**SECTION B**

**15            Figure 4a**

**16            Figure 4b**

**17            Figure 5a**

**18            Figure 5b**

**19            Figure 6a**

**20–21       Figure 6b**

**SECTION C**

**22            Figure 7a (Colour) – Part 1**

**23            Figure 7a (Colour) – Part 2**

**24            Figure 7a (Colour) – Part 3**

**25            Figure 7a (Black and White) – Part 1**

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

**27            Figure 7a (Black and White) – Part 3**

**28            Figure 7b – Key**

**29            Figure 7b – Diagram**

**30            Figure 7c**

**31            Figure 8a (Colour) – Part 1**

**32            Figure 8a (Colour) – Part 2**

**33            Figure 8a (Colour) – Part 3**

**(continued on the next page)**

**Turn over**

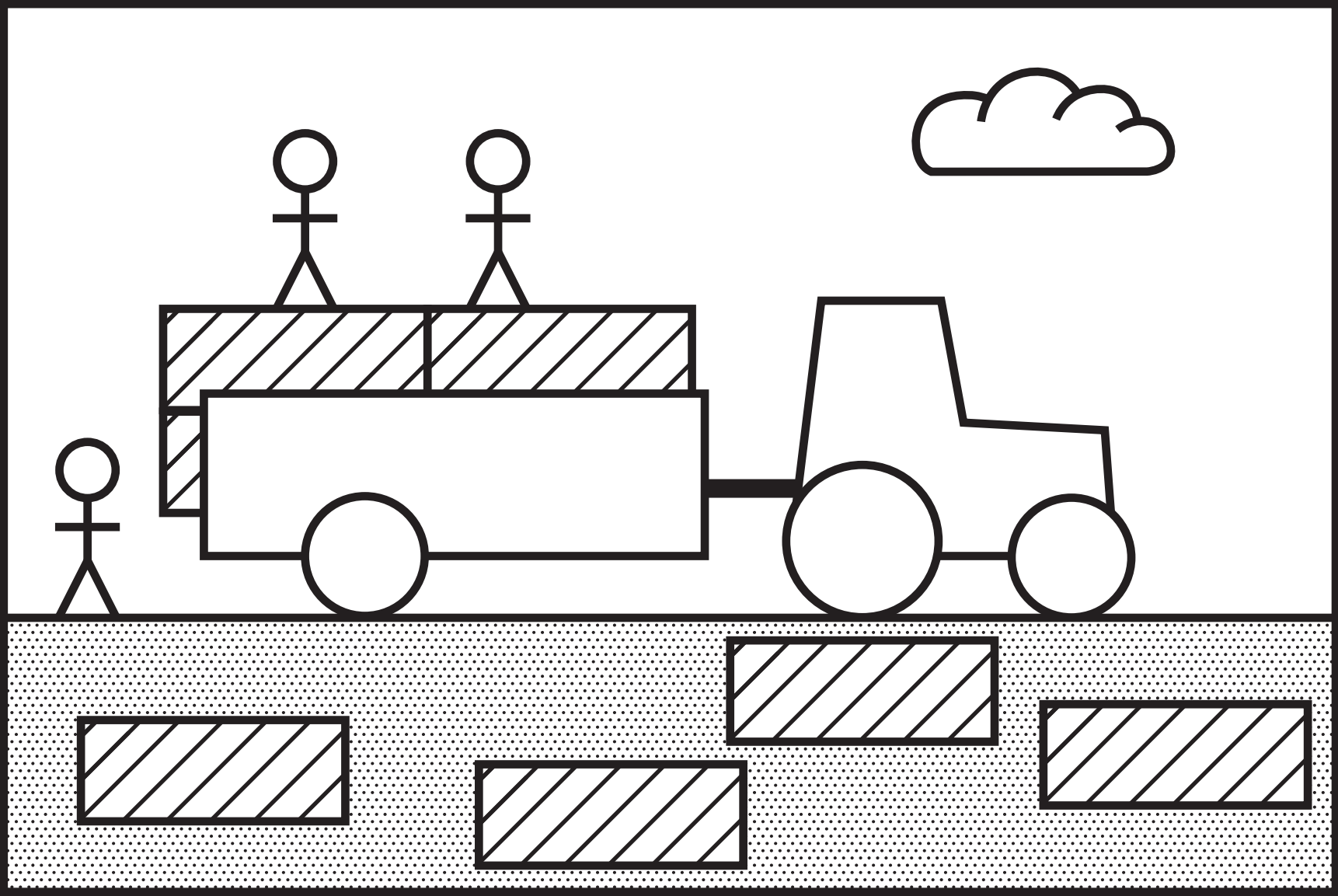
**Contents continued.**

**Page**

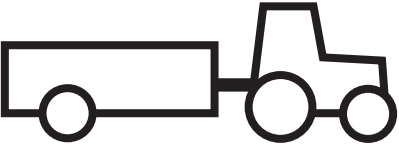
<b>34</b>	<b>Figure 8a (Black and White) – Part 1</b>
<b>35</b>	<b>Figure 8a (Black and White) – Part 2</b>
<b>36</b>	<b>Figure 8a (Black and White) – Part 3</b>
<b>37</b>	<b>Figure 8b</b>
<b>38</b>	<b>Figure 8c (Colour)</b>
<b>39</b>	<b>Figure 8c (Black and White)</b>
<b>40</b>	<b>Figure 9a – Key (Colour)</b>
<b>41</b>	<b>Figure 9a – Diagram (Colour) – Part 1</b>
<b>42</b>	<b>Figure 9a – Diagram (Colour) – Part 2</b>
<b>43</b>	<b>Figure 9a – Diagram (Colour) – Part 3</b>
<b>44</b>	<b>Figure 9a – Key (Black and White)</b>
<b>45</b>	<b>Figure 9a – Diagram (Black and White) – Part 1</b>
<b>46</b>	<b>Figure 9a – Diagram (Black and White) – Part 2</b>
<b>47</b>	<b>Figure 9a – Diagram (Black and White) – Part 3</b>
<b>48</b>	<b>Figure 9b</b>
<b>49</b>	<b>Figure 9c</b>




Figure 1a  
Activities in the primary sector




KEY



Tractor and trailer




Hay



Field



Farmers



Clouds



Figure 1b

## Global investment in energy efficiency, 2015–2021

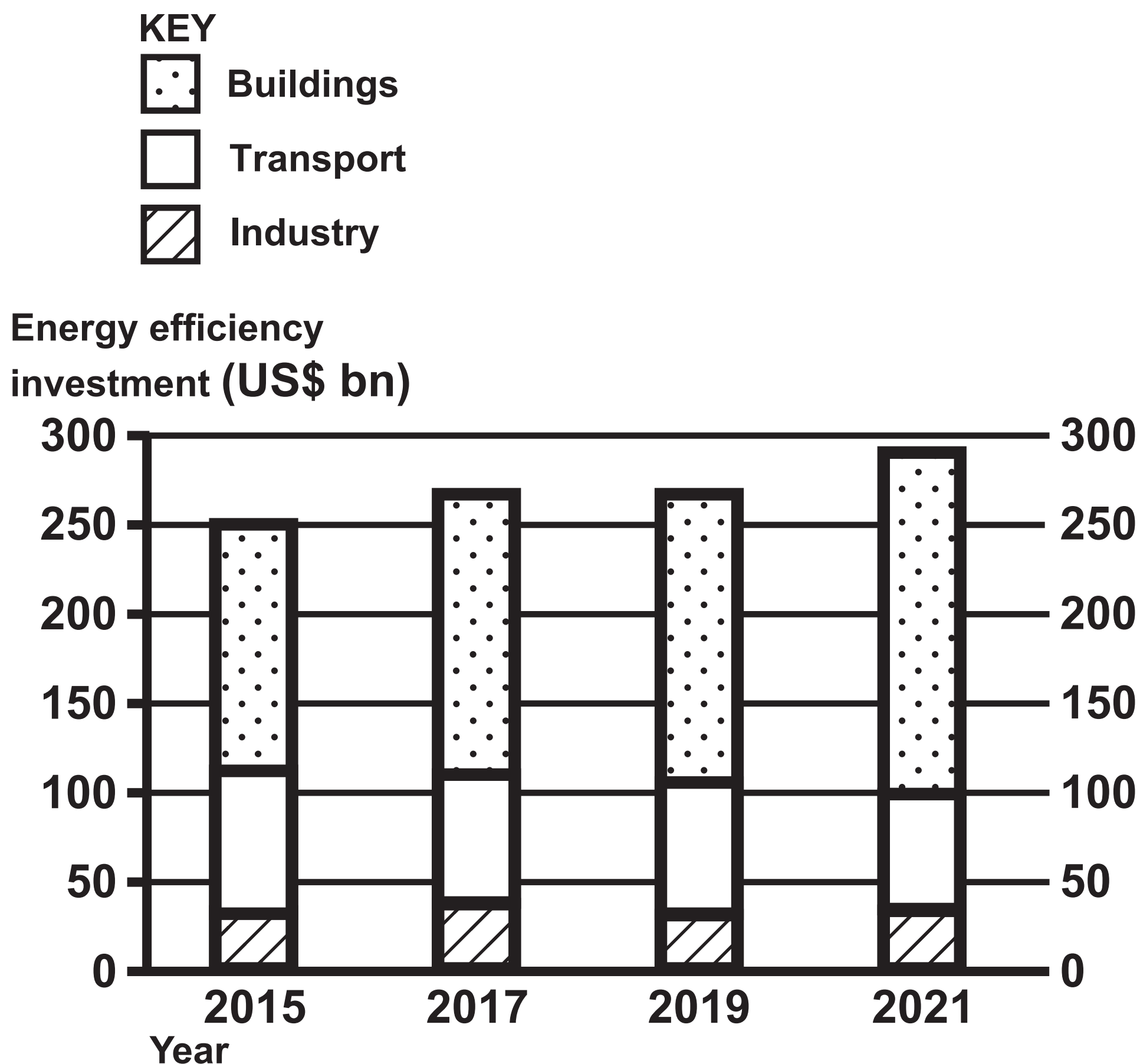


Figure 1c

## Energy mix in Africa and the European Union, 2020

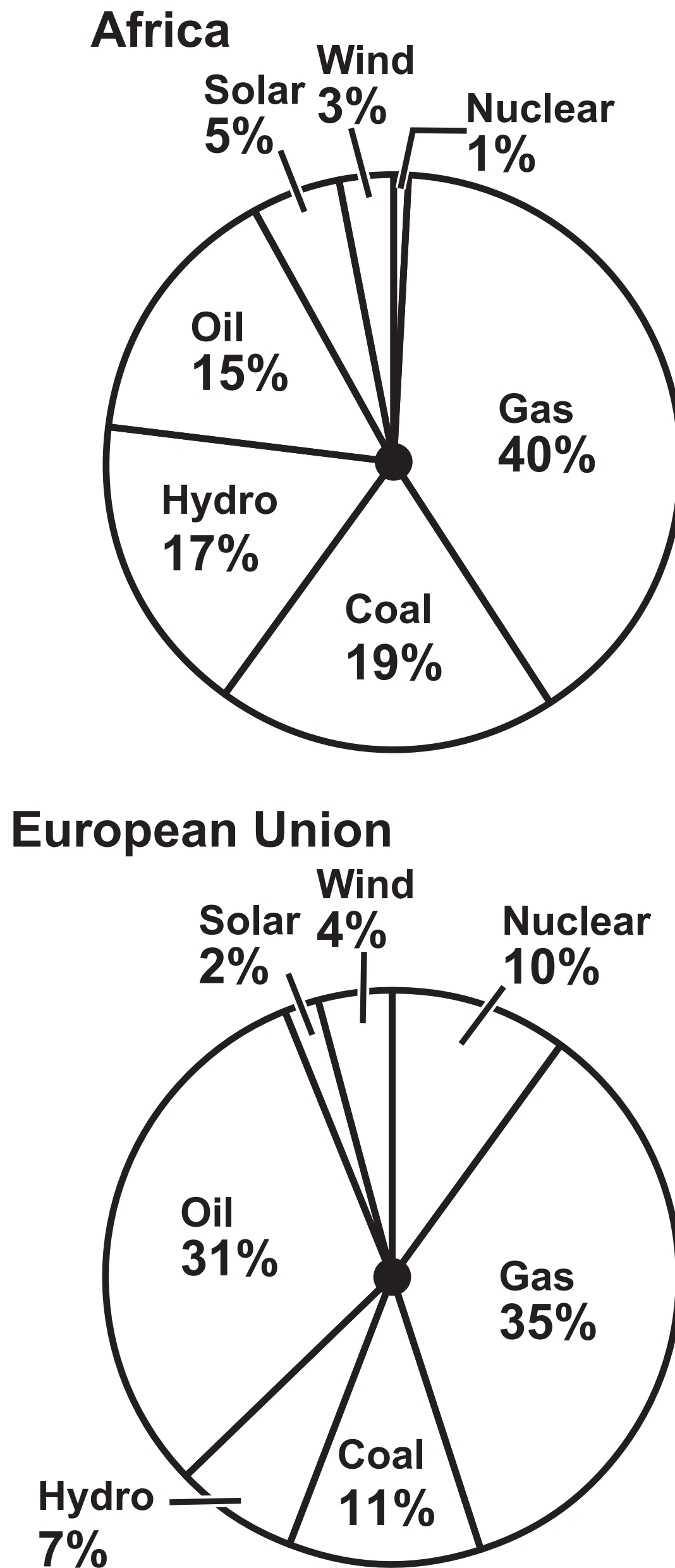


Figure 2a  
Global biomes

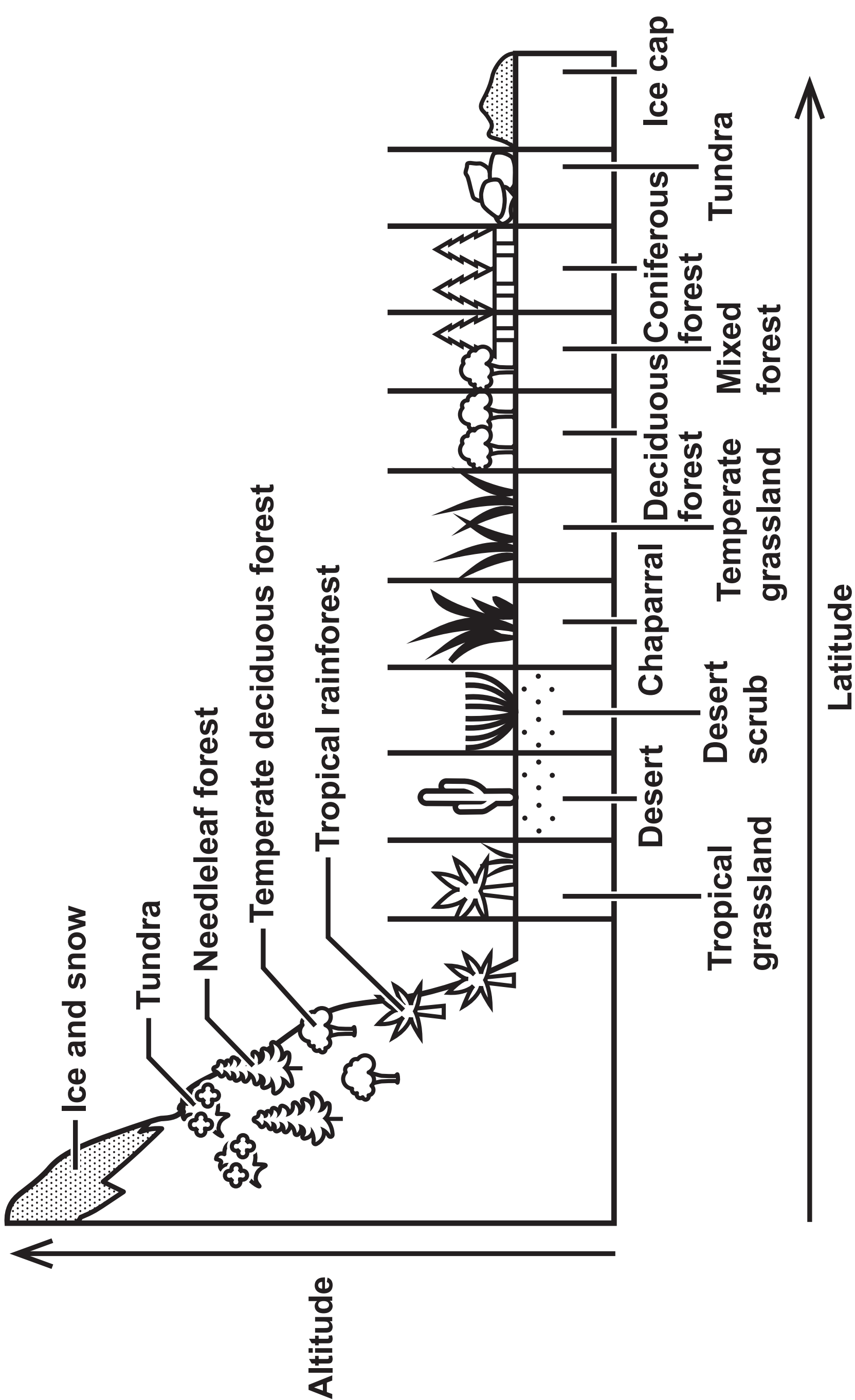


Figure 2b

Average income from farm diversification activities in England, 2022

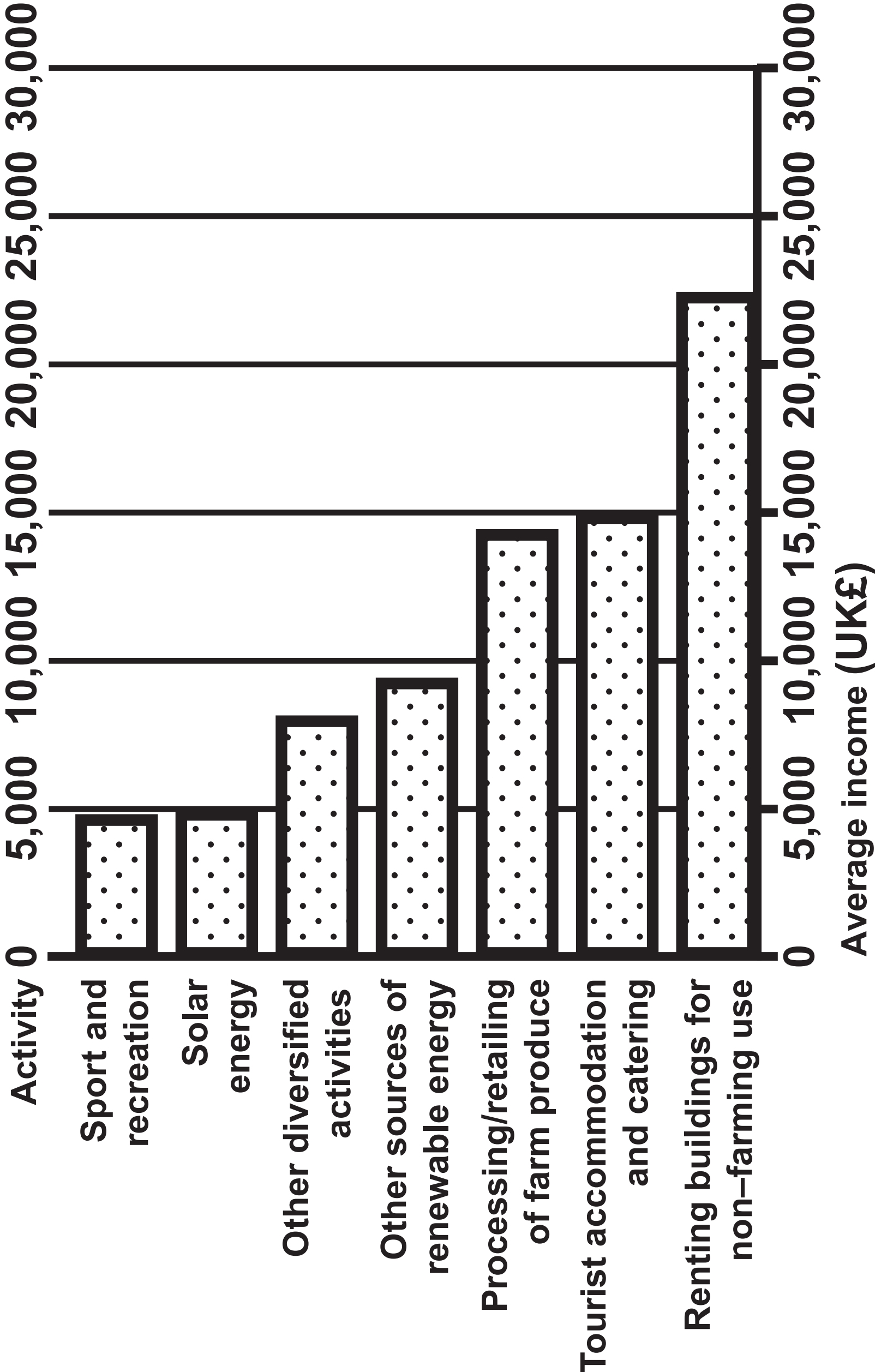


Figure 2c

Ecosystem goods and services

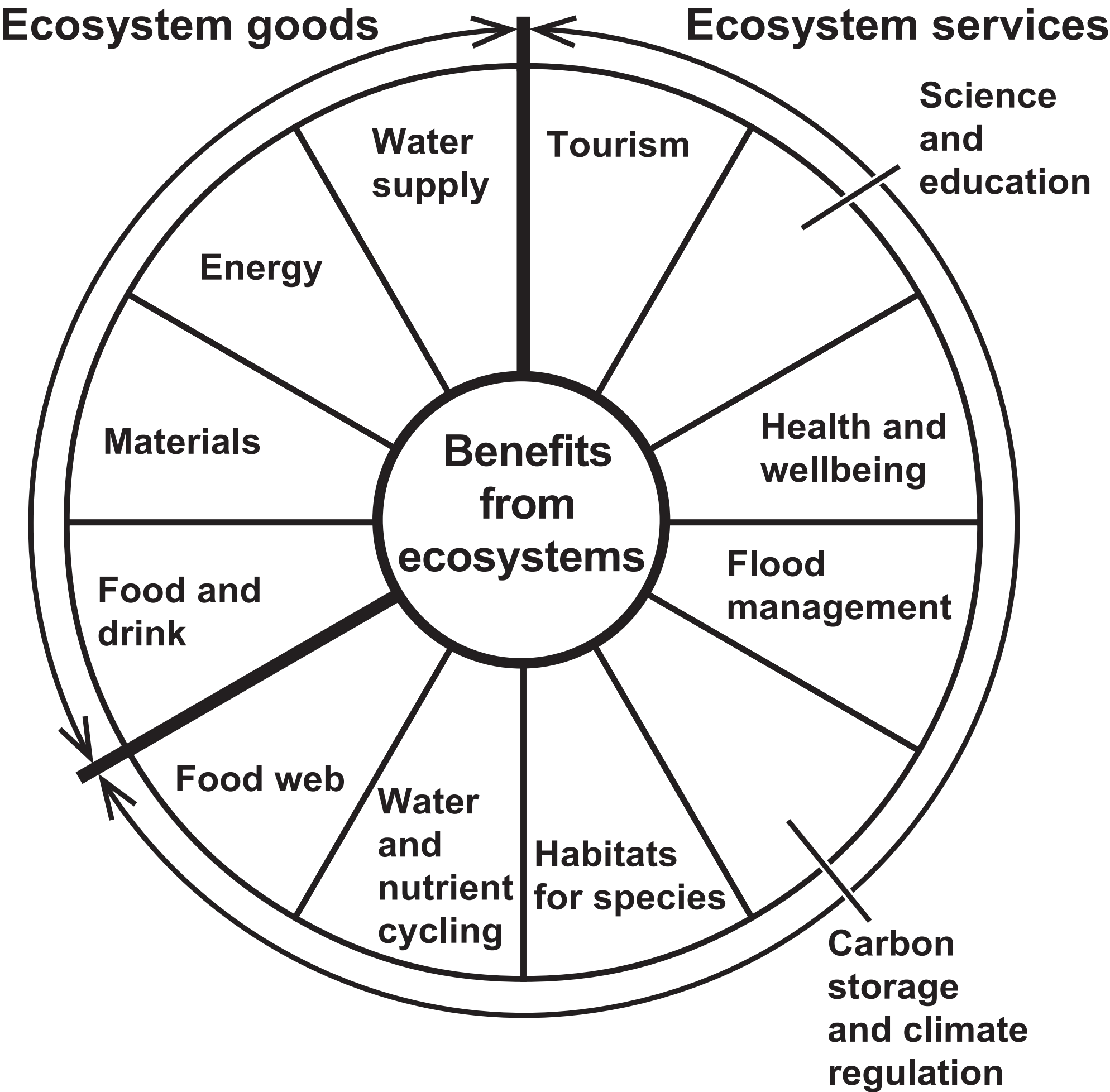
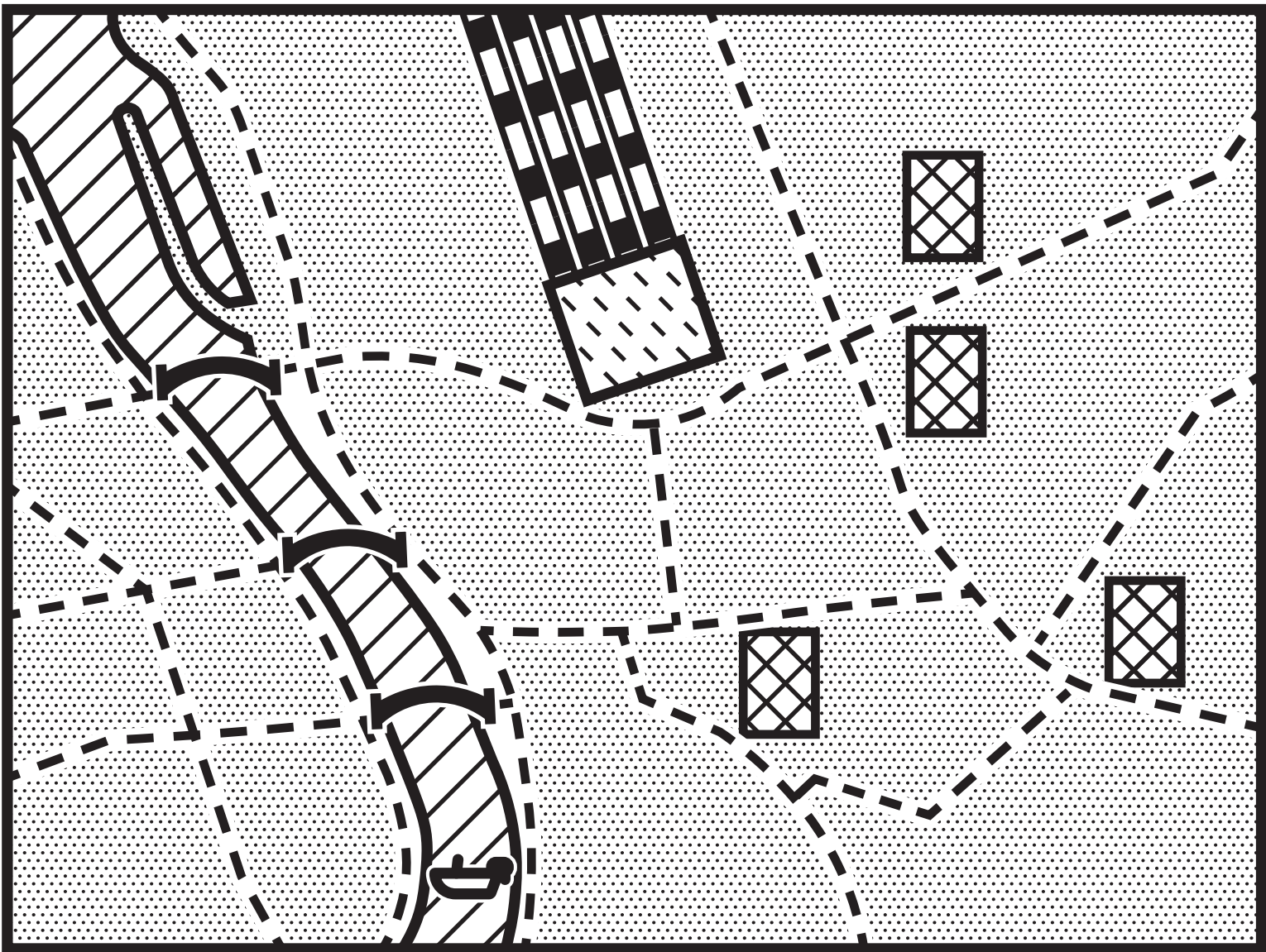




Figure 3a

Aerial photograph of Frankfurt, Germany



**KEY**

	Buildings		River		Bridges		Train station
	Roads		High rise buildings		Boat		

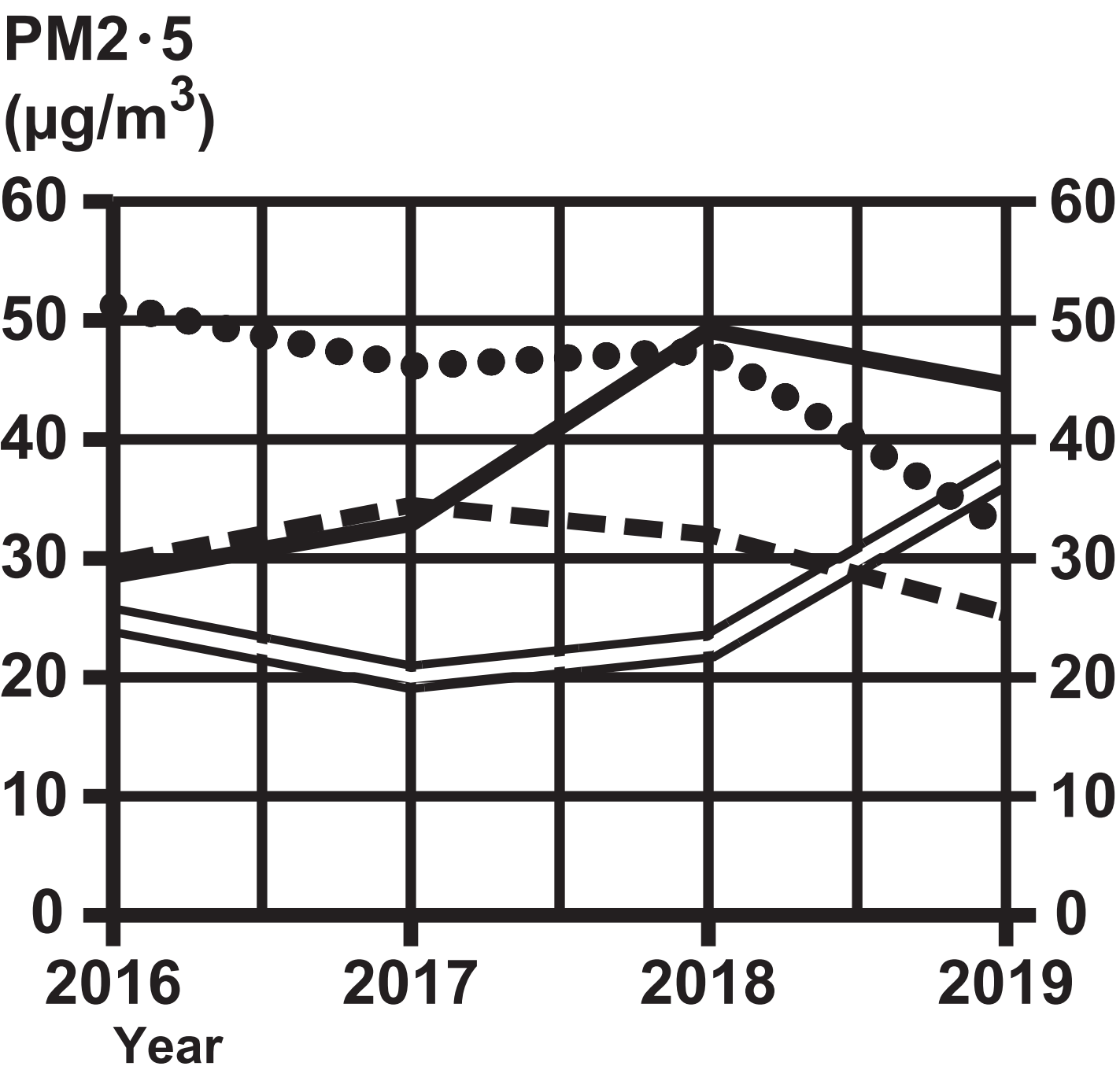
Figure 3b

Air quality in selected cities

**Note:** Particulate matter 2·5 (PM2·5), refers to tiny particles or droplets in the air that are 2·5 microns or less in width.

KEY: CITY

- Bengaluru (India)
- ■ Katowice (Poland)
- Abu Dhabi (United Arab Emirates)
- == Johannesburg (South Africa)





## Figure 3c – Key

**Global urban population and city numbers,  
1990, 2018 and projections to 2030, by size of city**

**Note:** numbers on bars indicate the number of each city type

**\*Number in Small cities category unknown**

### KEY



**Mega cities**

**Population: More than 10 million.**

**Examples: New York, Tokyo, Lagos**



**Large cities**

**Population: 5 to 10 million.**

**Examples: Houston, Toronto, Hong Kong**



**Mid-sized cities**

**Population: 1 to 5 million.**

**Examples: Vancouver, Prague, Brisbane**



**Regional cities**

**Population: 500,000 to 1 million.**

**Examples: Syracuse, Ann Arbor, Liverpool**



**Small cities\***

**Population: Less than 500,000.**

**Examples: Boulder, Halifax, Christchurch**

Figure 3c – Diagram

Global urban population and city numbers, 1990, 2018 and projections to 2030, by size of city

Population size  
(billions)

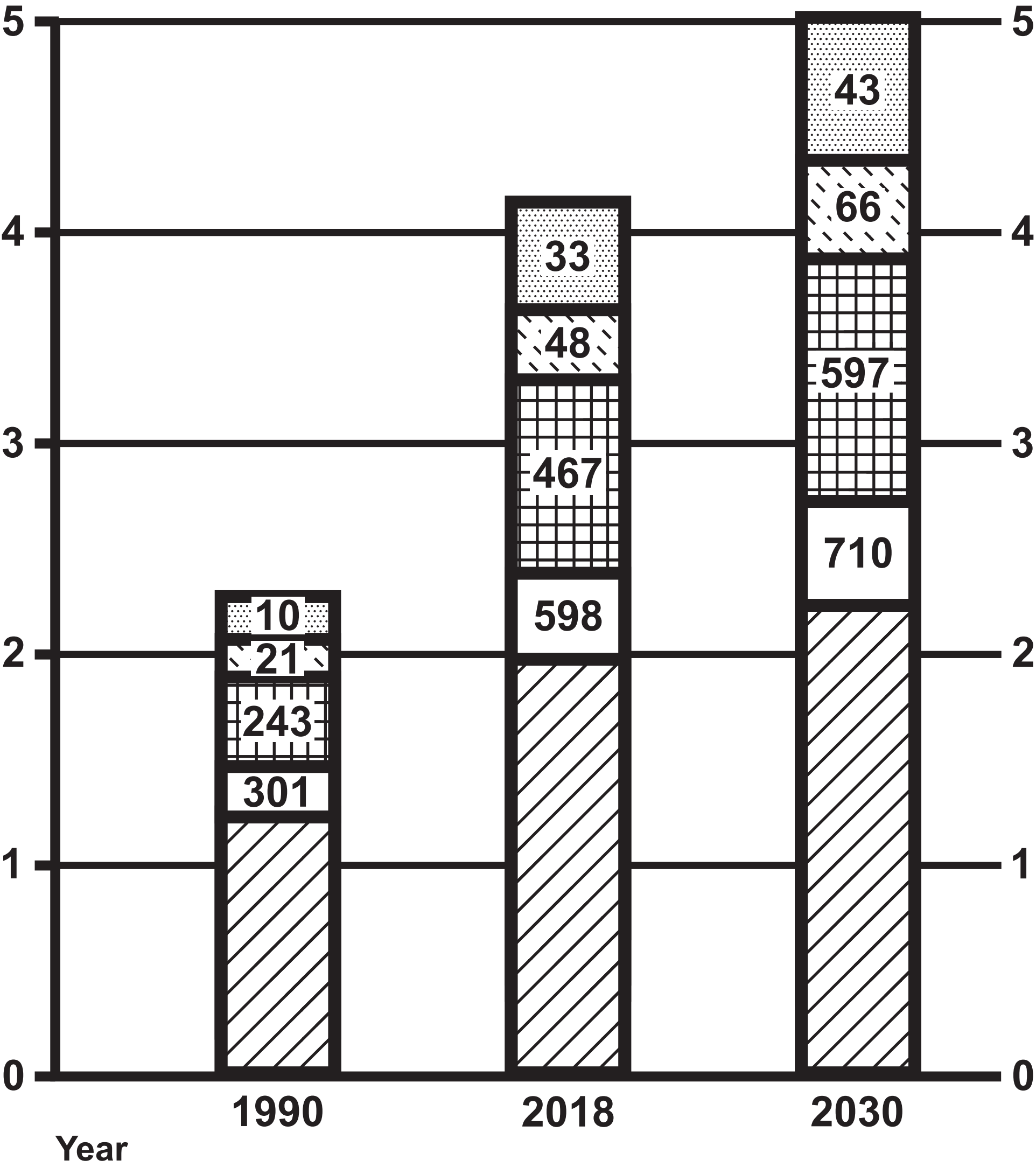


Figure 4a

Fieldwork equipment and data collection methods used

Fieldwork equipment	Data collection methods
Mobile phone (with camera)	Review of newspaper articles
Environmental quality survey sheet	Photographs
Interview guide	Environmental quality survey
	Interviews

Figure 4b  
Interview guide

Interview guide	
Q1	To which age group do you belong?  _____
Q2	How long have you lived in this area?  Under a year      1–5 years      5–10 years      10 years +  <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Q3	What are your views on renewable energy?  _____  _____
Q4	Do you support the construction of a new wind farm?  Yes      No  <input type="checkbox"/> <input type="checkbox"/>
Q5	What do you think the land should be used for?  _____
Q6	On a scale of 1–5 what impact do you think the new wind farm will have on the local area?  1      2      3      4      5  <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>  (Very negative)      (Very positive)

Figure 5a

Fieldwork equipment and data collection methods used

Fieldwork equipment	Data collection methods
Mobile phone (with camera) Environmental quality survey sheet Interview guide	Review of newspaper articles Photographs Environmental quality survey Interviews

Figure 5b  
Interview guide

Interview guide				
Q1	To which age group do you belong?  _____			
Q2	How long have you lived in this area?  Under a year      1–5 years      5–10 years      10 years +  <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>			
Q3	What are your views on trains as a form of transport?  _____  _____			
Q4	Do you support the construction of the new train line?  Yes      No  <input type="checkbox"/> <input type="checkbox"/>			
Q5	What do you think the land should be used for?  _____			
Q6	On a scale of 1–5 what impact do you think the new train line will have on the local area?  1      2      3      4      5  <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>  (Very negative)      (Very positive)			



Figure 6a

Fieldwork equipment and data collection methods used

Fieldwork equipment	Data collection methods
Mobile phone (with camera) Environmental quality survey sheet Interview guide	Review of newspaper articles Photographs Environmental quality survey Interviews

**Figure 6b**  
**Interview guide**

<b>Interview guide</b>									
<b>Q1</b>	<b>To which age group do you belong?</b>  _____								
<b>Q2</b>	<b>How long have you lived in this area?</b>  <table><tr><td><b>Under a year</b></td><td><b>1–5 years</b></td><td><b>5–10 years</b></td><td><b>10 years +</b></td></tr><tr><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr></table>	<b>Under a year</b>	<b>1–5 years</b>	<b>5–10 years</b>	<b>10 years +</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Under a year</b>	<b>1–5 years</b>	<b>5–10 years</b>	<b>10 years +</b>						
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>						
<b>Q3</b>	<b>What are your views on trains as a form of transport?</b>  _____  _____								
<b>Q4</b>	<b>Do you support the construction of the new train line?</b>  <table><tr><td><b>Yes</b></td><td><b>No</b></td></tr><tr><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr></table>	<b>Yes</b>	<b>No</b>	<input type="checkbox"/>	<input type="checkbox"/>				
<b>Yes</b>	<b>No</b>								
<input type="checkbox"/>	<input type="checkbox"/>								
<b>Q5</b>	<b>What do you think should be a development priority for the city?</b>  _____								

**(continued on the next page)**

Figure 6b continued.

Interview guide					
Q6	On a scale of 1–5 what impact do you think the new train line will have on the local area?				
	1	2	3	4	5
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	(Very negative)			(Very positive)	

Figure 7a (Colour) – Part 1

Global distribution of drought risk

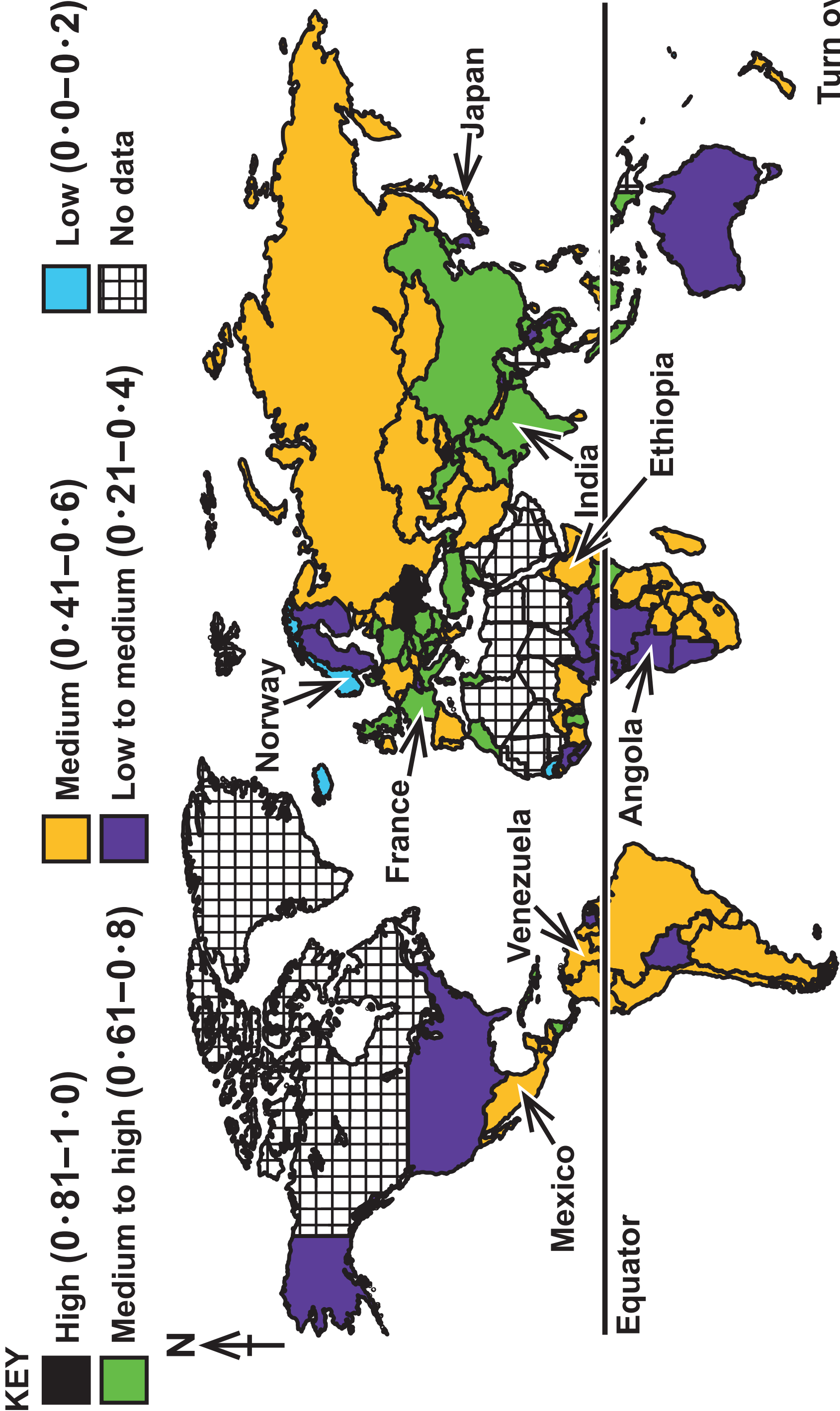


Figure 7a (Colour) – Part 2

Global distribution of drought risk

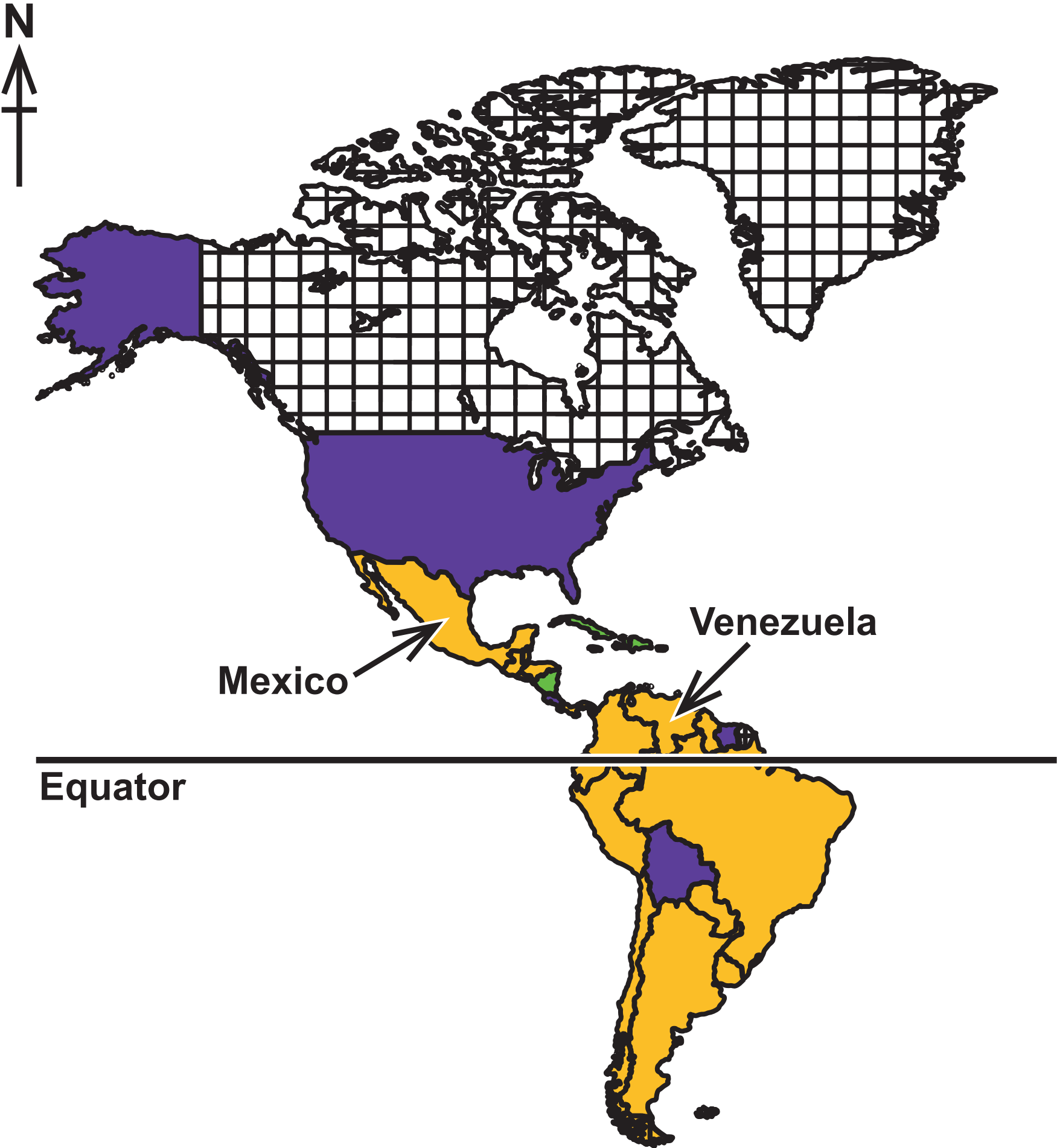
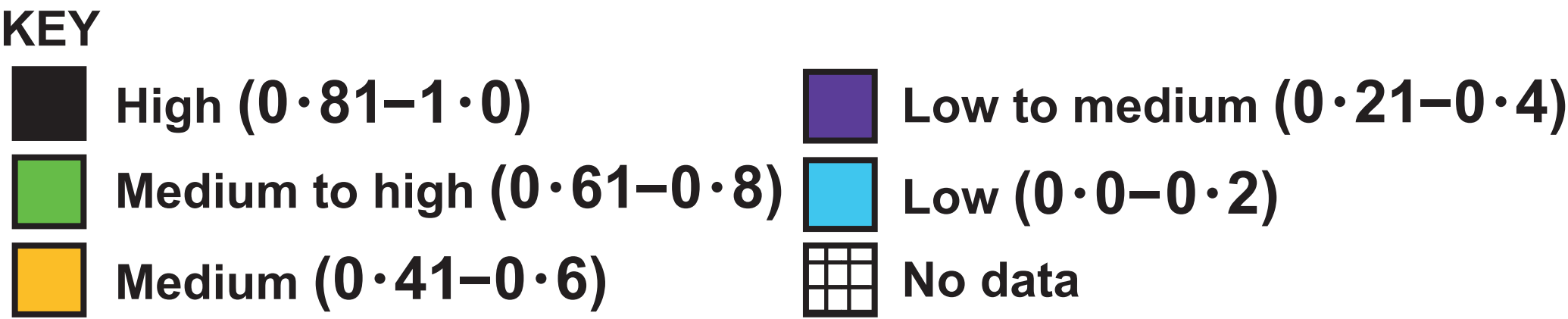


Figure 7a (Colour) – Part 3

Global distribution of drought risk

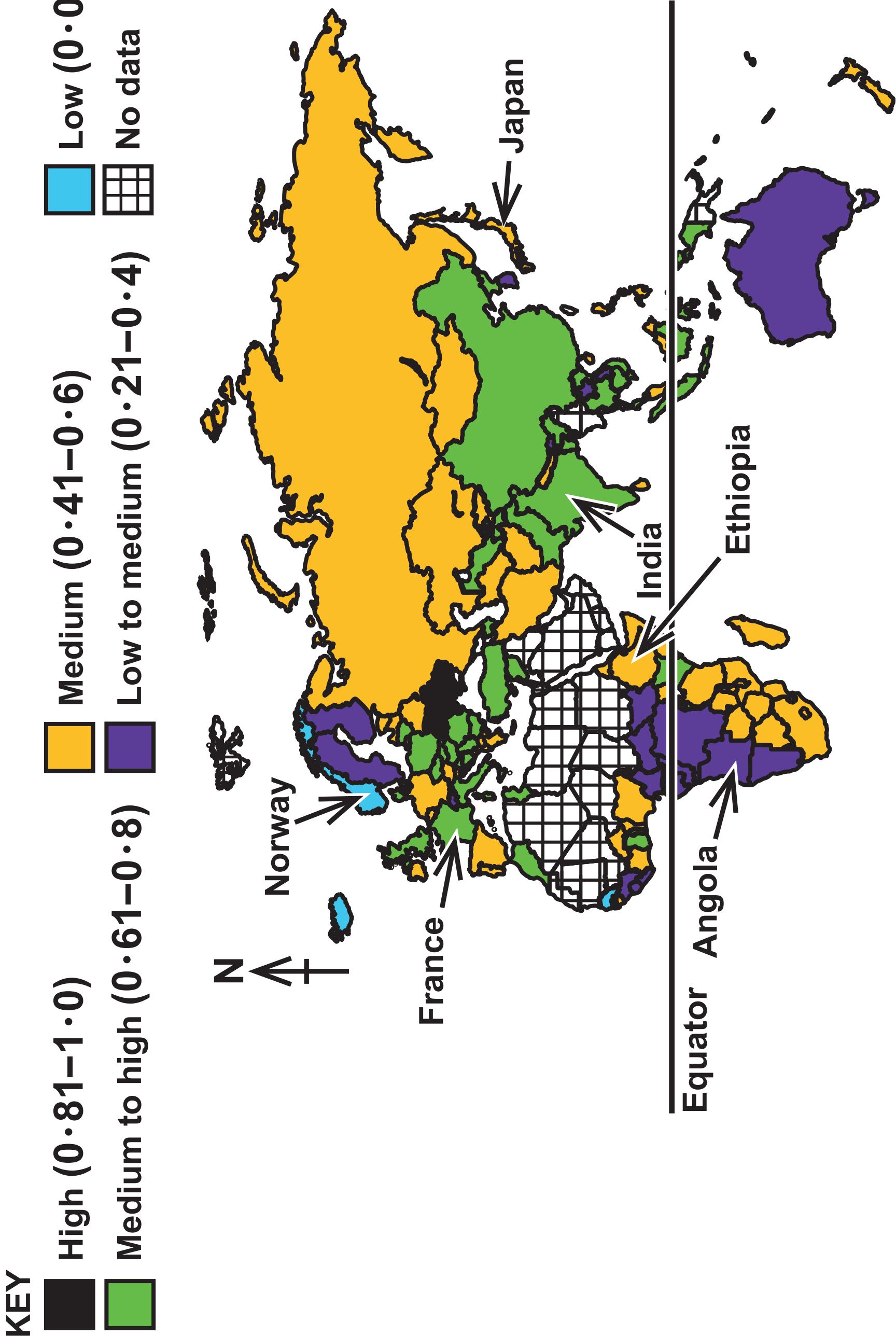


Figure 7a (Black and White) – Part 1

Global distribution of drought risk

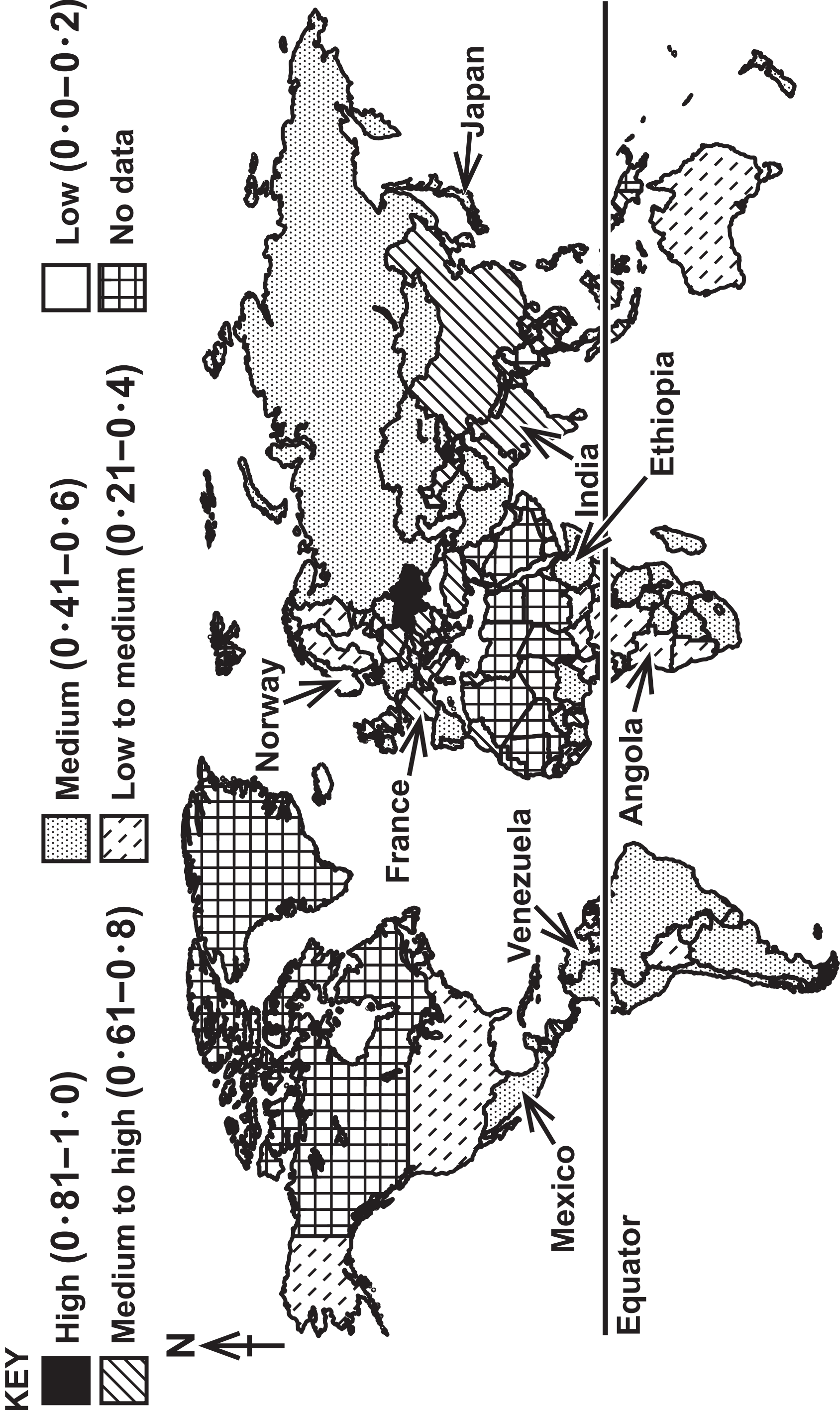




Figure 7a (Black and White) – Part 2

Global distribution of drought risk

KEY

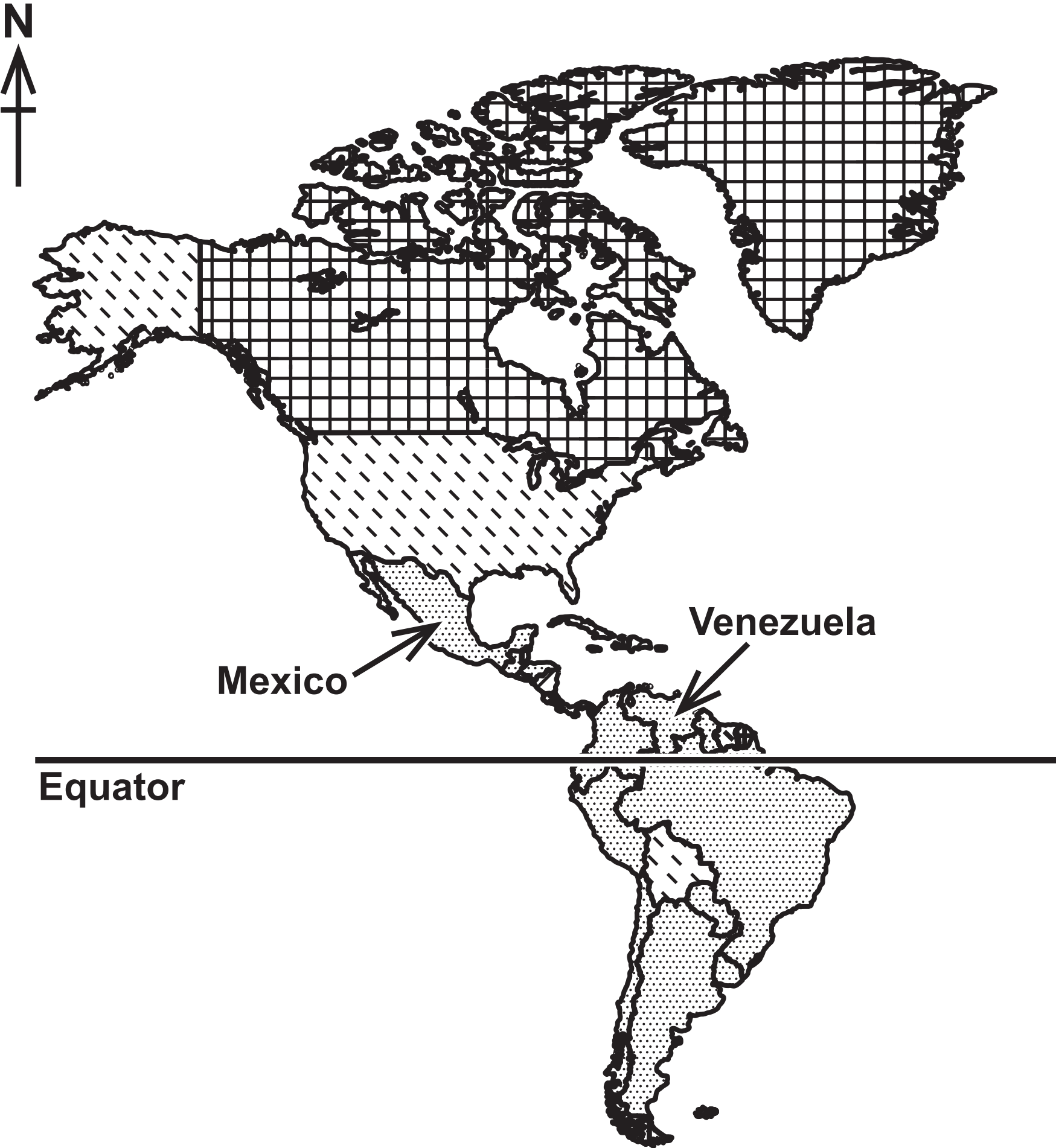
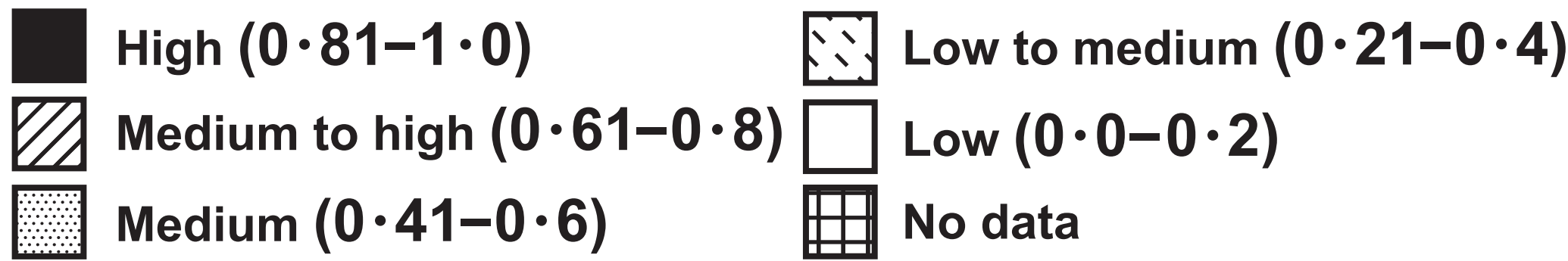
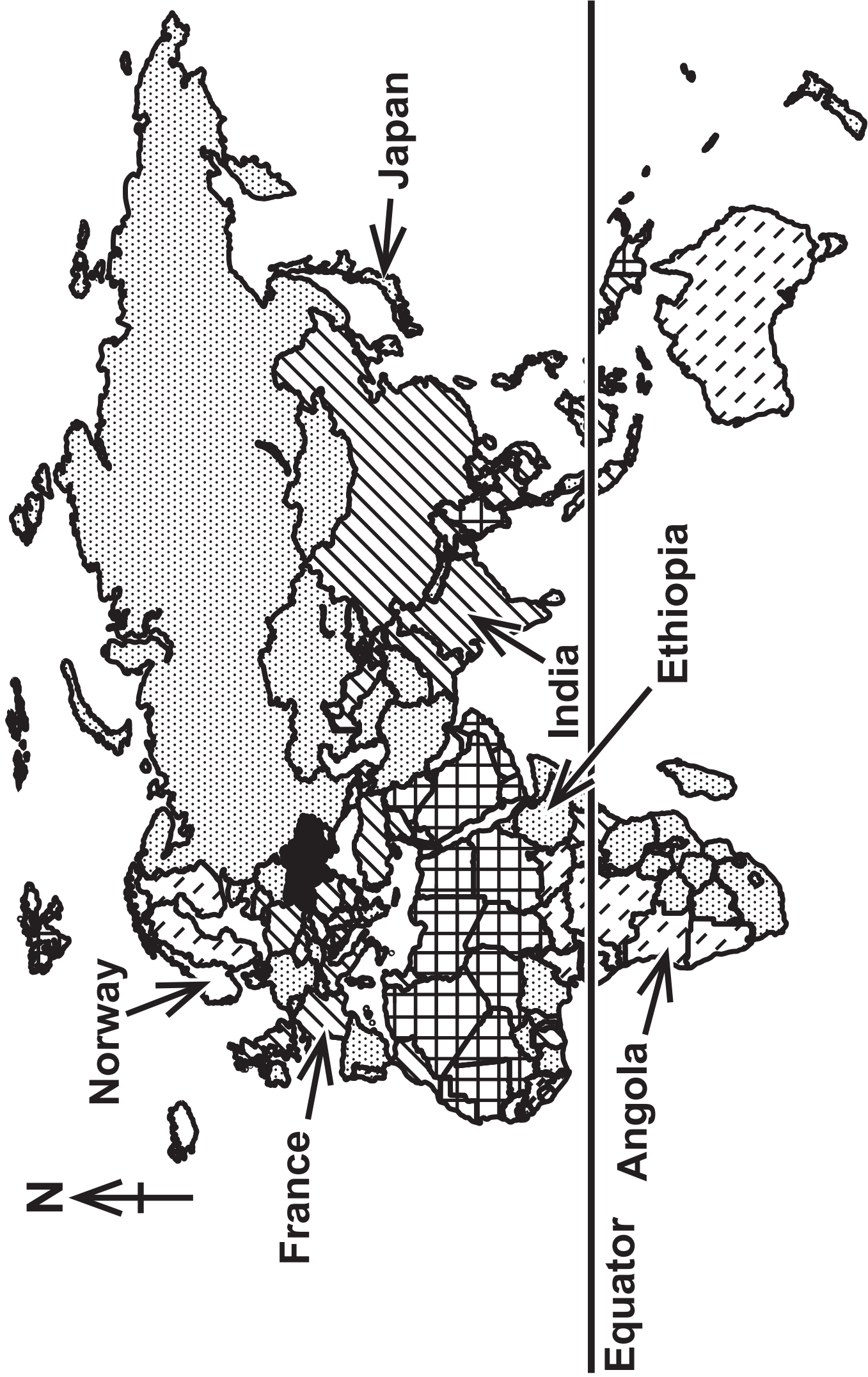




Figure 7a (Black and White) – Part 3

Global distribution of drought risk



## Figure 7b – Key

### Information on global forest loss, 2001–2015

#### KEY: Cause of forest loss



Wildfires



Deforestation for logging to make paper and pulp



Deforestation from agriculture, mining and urbanisation

**A. Central and South America**

**B. Southeast Asia**

**C. Africa**

**D. North America**

**E. Russia, China, South Asia**

**F. Europe**

**G. Oceania**

Figure 7b – Diagram

Information on global forest loss, 2001–2015

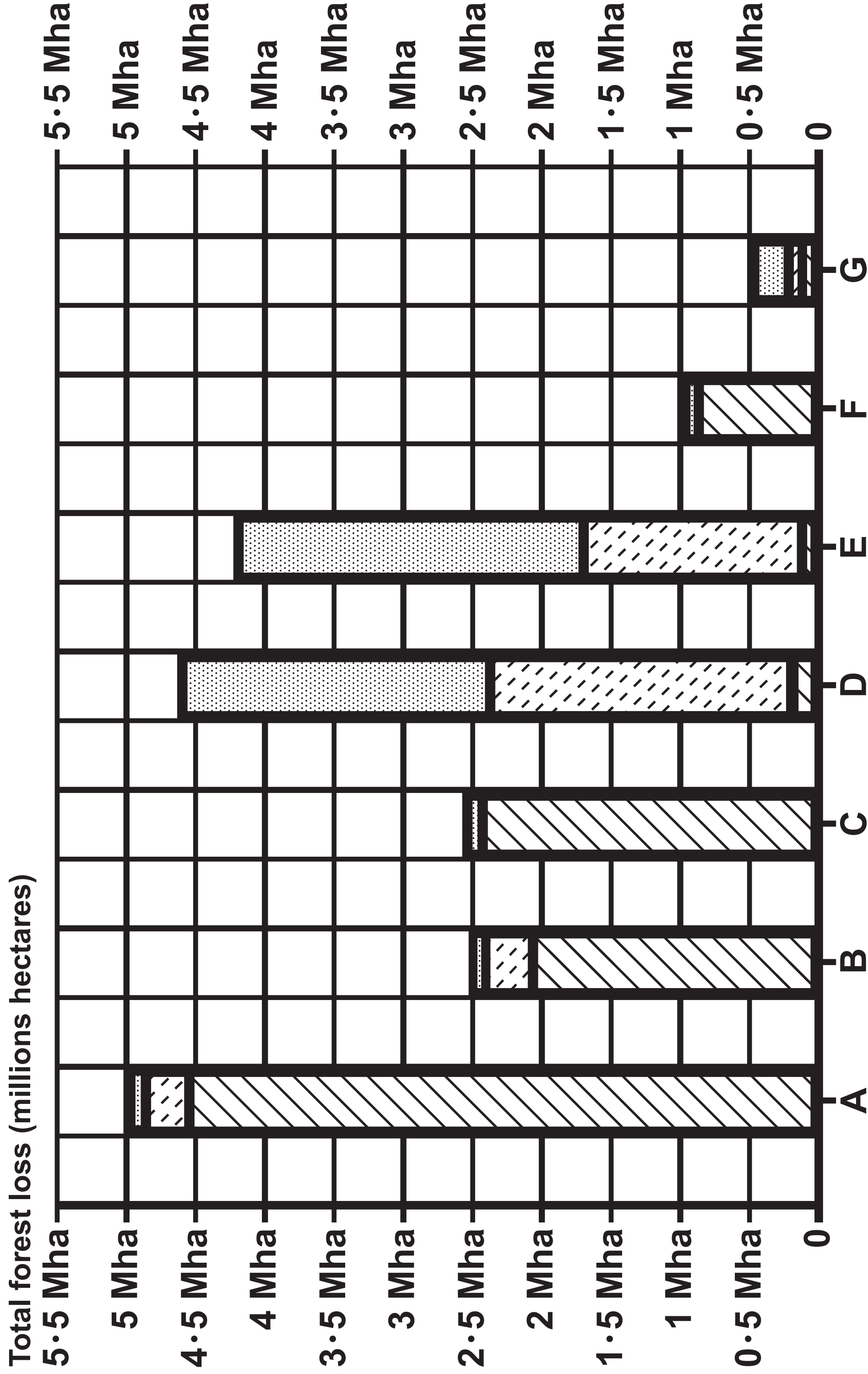
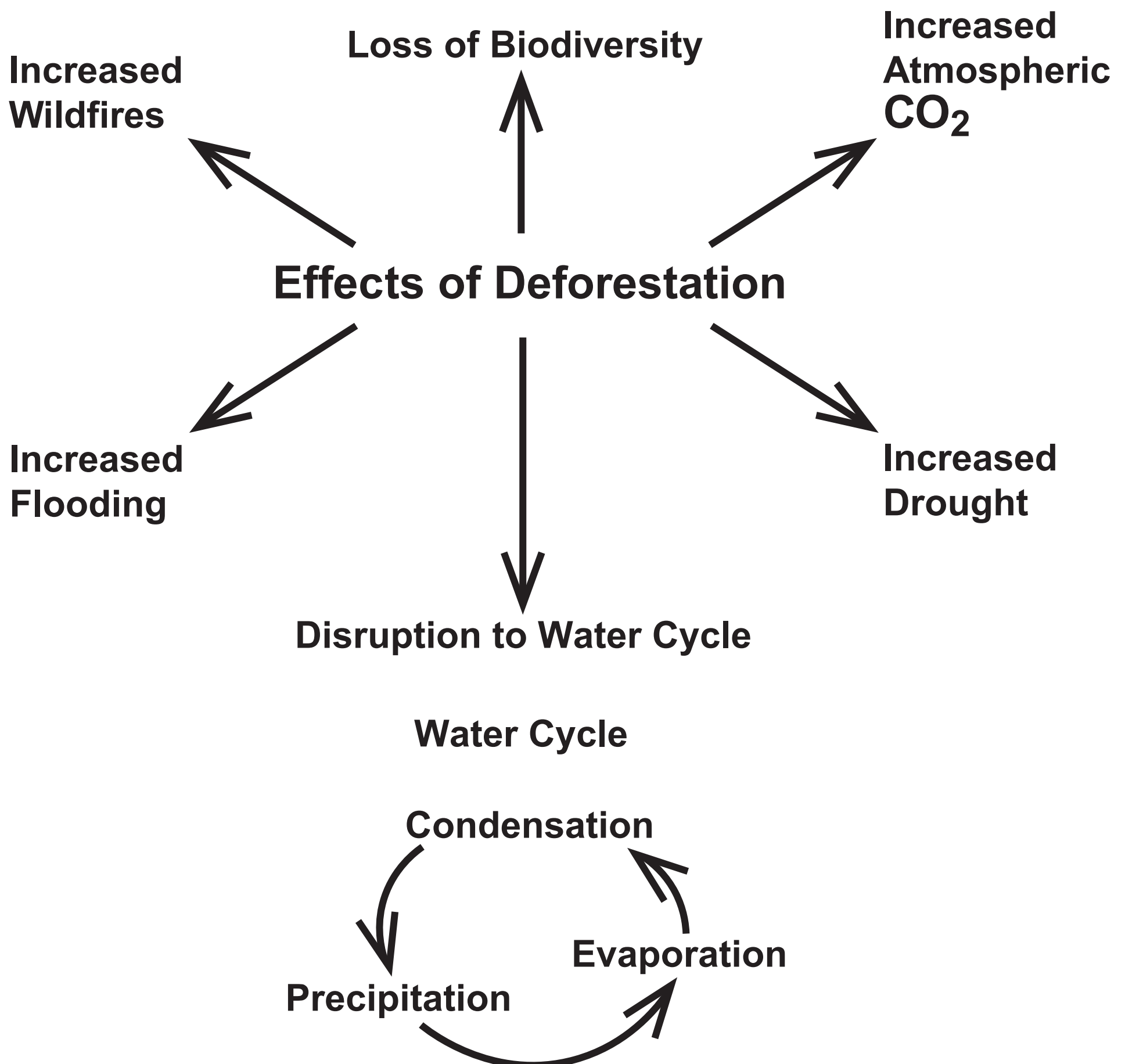


Figure 7c

**Selected impacts of deforestation**

Net annual migration per 1000 population, 2017–2021

KEY

Positive



0 to 4.9



5 to 9.9



10 to 45

Negative



0 to -4.9

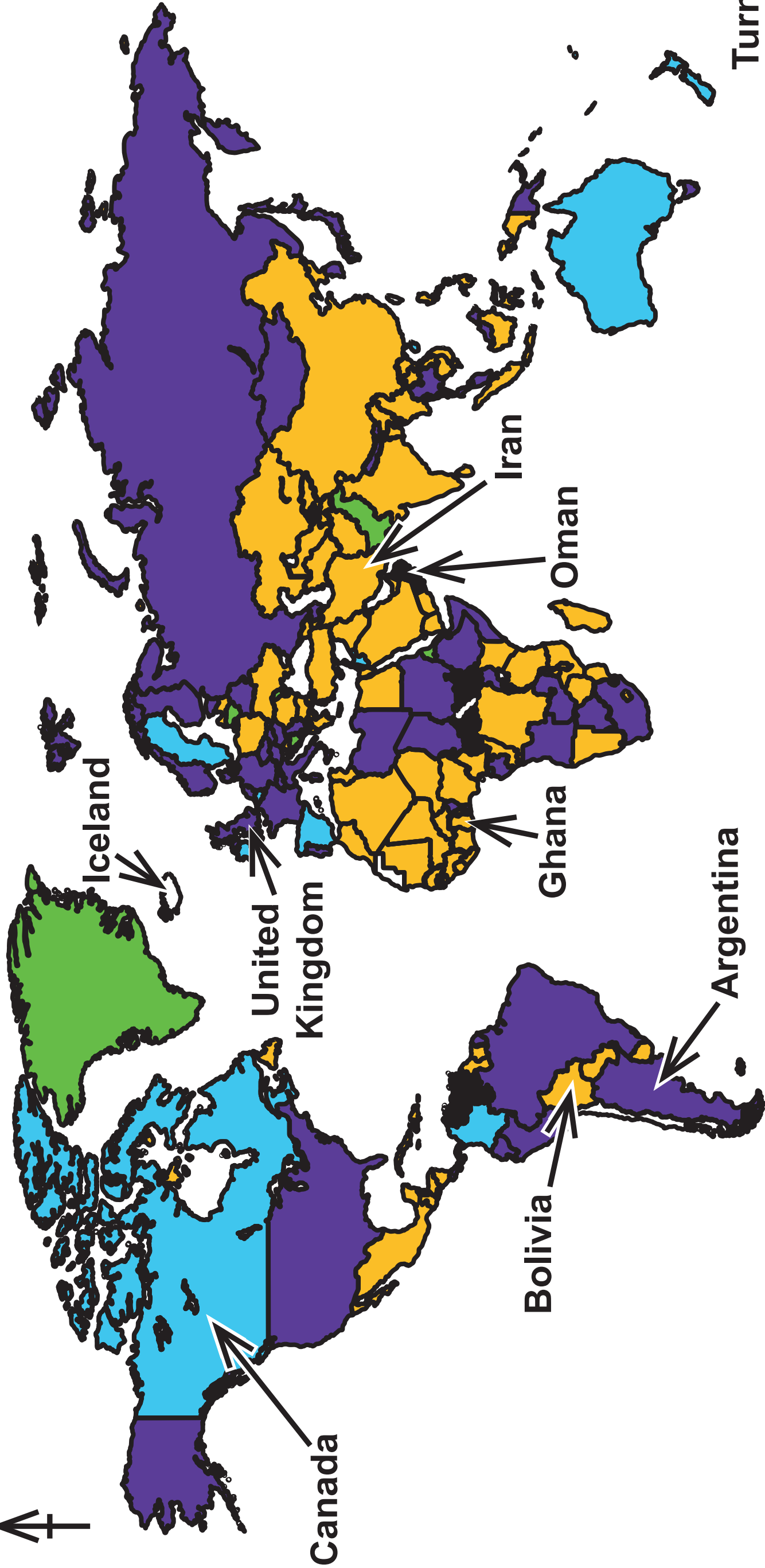


-5 to -9.9



-10 to -42

N  
↑



Turn over

Figure 8a (Colour) – Part 2

Net annual migration per 1000 population,  
2017–2021

KEY

Positive

0 to 4.9    5 to 9.9    10 to 45

Negative

0 to -4.9    -5 to -9.9    -10 to -42



Turn over

Net annual migration per 1000 population, 2017–2021

KEY

Positive



0 to 4.9



5 to 9.9



10 to 45

Negative



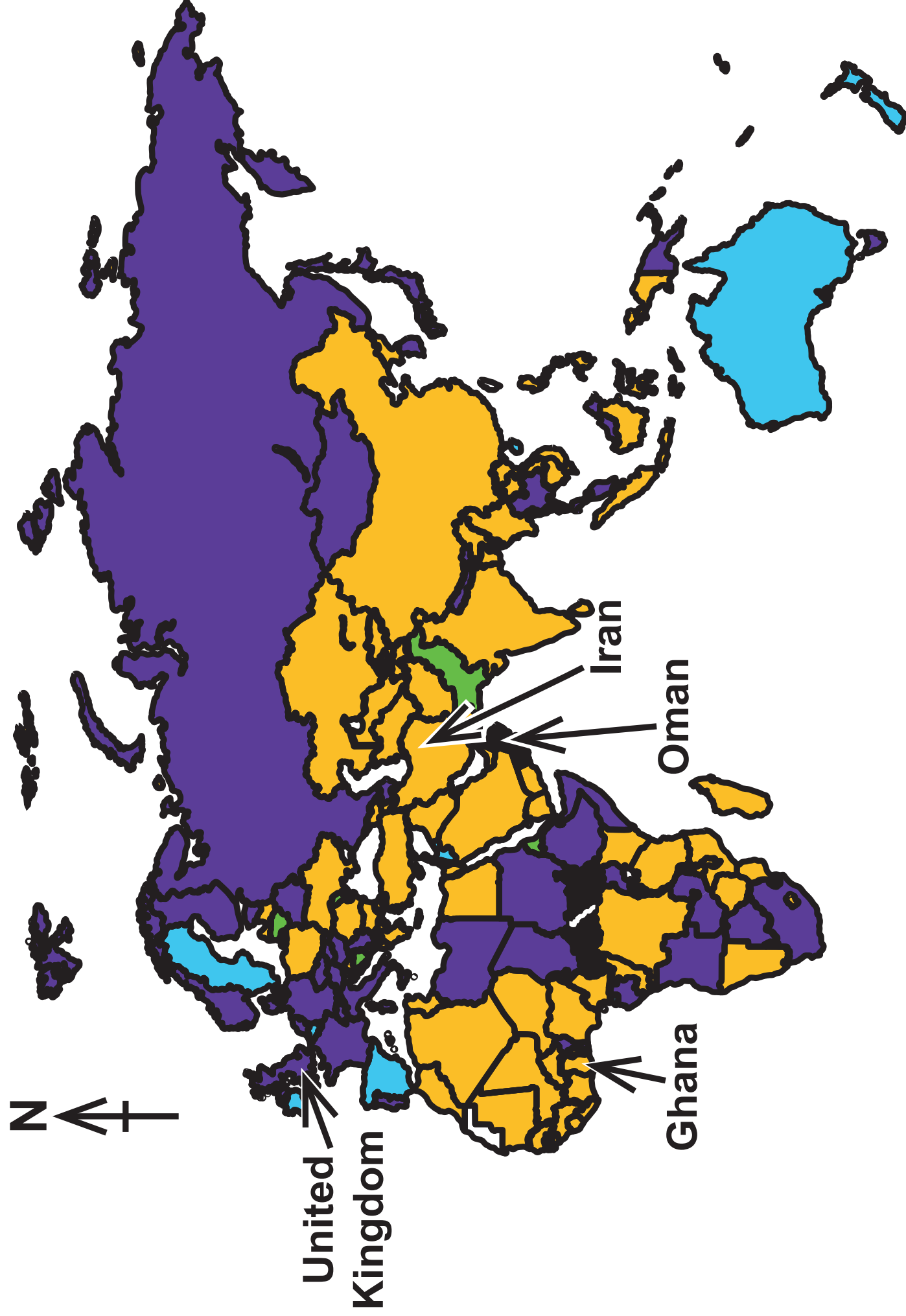
0 to -4.9



-5 to -9.9



-10 to -42





Net annual migration per 1000 population, 2017–2021

KEY

Positive



0 to 4.9



5 to 9.9



10 to 45

Negative



0 to -4.9

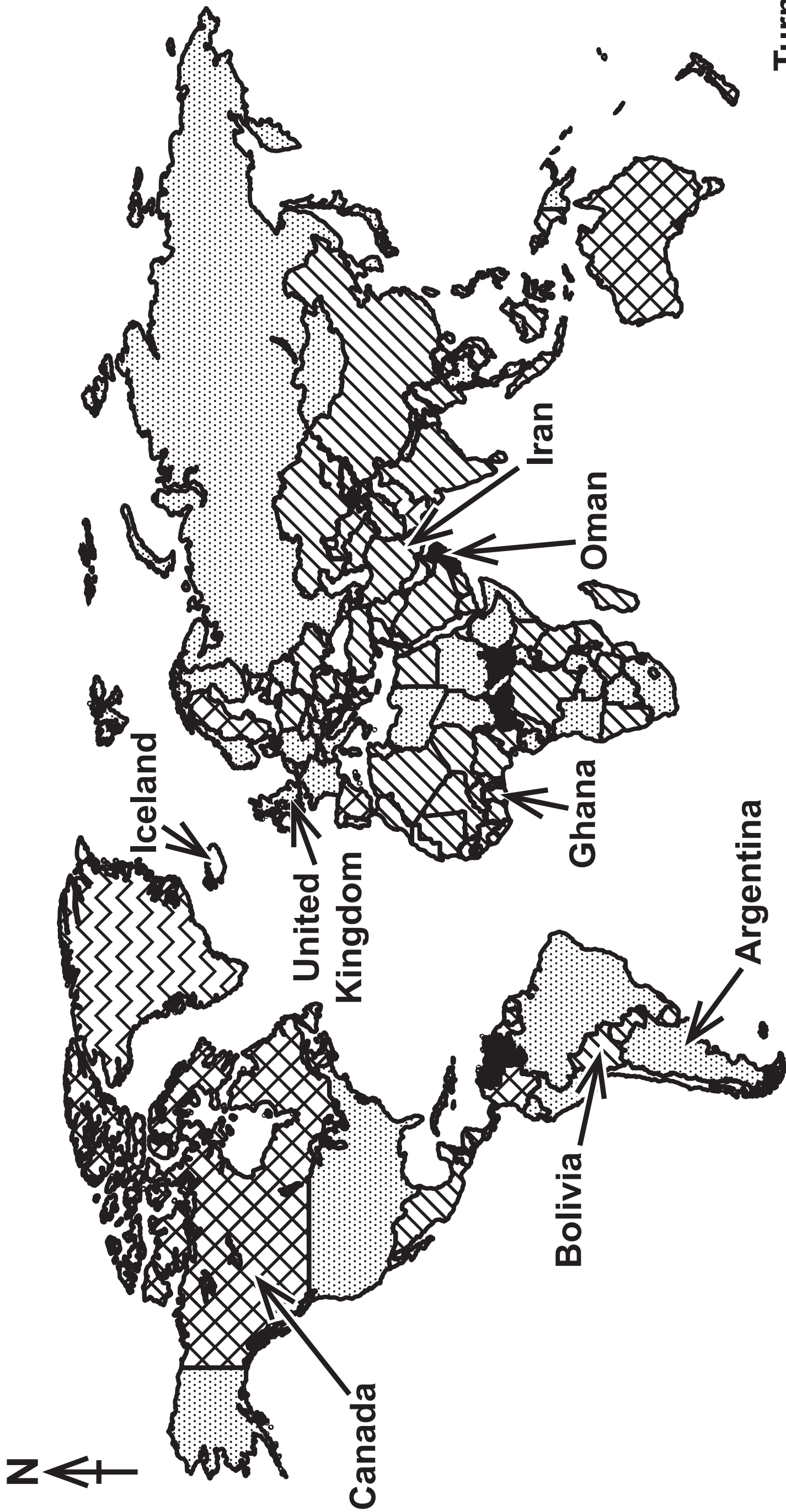


-5 to -9.9



-10 to -42

N  
↑





Net annual migration per 1000 population,  
2017–2021

KEY

Positive

0 to 4.9    5 to 9.9    10 to 45

Negative

0 to -4.9    -5 to -9.9    -10 to -42

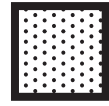


Turn over

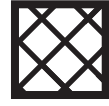
Net annual migration per 1000 population, 2017–2021

KEY

Positive



0 to 4.9



5 to 9.9



10 to 45

Negative



0 to -4.9



-5 to -9.9



-10 to -42

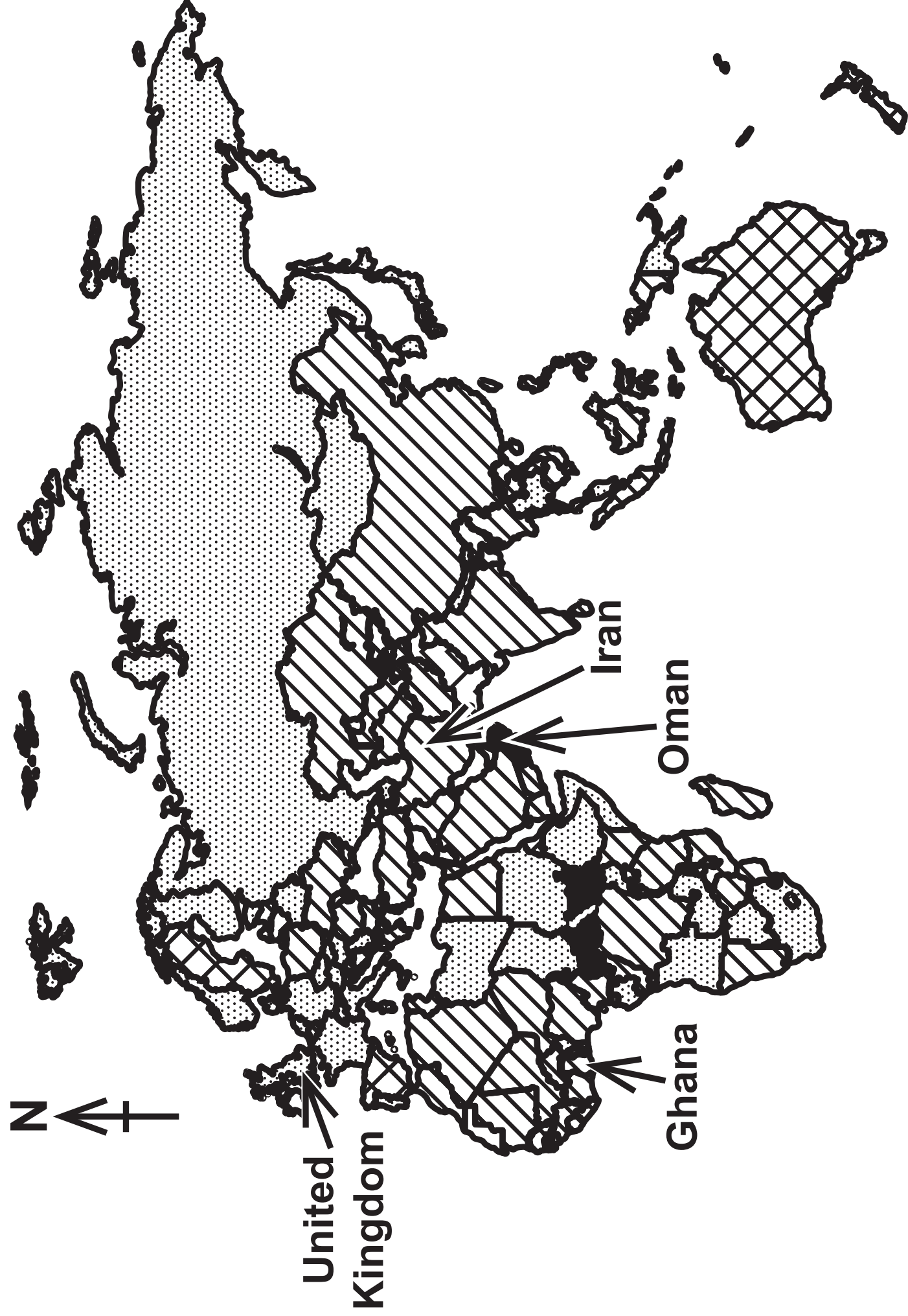


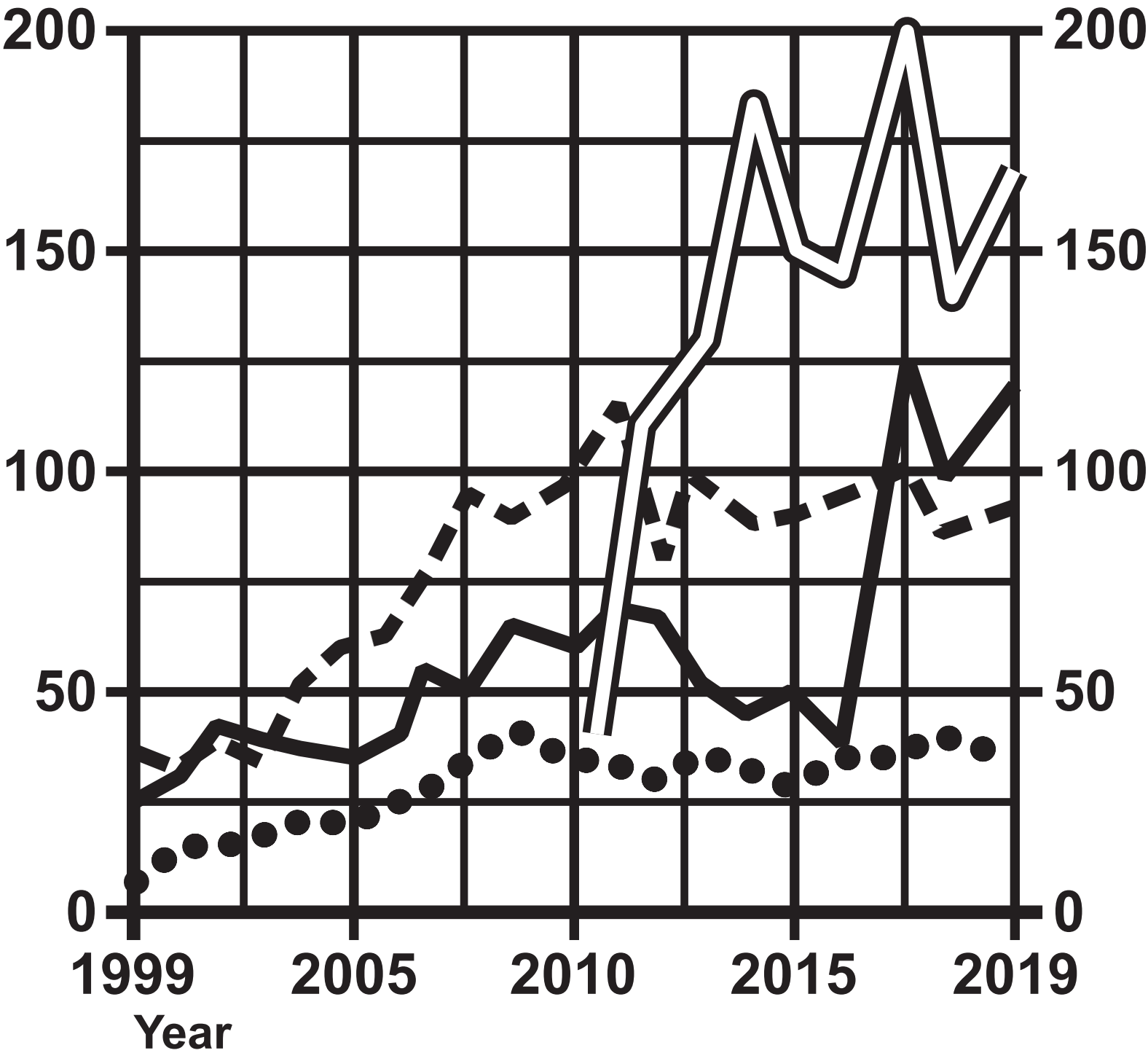
Figure 8b

Development aid received per capita for selected countries, 1999–2019

KEY

- == South Sudan
- Somalia
- - Rwanda
- Ethiopia

Development aid received per capita (US\$)



## Information on the Regional Comprehensive Economic Partnership (RCEP)

trade bloc

15 countries sign world's biggest free trade deal (indicated in blue)

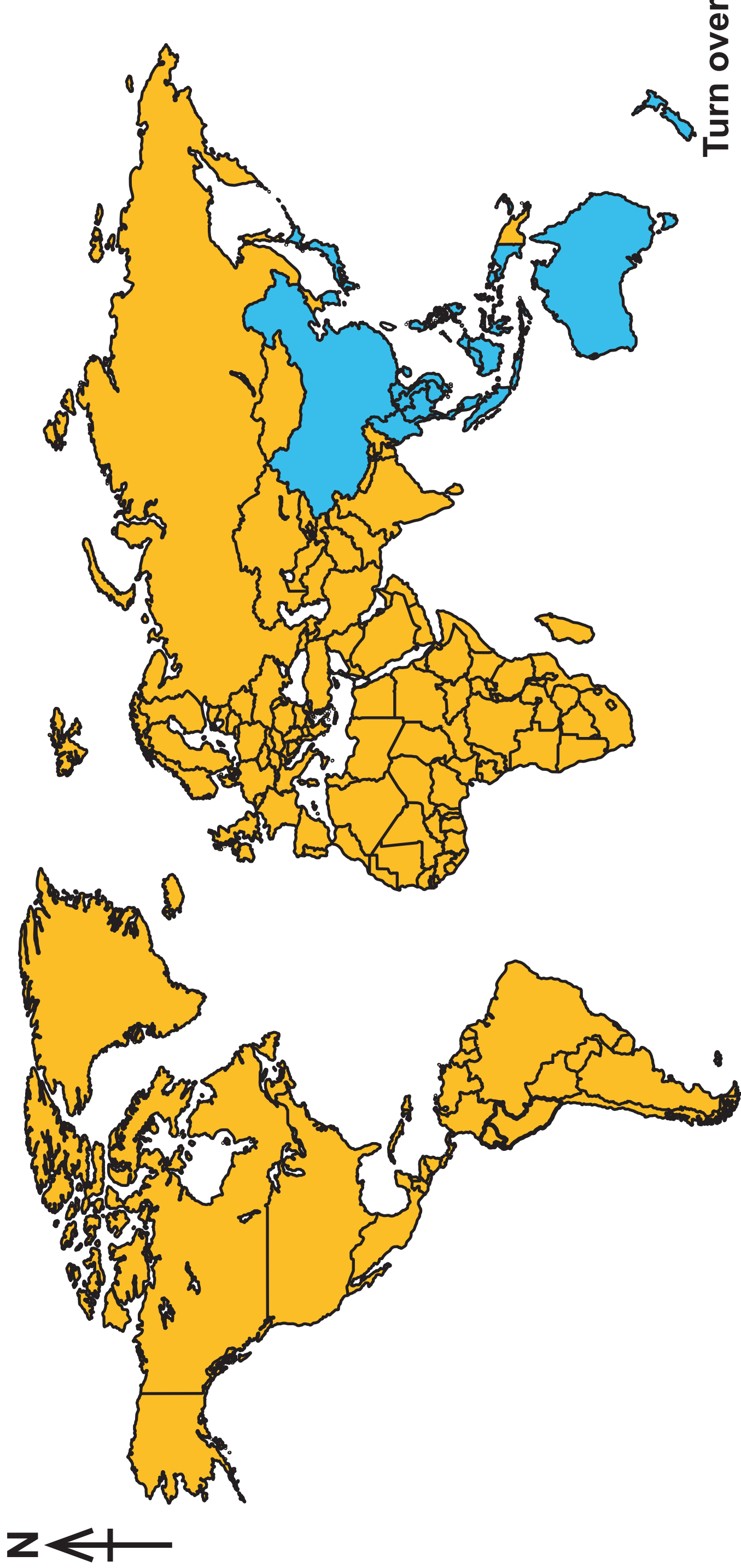
### Key facts

Countries: 15

Population: 2·2 billion

Combined GDP: US\$26·2 trillion

Share of global trade: 28%    Share of global economic output: 30%    Year established: 2022



Information on the Regional Comprehensive Economic Partnership (RCEP)  
trade bloc

15 countries sign world's biggest free trade deal (indicated in dotted shading)

Key facts

Countries: 15      Population: 2.2 billion      Combined GDP: US\$26.2 trillion  
Share of global trade: 28%      Share of global economic output: 30%      Year established: 2022

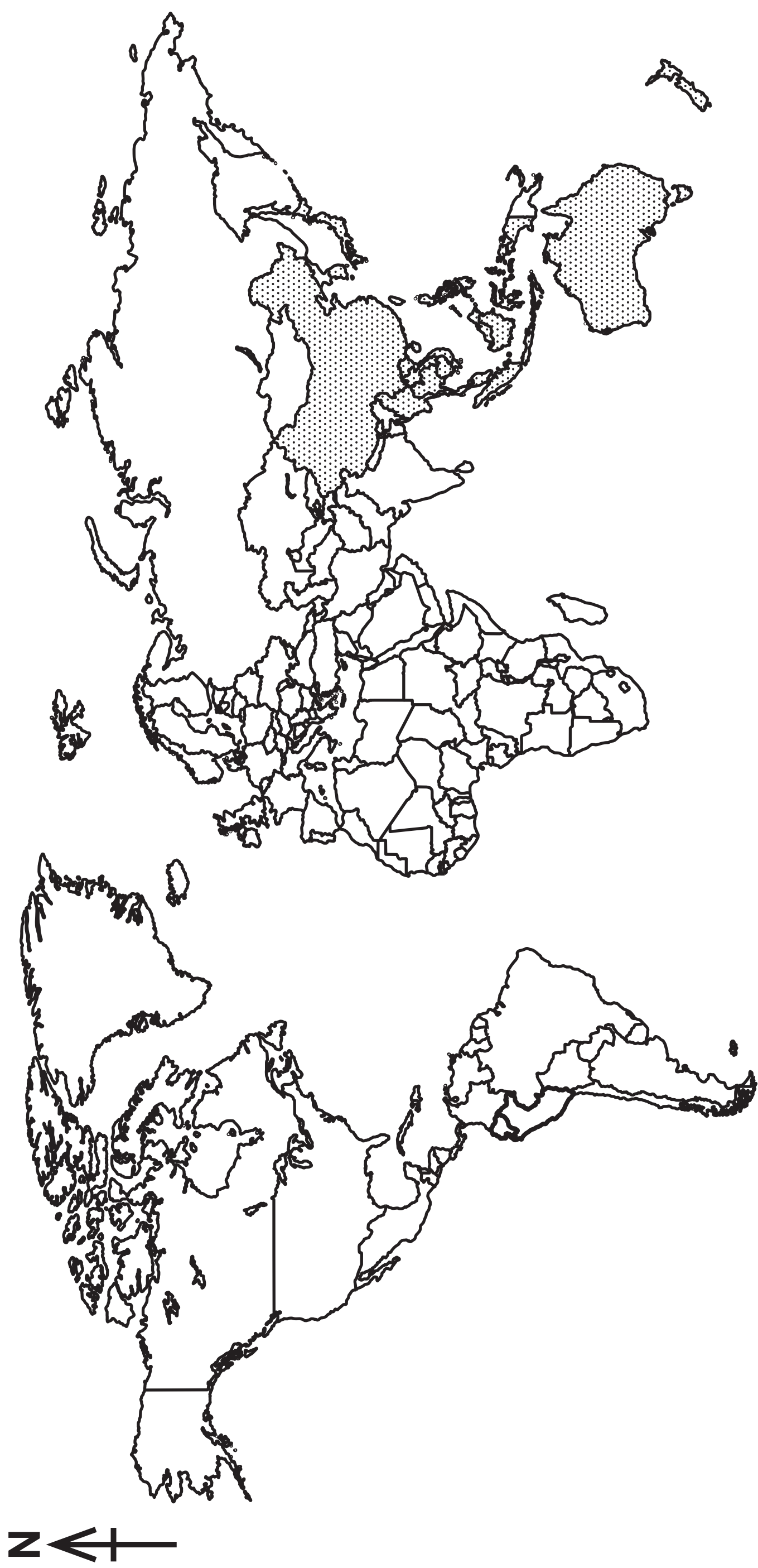




Figure 9a – Key (Colour)

Life expectancy, 2022



Figure 9a – Diagram (Colour) – Part 1

Life expectancy, 2022

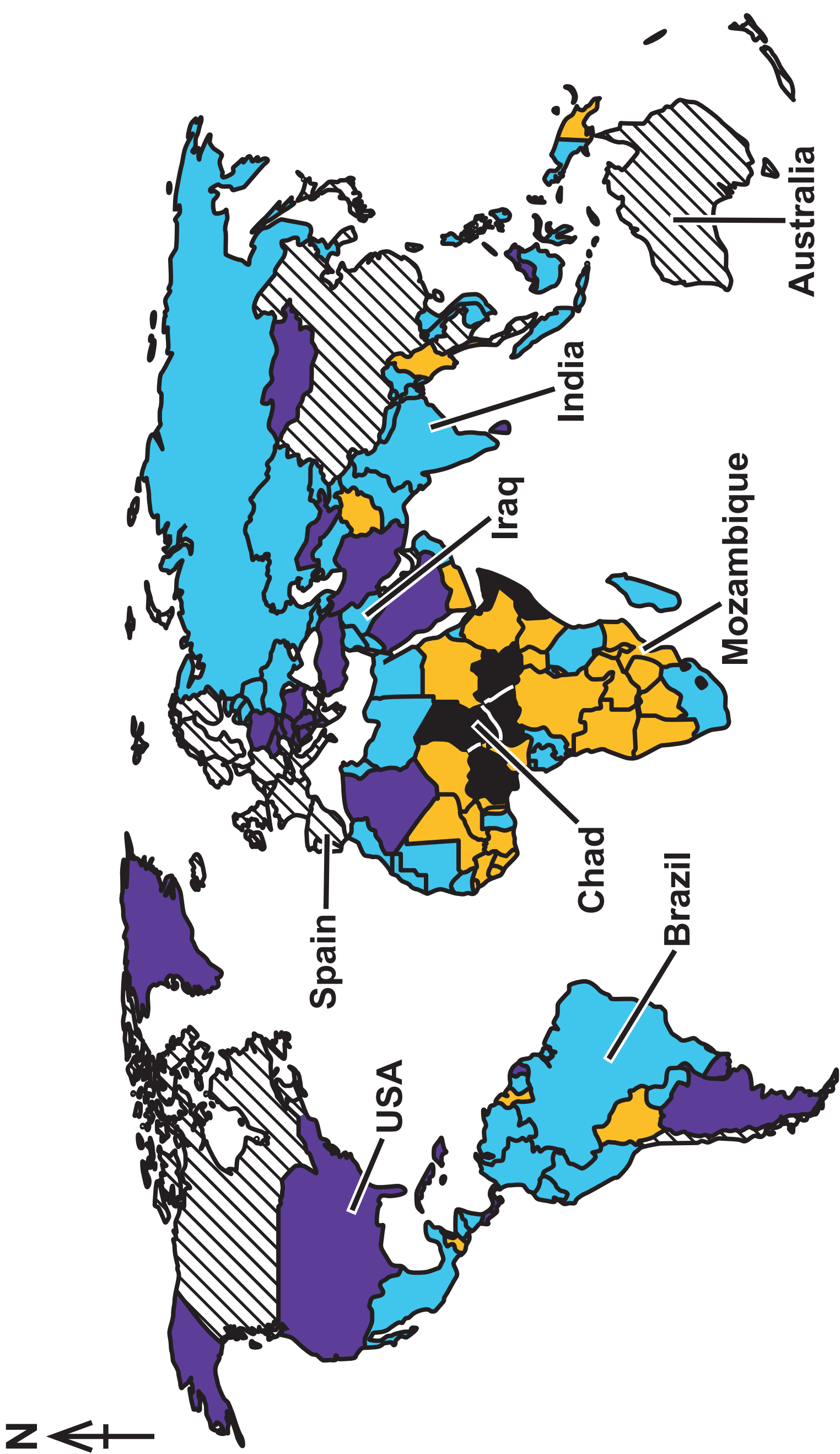


Figure 9a – Diagram (Colour) – Part 2

Life expectancy, 2022





Figure 9a – Key (Black and White)

Life expectancy, 2022

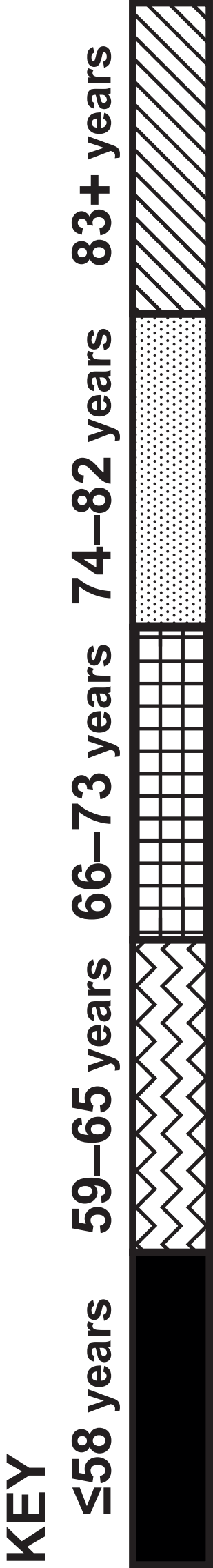
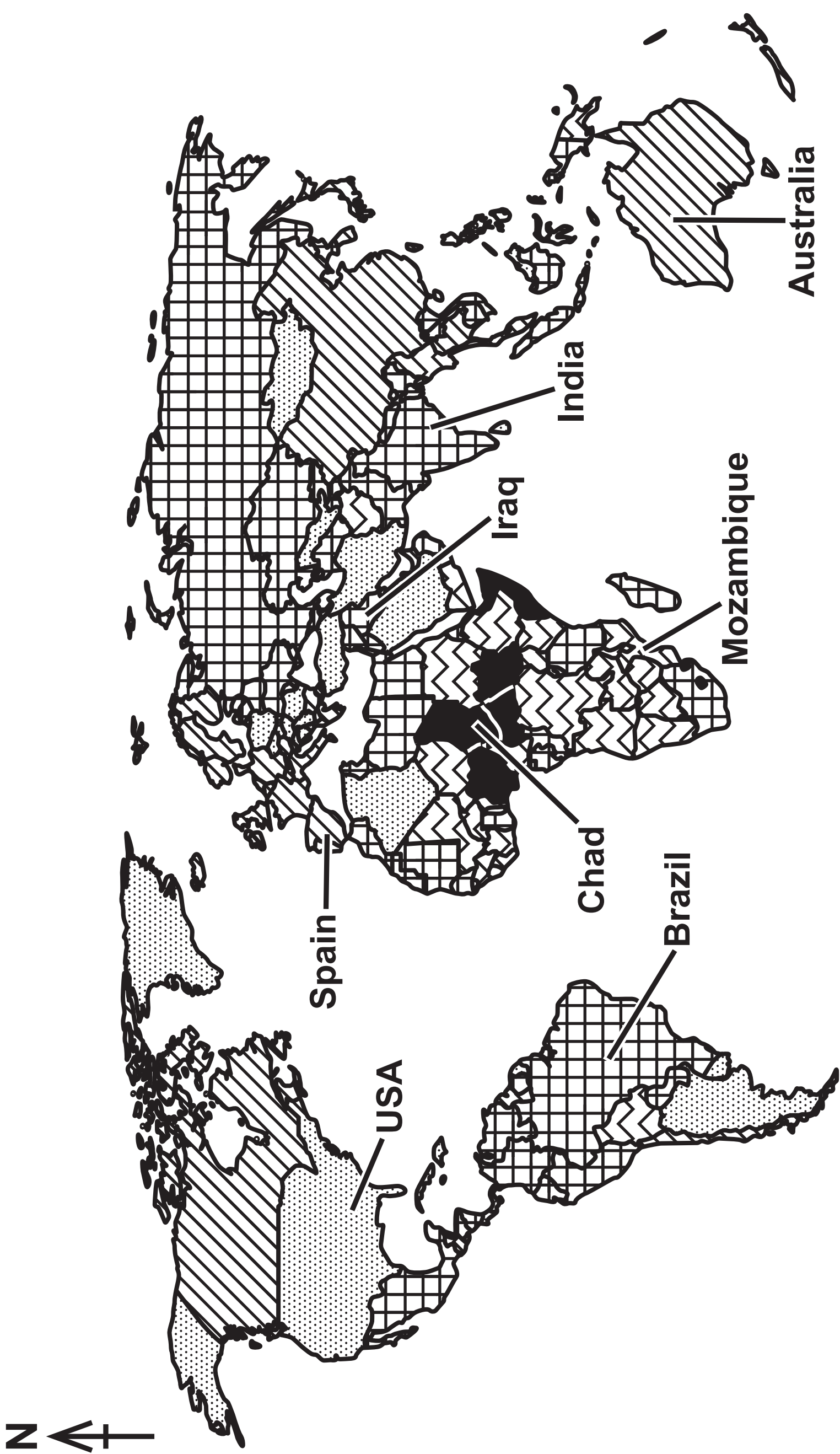




Figure 9a – Diagram (Black and White) – Part 1

Life expectancy, 2022



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

Life expectancy, 2022

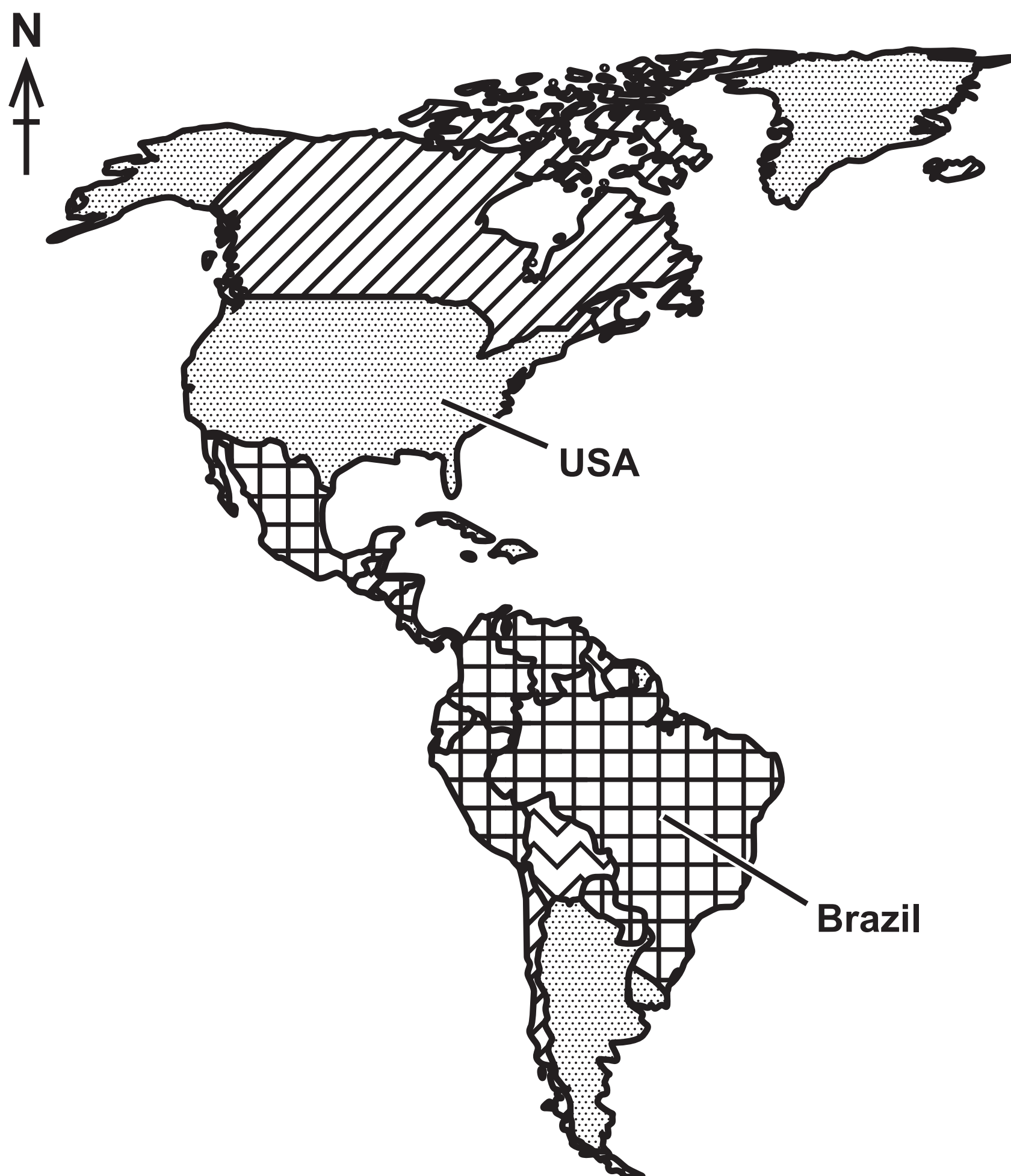


Figure 9a – Diagram (Black and White) – Part 3

Life expectancy, 2022

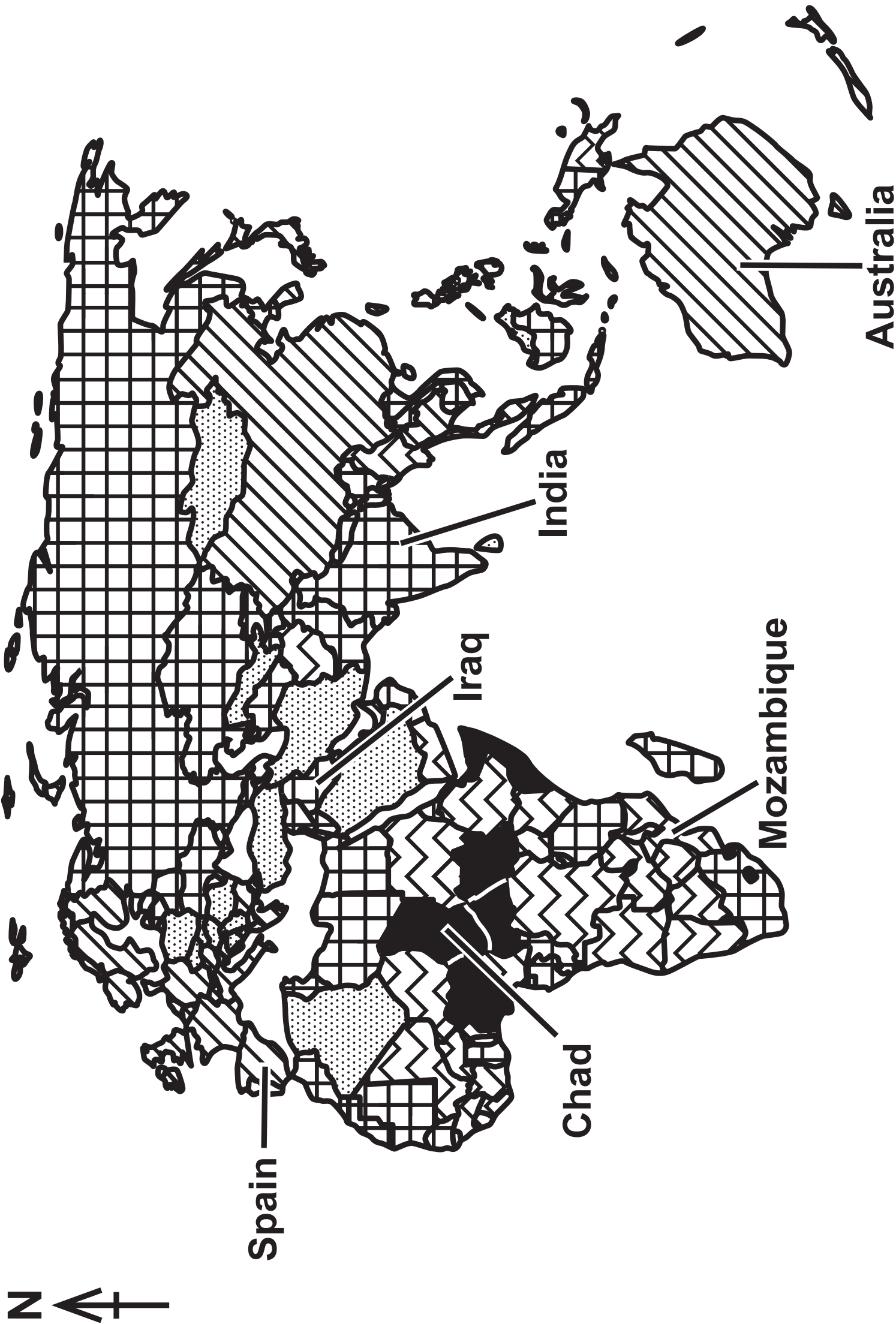


Figure 9b

Number of people affected by food insecurity for selected countries, 2015–2019

KEY

- Nigeria
- - -

 Brazil
- Kenya
- ==

 Indonesia
- . -

 Sierra Leone

Number of people  
(millions)

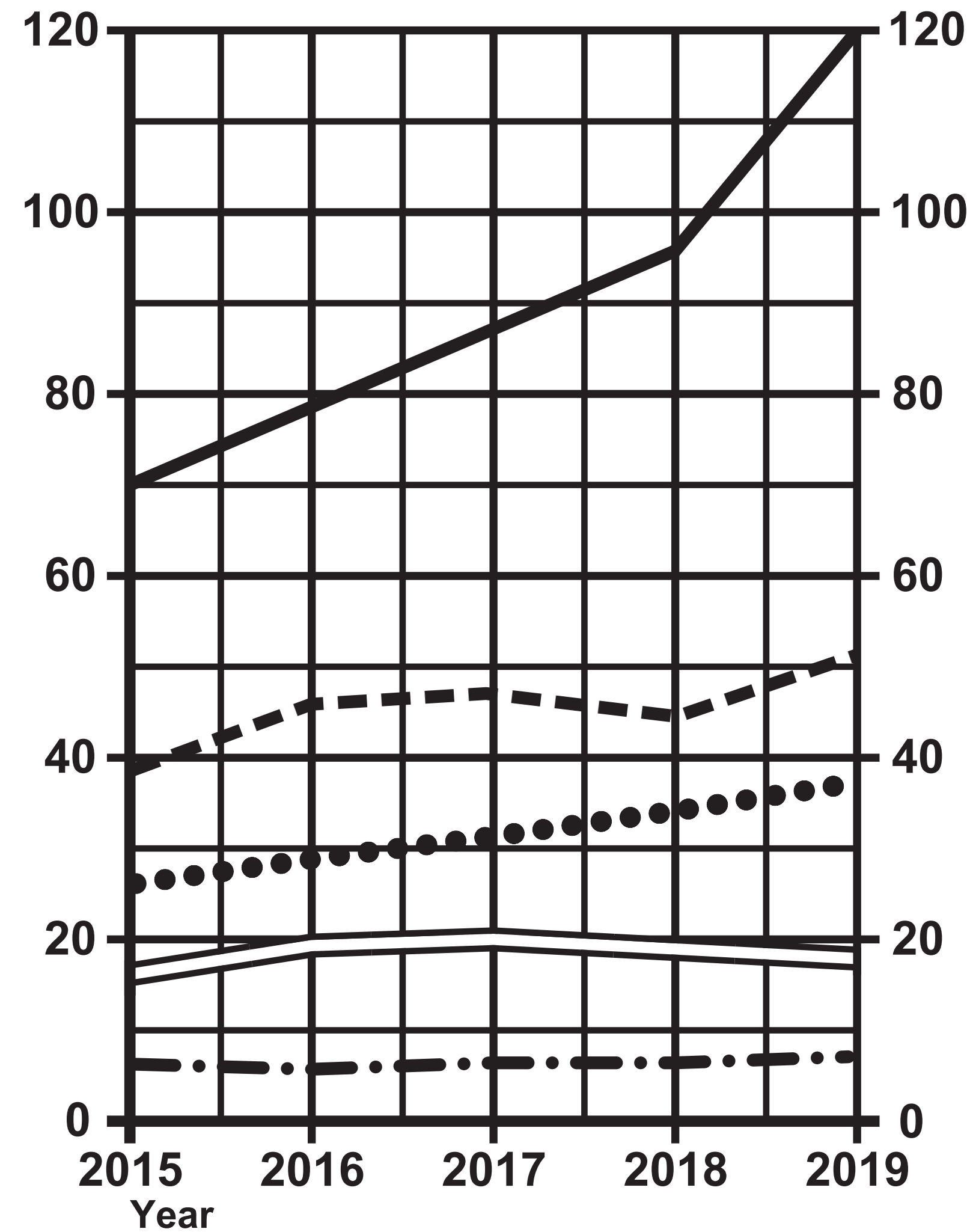
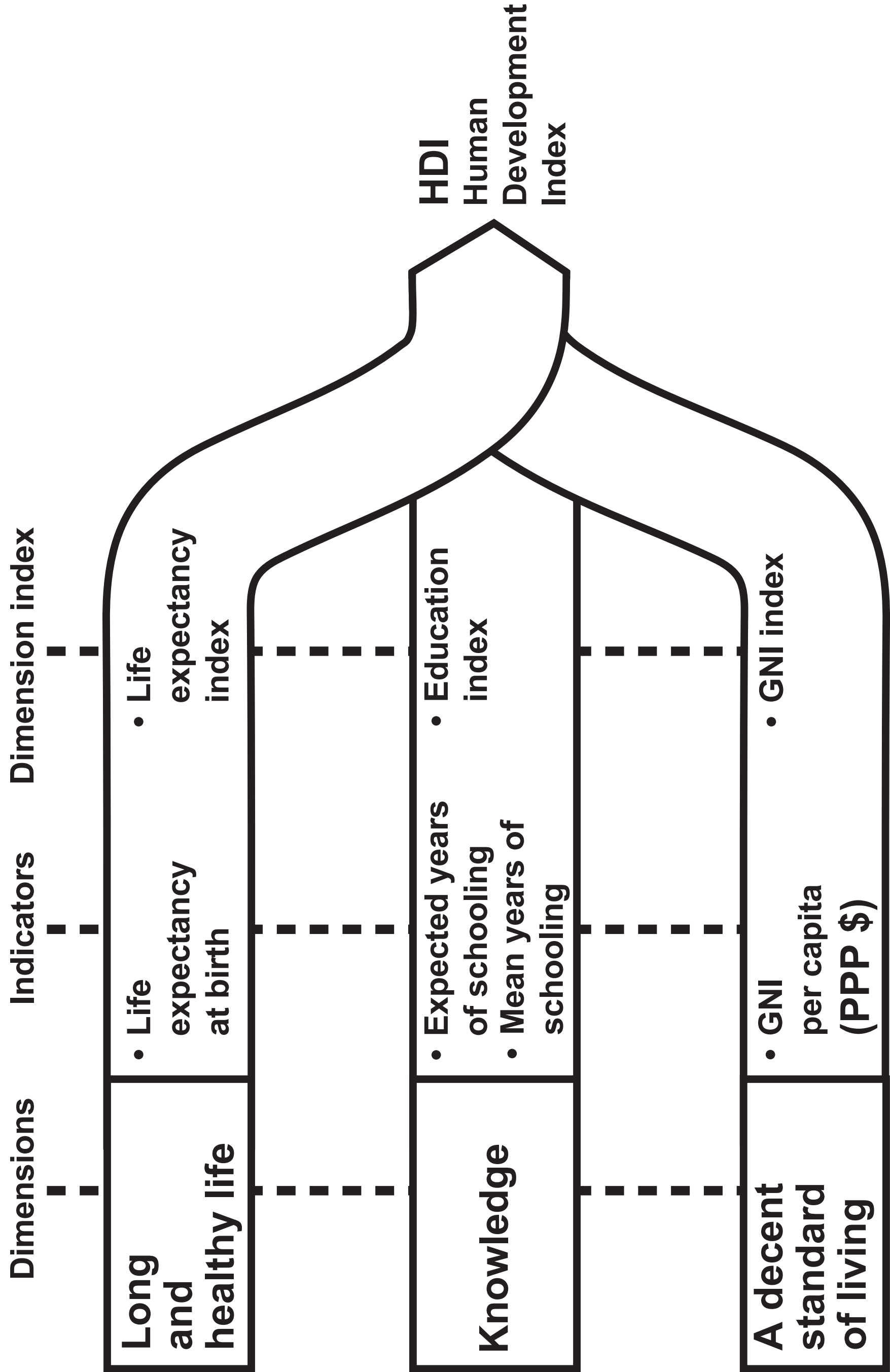


Figure 9c  
The Human Development Index (HDI)

Note: GNI is gross national income



## Acknowledgements

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

**Figure 1a: © Amanda Ahn / Alamy Stock Photo**

**Figure 2a adapted from: © stihii/Shutterstock**

**Figure 3a adapted from: [https://en.m.wikipedia.org/wiki/](https://en.m.wikipedia.org/wiki/File:Frankfurt_am_Main,_Germany,_March_25,_2018_SkySat.jpg)**

**File:Frankfurt\_am\_Main,\_Germany,\_March\_25,\_2018\_SkySat.jpg**

**Figure 7c adapted from: © GraphicsRF.com/Shutterstock**