

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

**Geography**  
**PAPER 2: Human geography**

# **Resource Book**

**Do not return this Resource Book 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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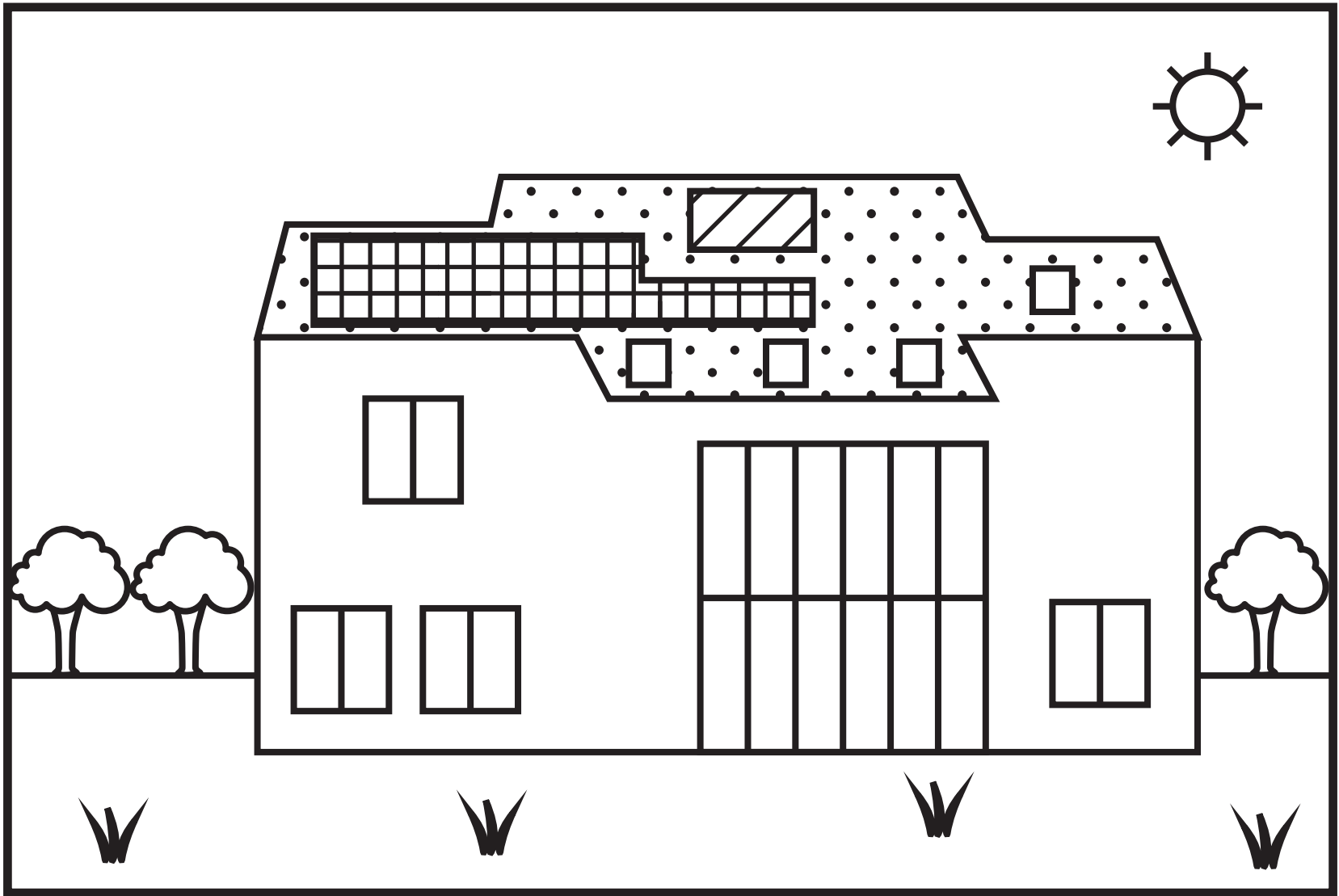


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Figure 1a  
Photograph of a house adapted for more sustainable energy consumption



Key:

- |   |   |   |  |
|---|---|---|--|
|  Roof  |  Windows |  Sky lights |  Panels on the roof |
|  Grass |  Trees   |  Sun        |  Panels on the roof |

Figure 1c  
Energy use and GDP per capita in China, 1980–2014

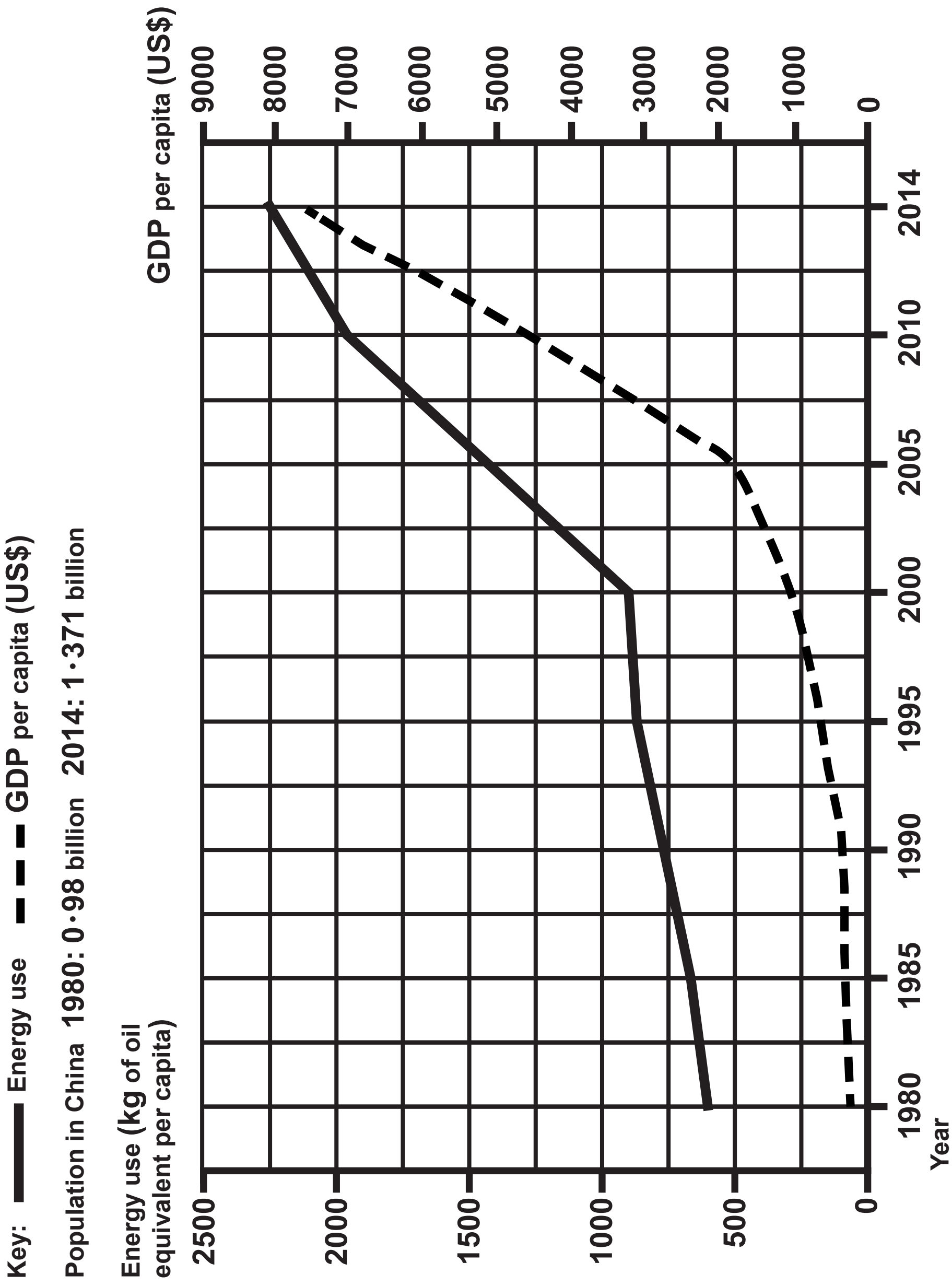
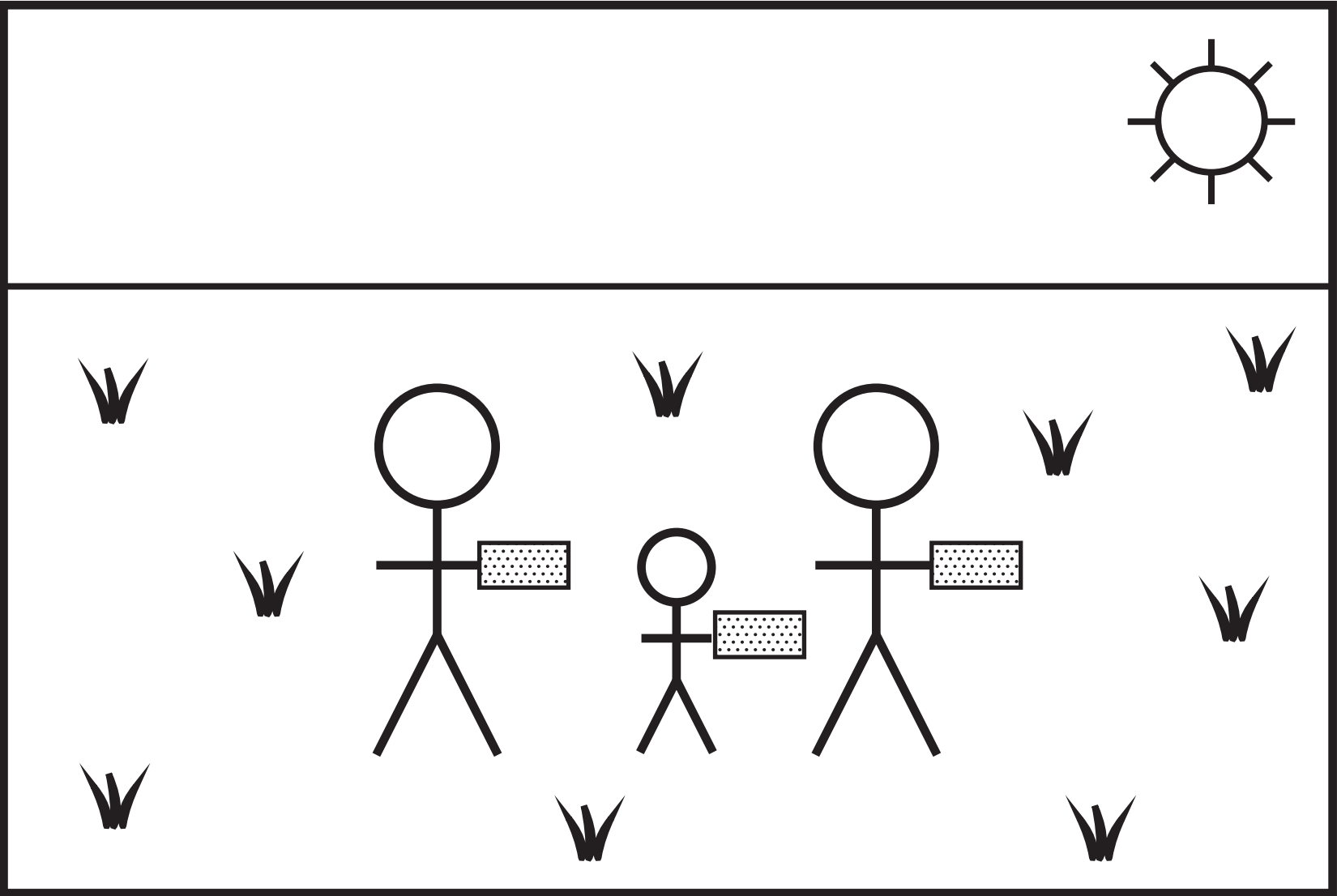




Figure 2a

New activities on a dairy farm



Key:



Strawberries



Person



Area of  
strawberry  
plants



Sun

Figure 2c

Production and export value of natural rubber extracted from forests in Indonesia, 2008–2016

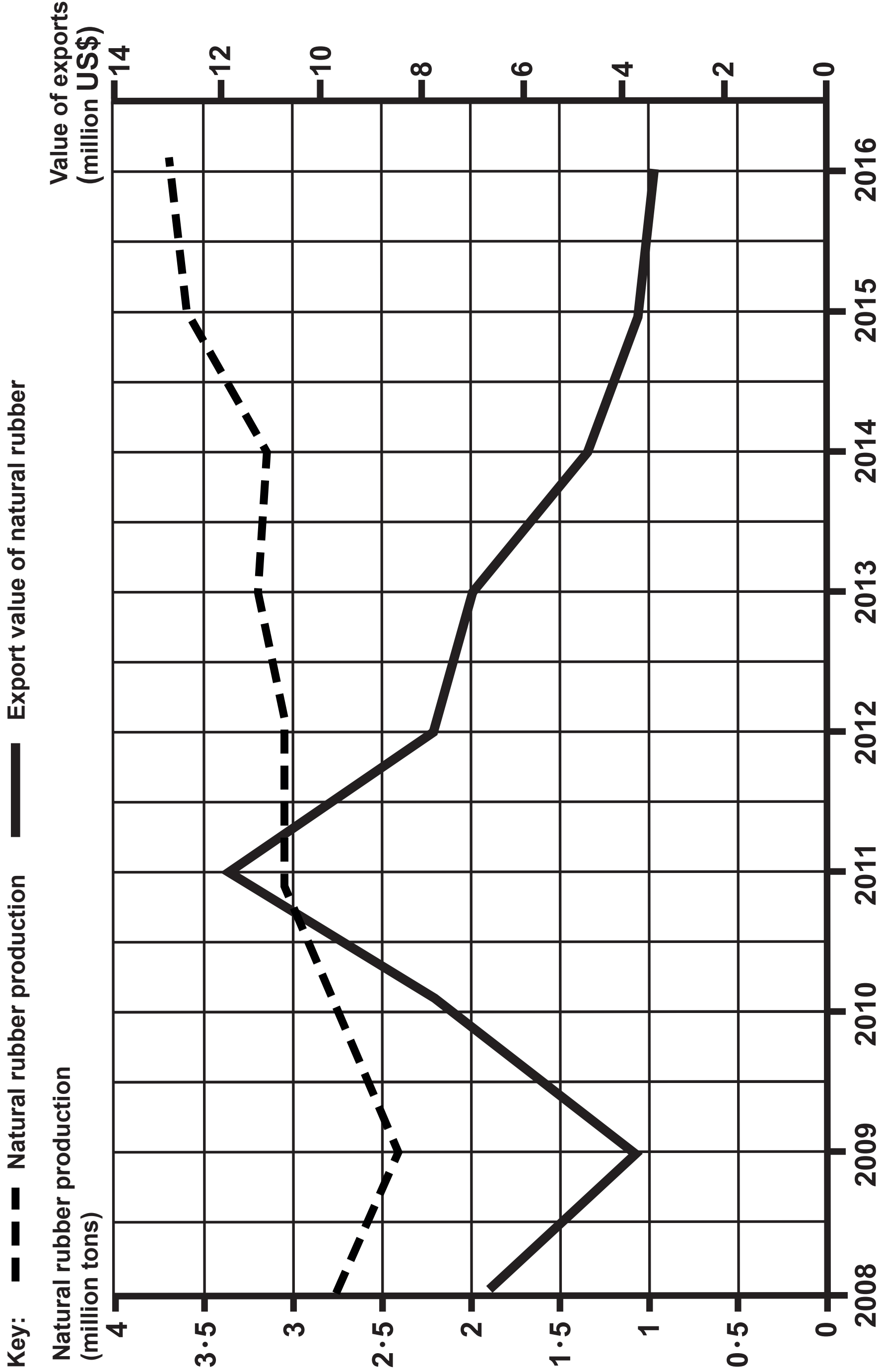




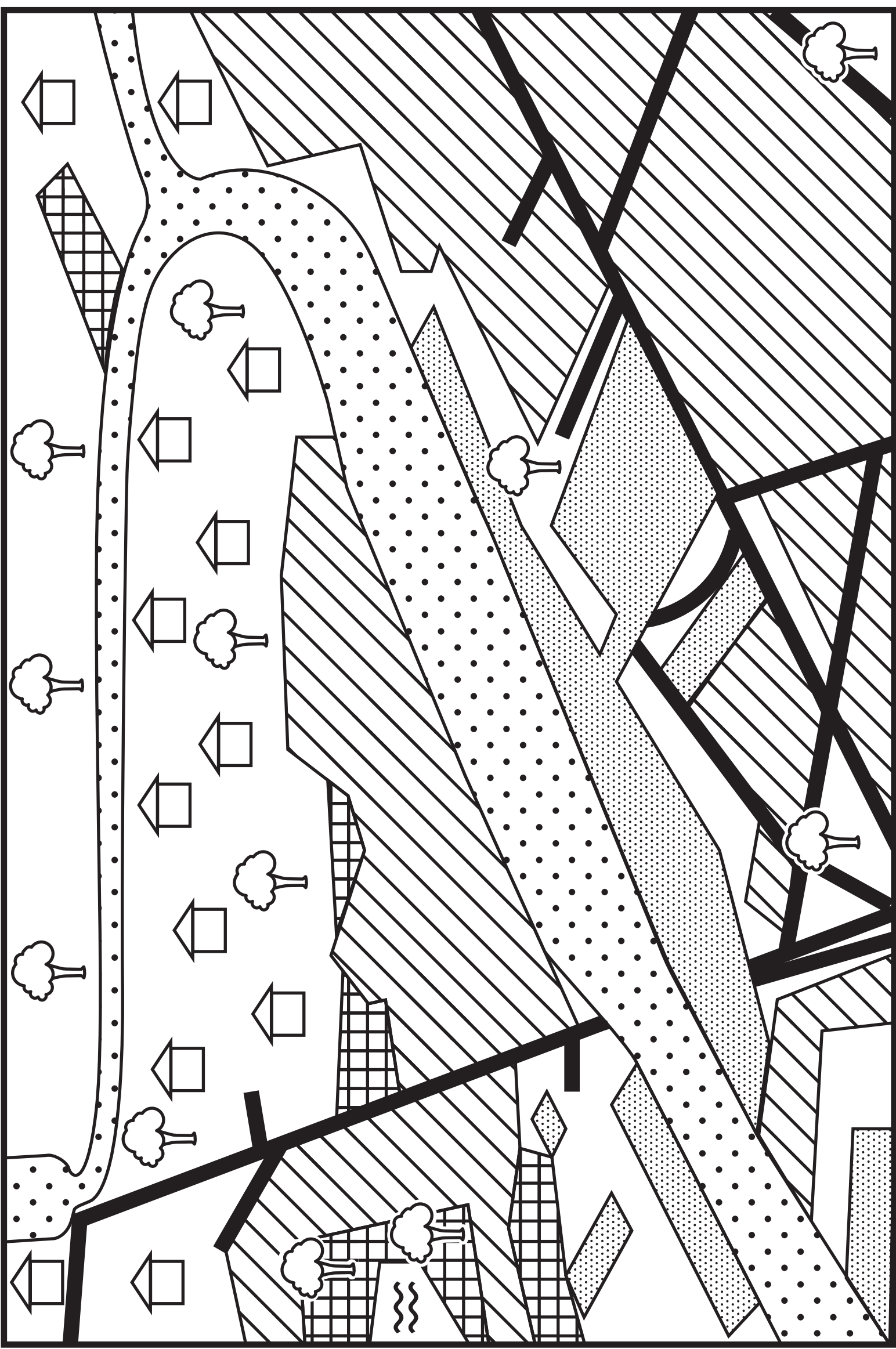
Figure 3a – Colour

An urban area

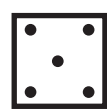




Figure 3a – Black and White  
An urban area



Key:



Railway



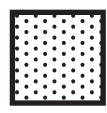
Road



High rise flats



Flats and Houses



Factory



Grass



Lake



Trees

Figure 3c  
Trends in urban population for selected countries, 1960–2016

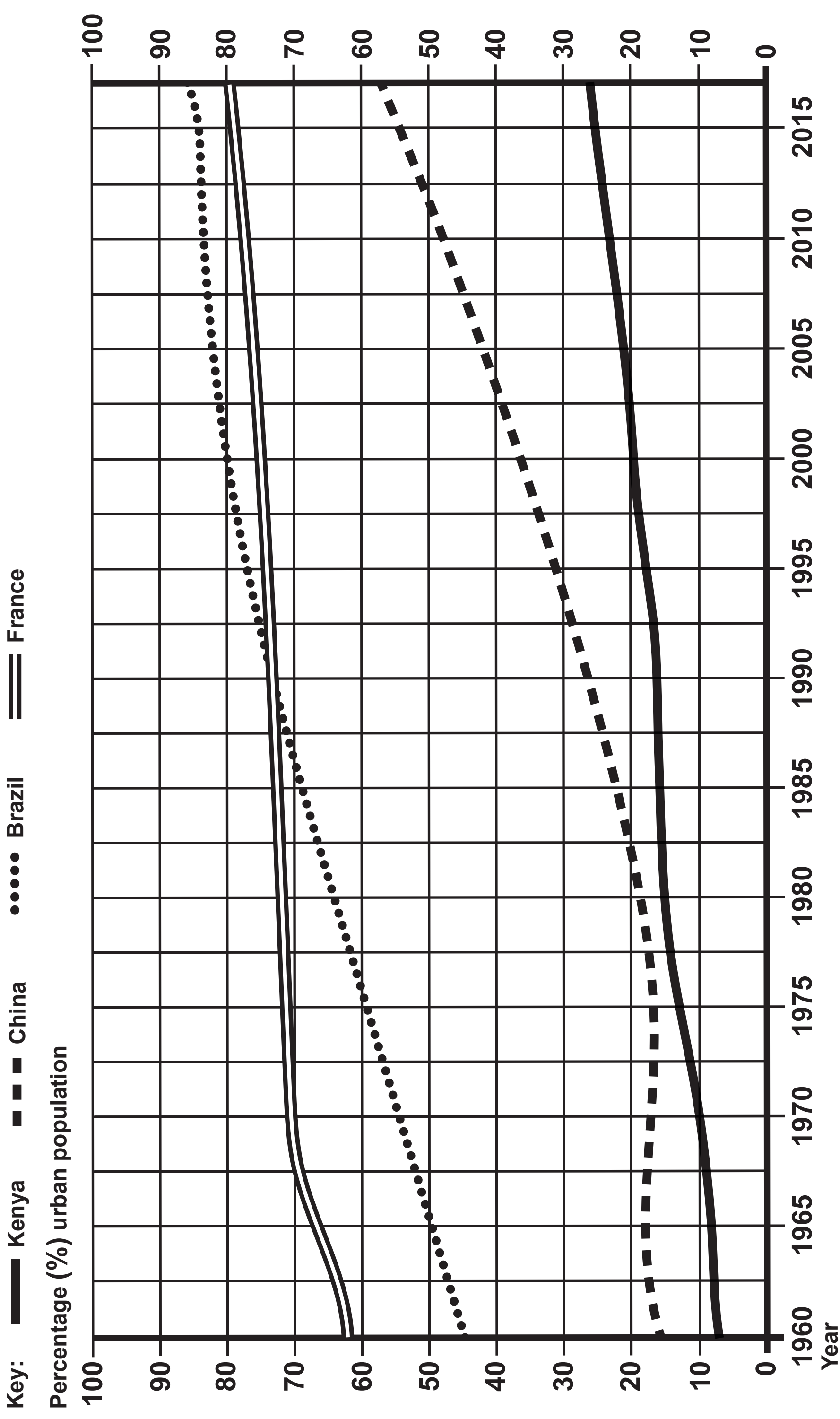
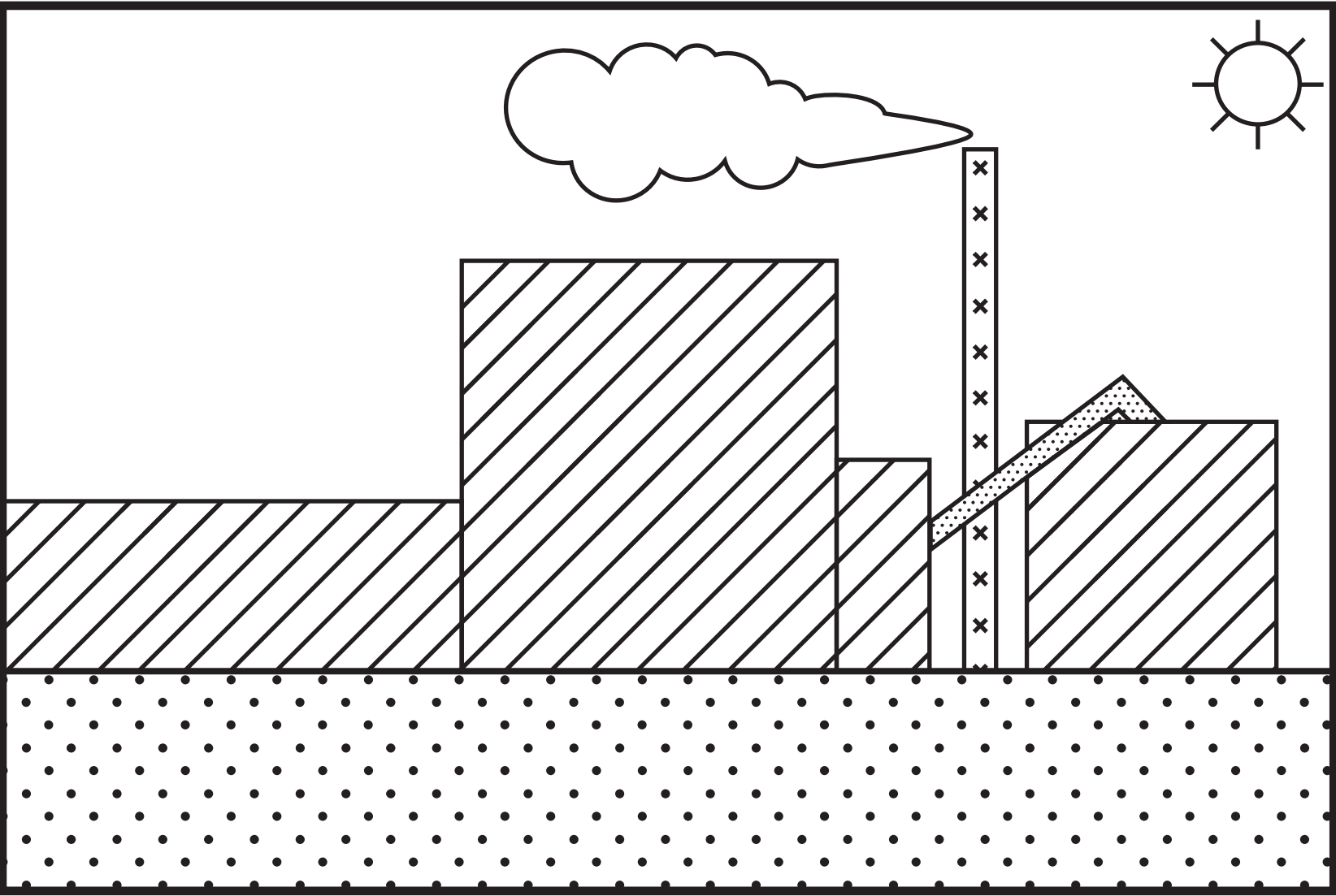




Figure 4a

Photograph of a new renewable energy plant



Key:




-  Buildings
-  Road
-  Pipe
-  Chimney
-  Smoke
-  Sun

Figure 4b

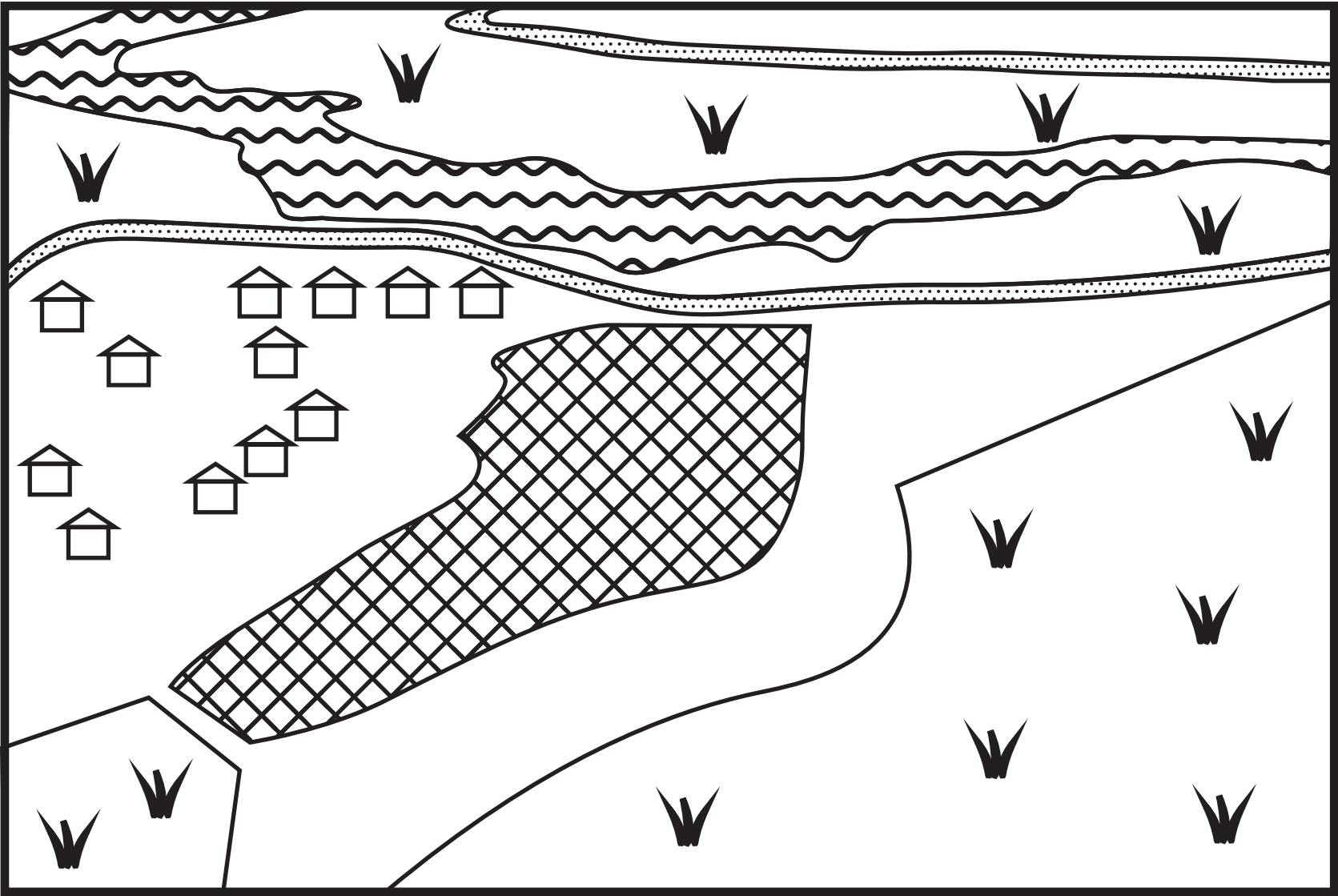
Extract from a table of results from an environmental quality survey

Environmental quality indicator	Site 1	Site 2	Site 3	Site 4	Site 5
<b>Building condition</b> (1 = Poor condition/5 = Good condition)	4	5	3	5	2
<b>Road quality</b> (1 = Poor condition/5 = Good condition)	4	2	3	5	2
<b>Noise</b> (1 = Very noisy/5 = No noise)	4	3	3	5	1
<b>Litter</b> (1 = A lot of litter/5 = No litter)	4	4	3	5	3
<b>Air pollution</b> (1 = Poor air quality/5 = Good air quality)	4	1	1	5	2
Total environmental quality score	20	15	13	25	10



Figure 5a

Photograph of a new development in a rural area



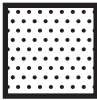
Key:



New development



River



Road



Houses



Grass

Figure 5b

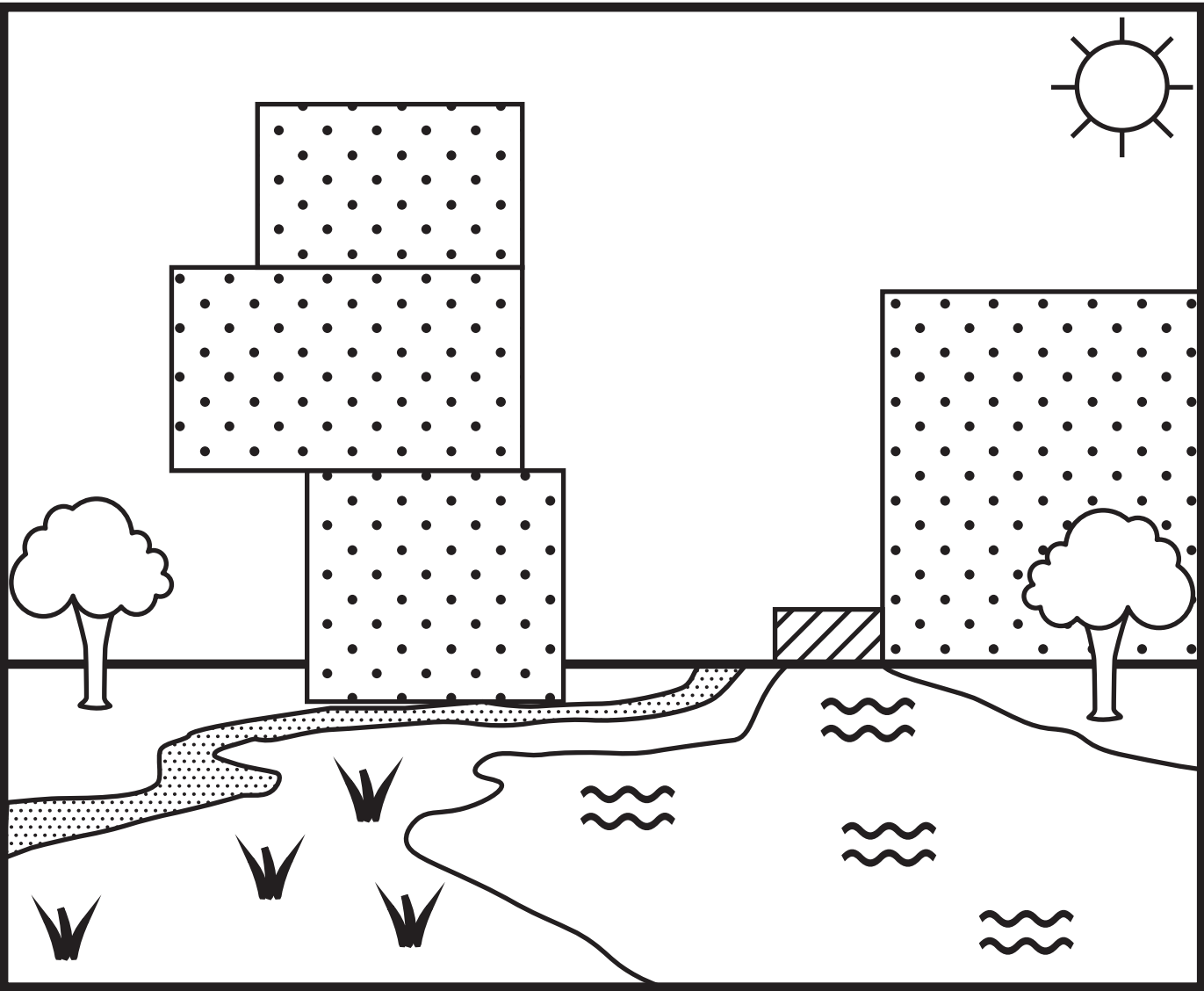
Extract from a table of results from an environmental quality survey

Environmental quality indicator	Site 1	Site 2	Site 3	Site 4	Site 5
<b>Building condition</b> (1 = Poor condition/5 = Good condition)	4	5	3	5	2
<b>Road quality</b> (1 = Poor condition/5 = Good condition)	4	2	3	5	2
<b>Noise</b> (1 = Very noisy/5 = No noise)	4	3	3	5	1
<b>Litter</b> (1 = A lot of litter/5 = No litter)	4	4	3	5	3
<b>Air pollution</b> (1 = Poor air quality/5 = Good air quality)	4	1	1	5	2
Total environmental quality score	20	15	13	25	10



Figure 6a

Photograph of a regenerated urban area



Key:







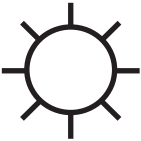
	Designer housing		River		Pavement		Bridge
	Trees		Grass		Sun		

Figure 6b

Extract from a table of results from an environmental quality survey

Environmental quality indicator	Site 1	Site 2	Site 3	Site 4	Site 5
<b>Building condition</b> (1 = Poor condition/5 = Good condition)	4	5	3	5	2
<b>Road quality</b> (1 = Poor condition/5 = Good condition)	4	2	3	5	2
<b>Noise</b> (1 = Very noisy/5 = No noise)	4	3	3	5	1
<b>Litter</b> (1 = A lot of litter/5 = No litter)	4	4	3	5	3
<b>Air pollution</b> (1 = Poor air quality/5 = Good air quality)	4	1	1	5	2
Total environmental quality score	20	15	13	25	10

Figure 7a

Climate graphs for Africa, 1901–1930 and 1991–2016

Key:  Average rainfall     Average temperature

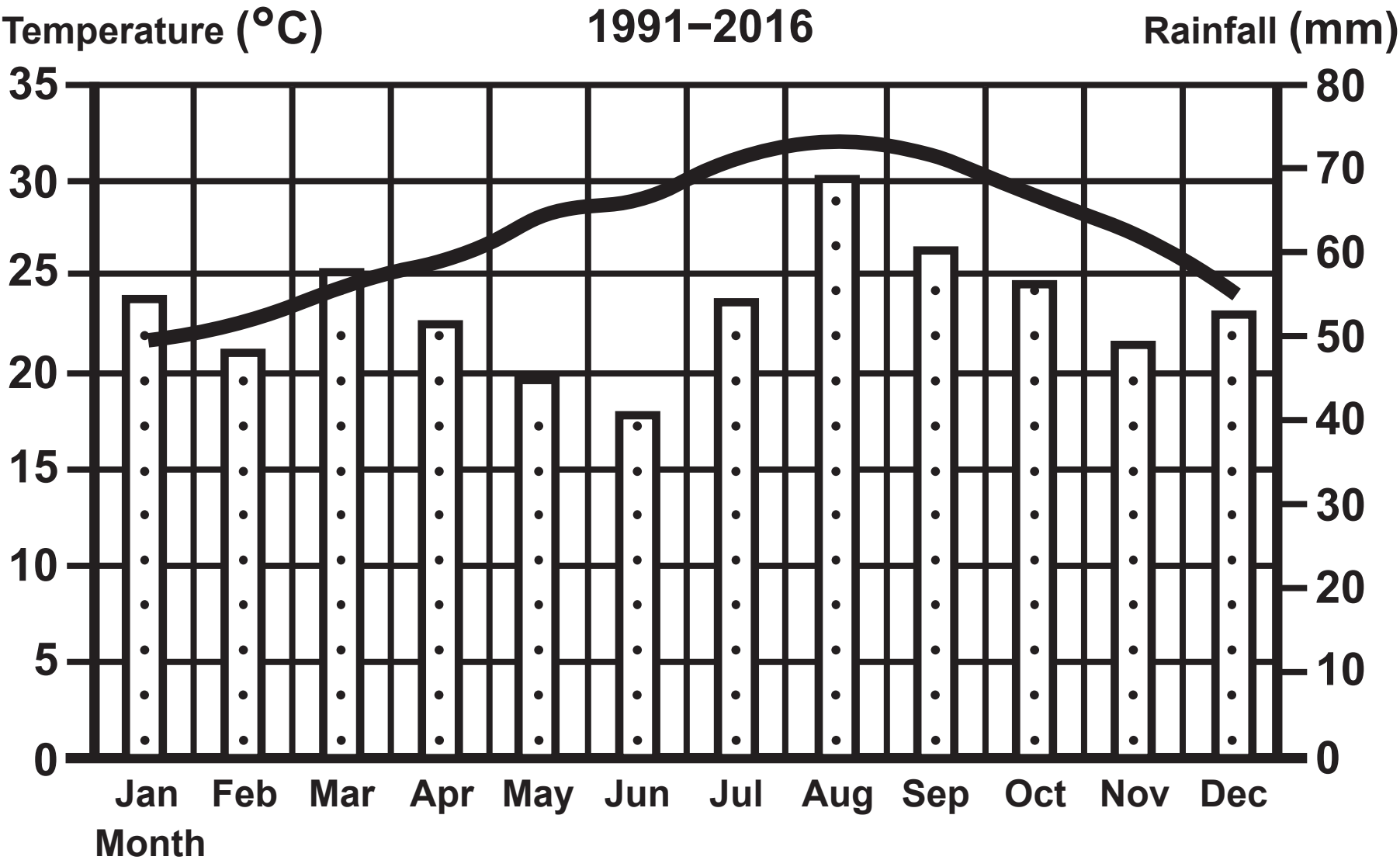
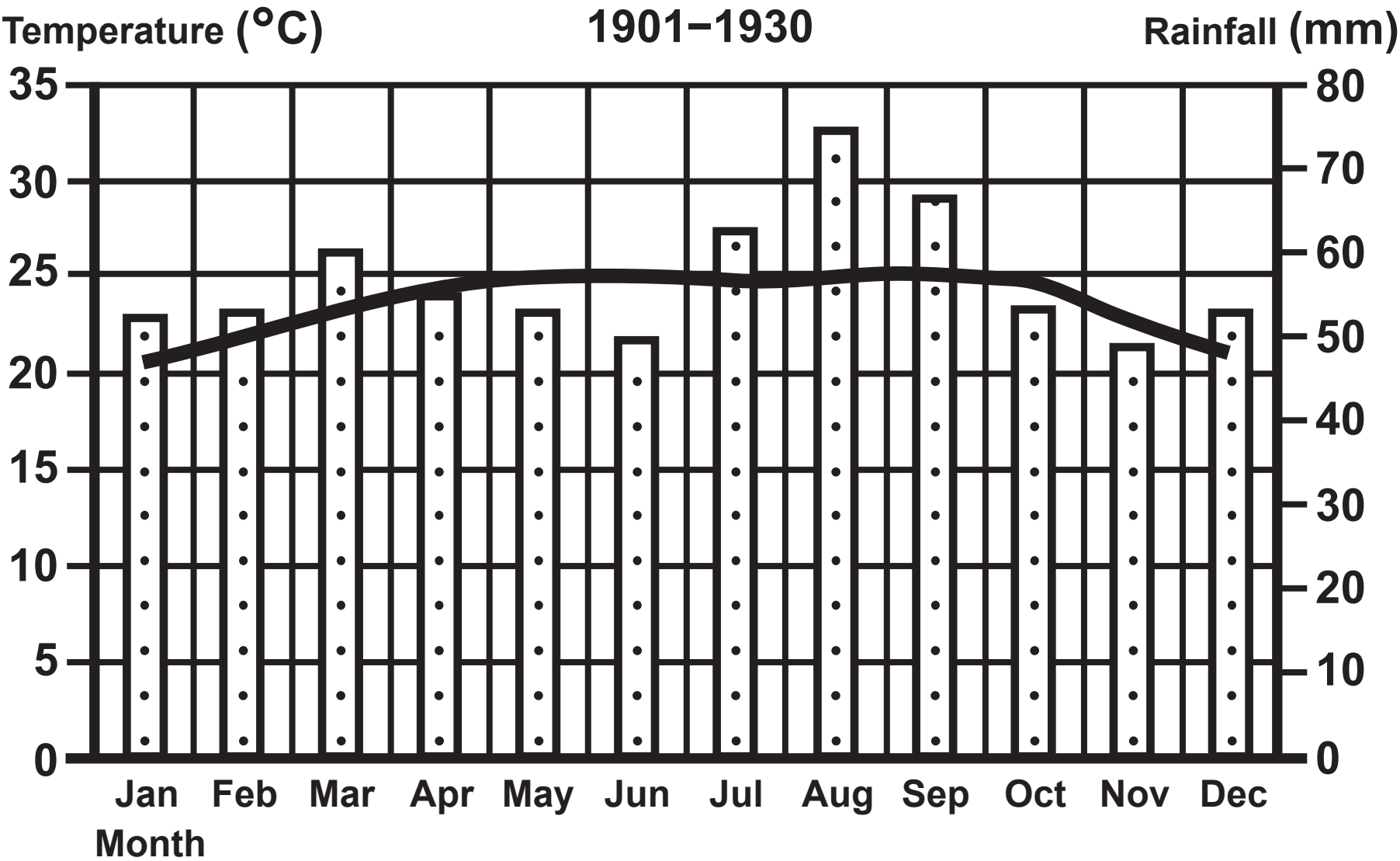


Figure 7a – Graph 1  
Climate graph for Africa, 1901–1930

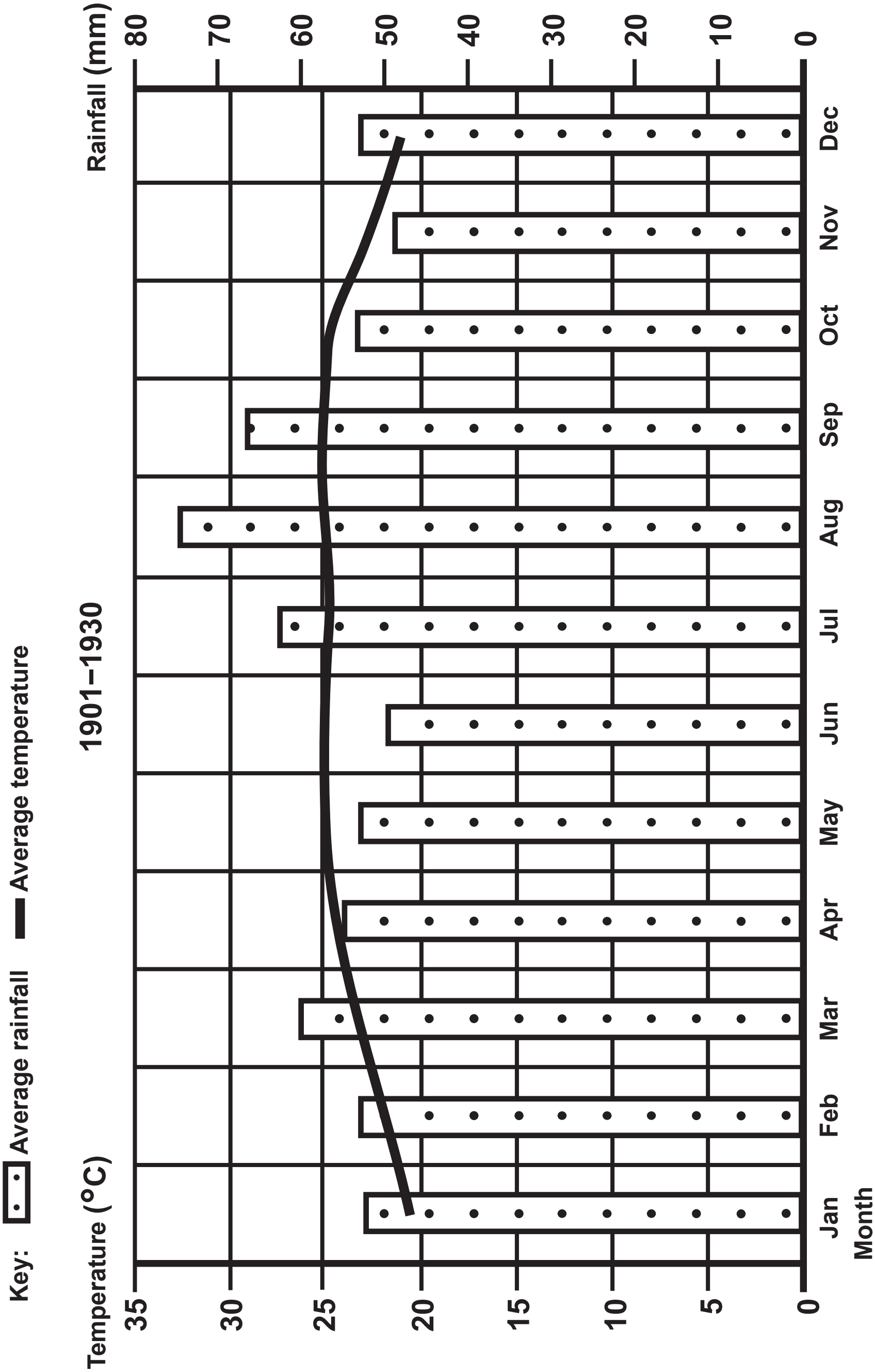




Figure 7a – Graph 2

Climate graph for Africa, 1991–2016

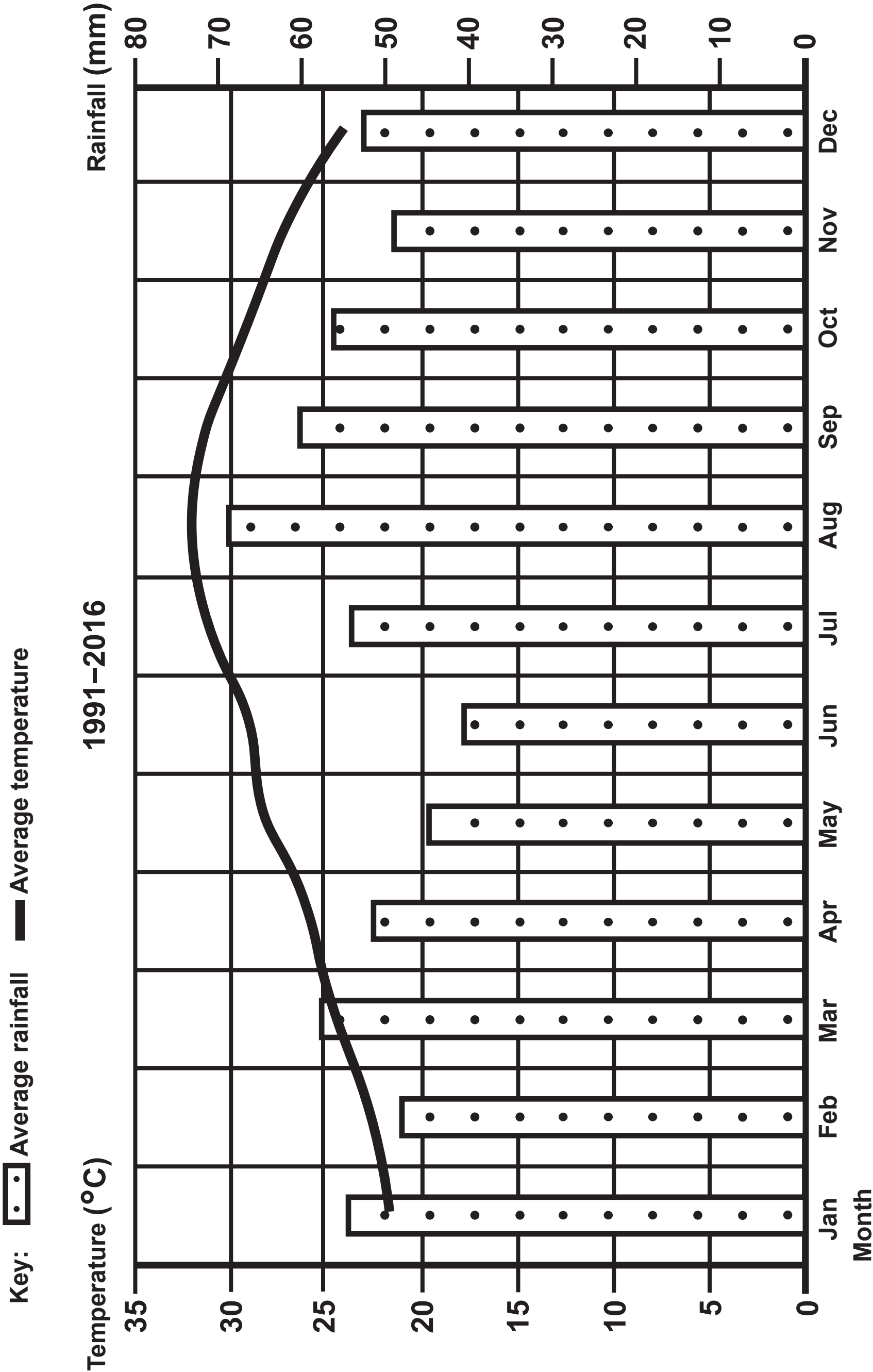


Figure 7b (Part 1) – Colour  
A global map of vulnerability to desertification

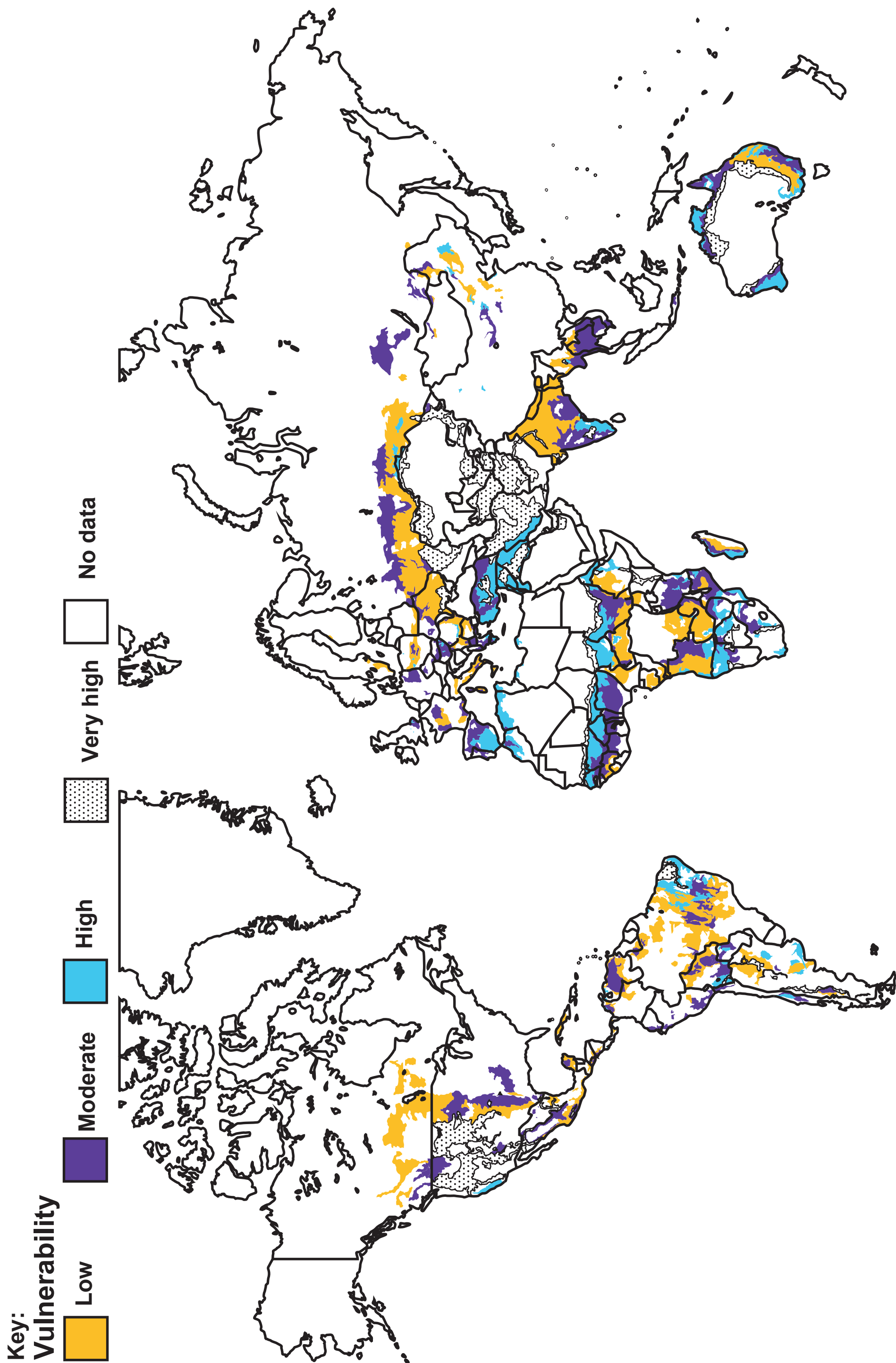


Figure 7b (Part 2) – Colour

A global map of vulnerability to desertification

The diagram is not drawn to scale

Key:  
Vulnerability

<div></div> Low	<div></div> Moderate	<div></div> High	<div></div> Very high	<div></div> No data
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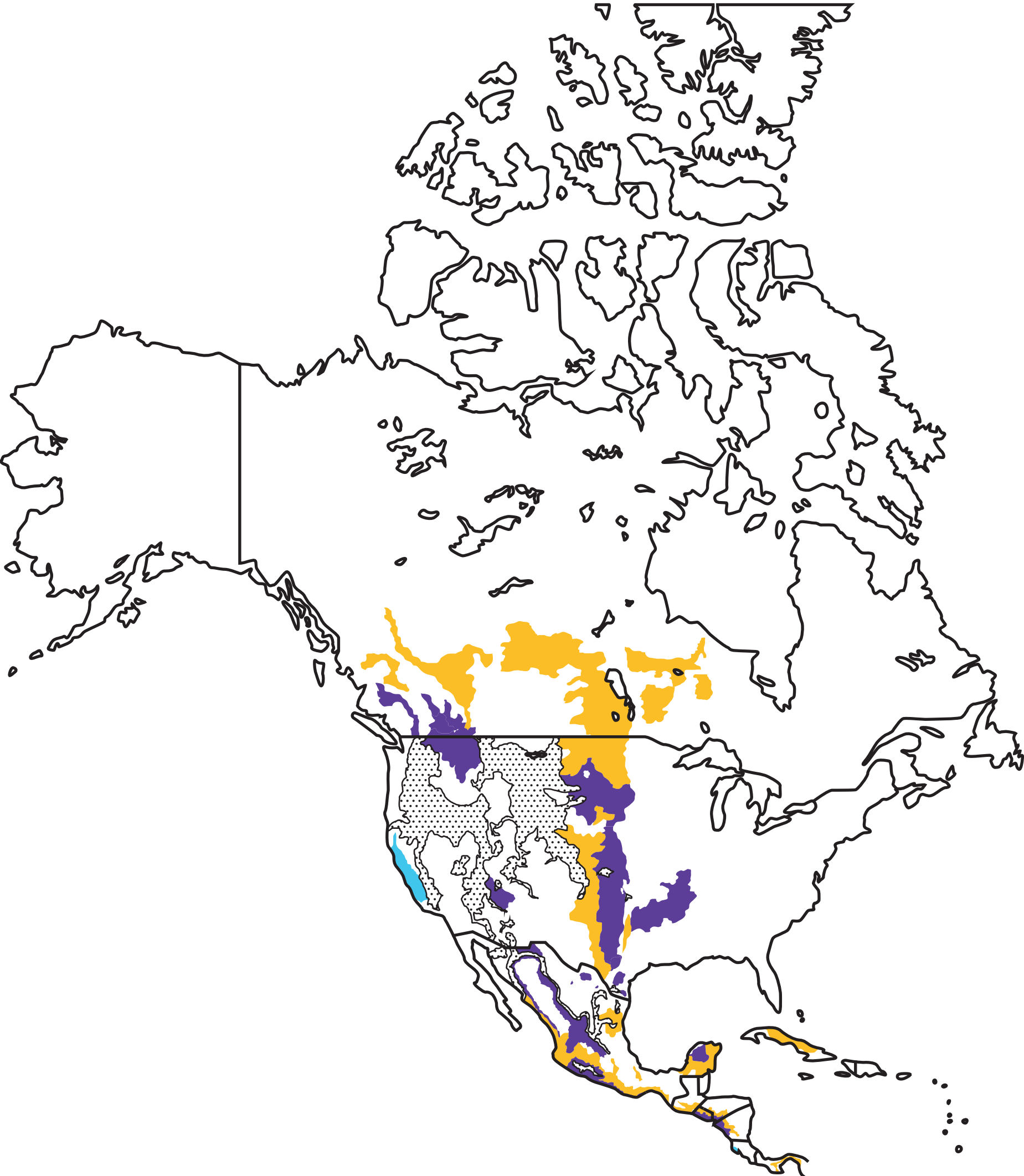


Figure 7b (Part 2 Enlarged) – Colour

A global map of vulnerability to desertification

The diagram is not drawn to scale

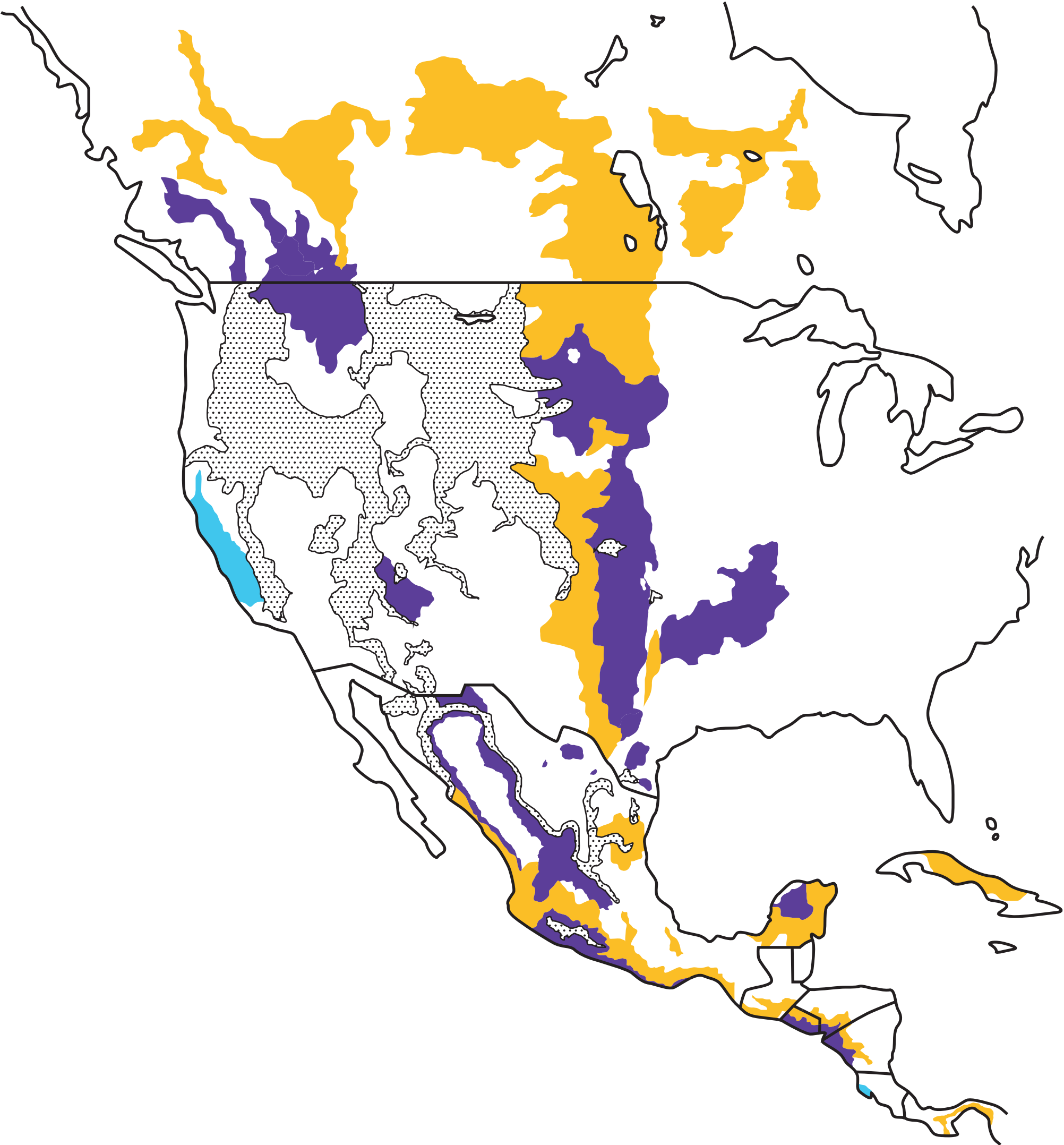
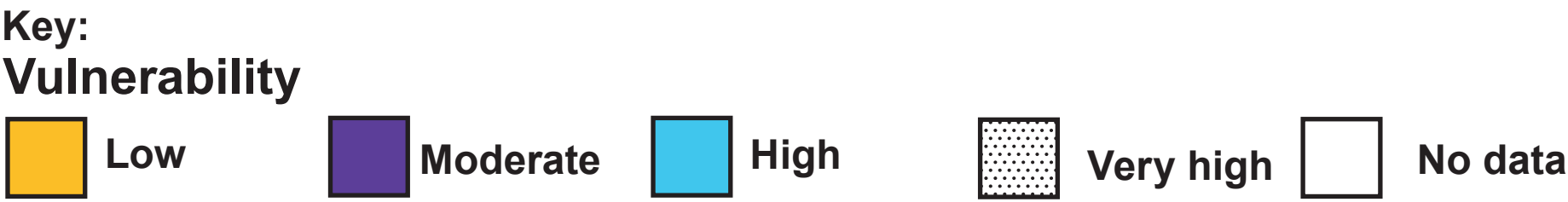


Figure 7b (Part 3) – Colour

A global map of vulnerability to desertification

The diagram is not drawn to scale

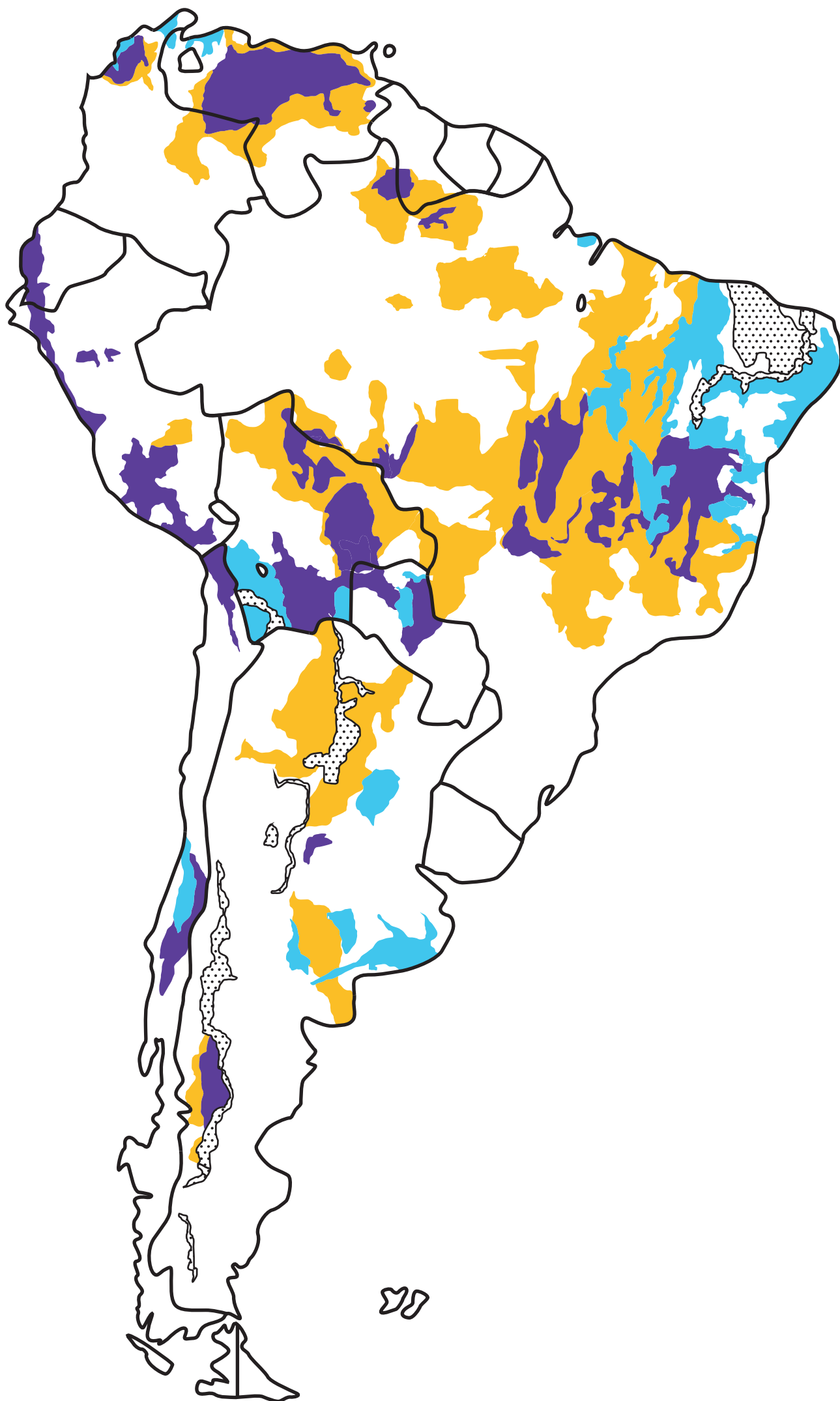
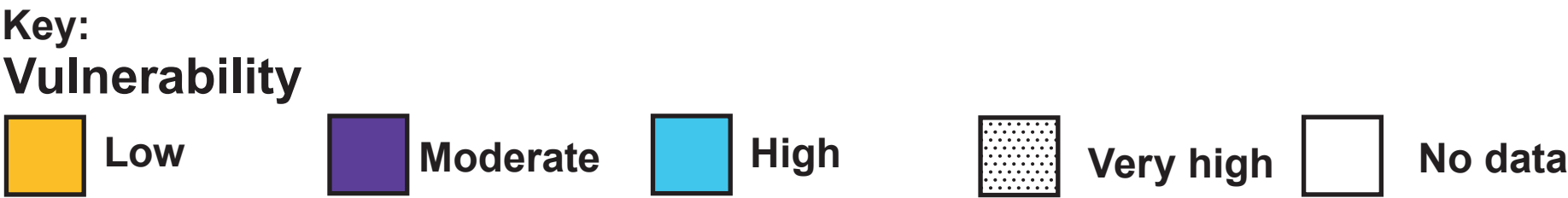


Figure 7b (Part 4) – Colour

A global map of vulnerability to desertification

The diagram is not drawn to scale

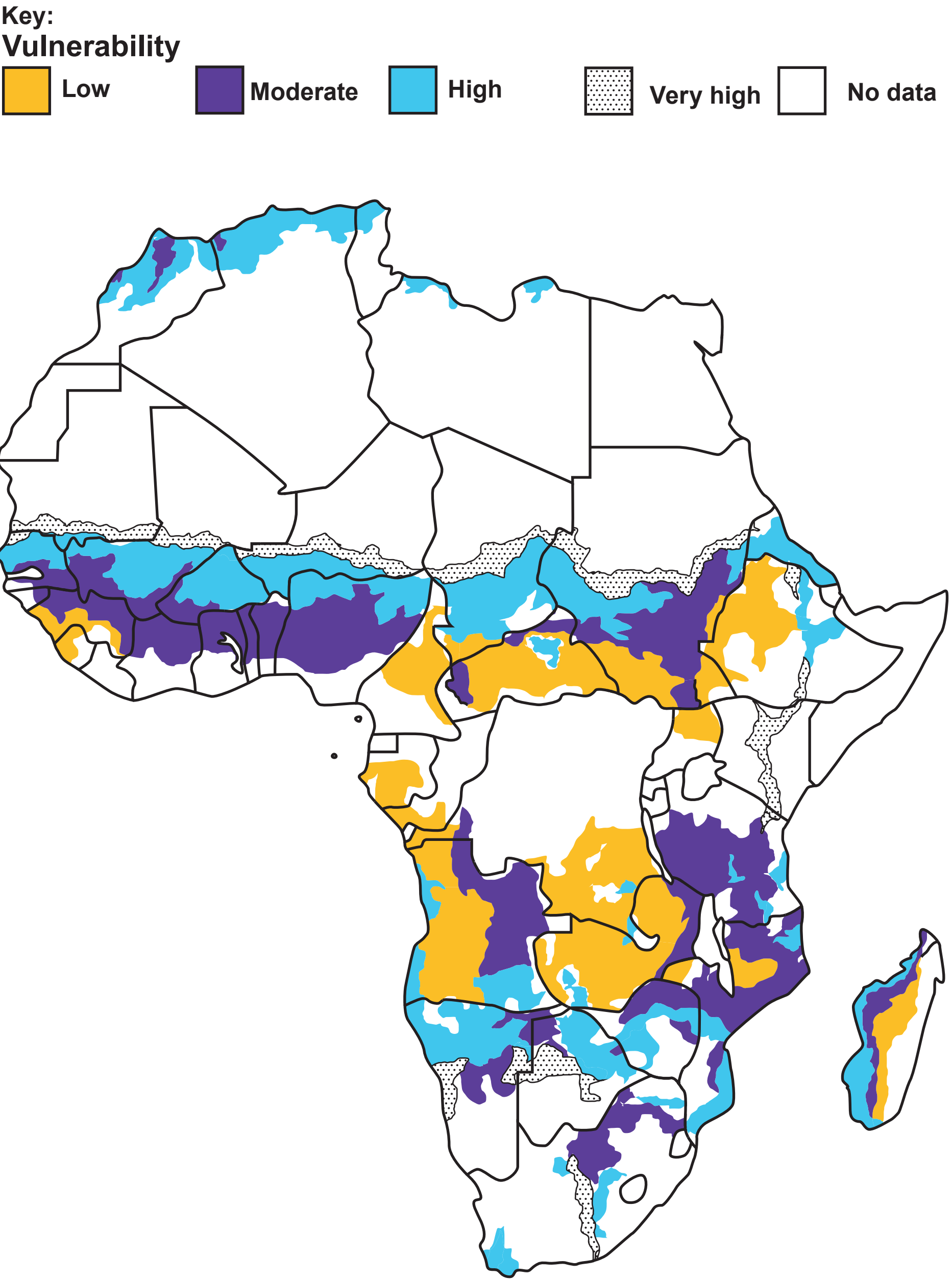




Figure 7b (Part 5) – Colour  
A global map of vulnerability to desertification  
The diagram is not drawn to scale

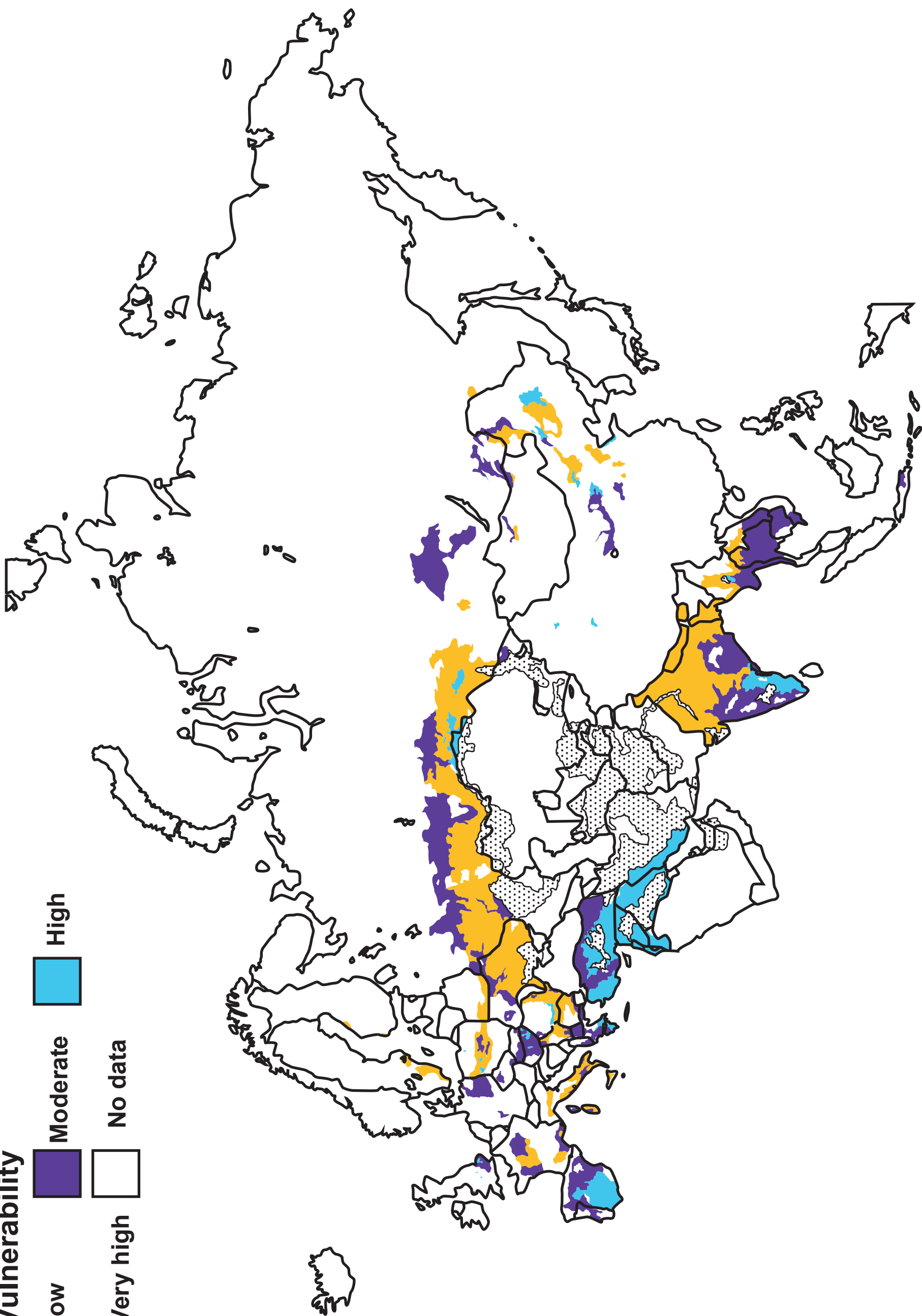
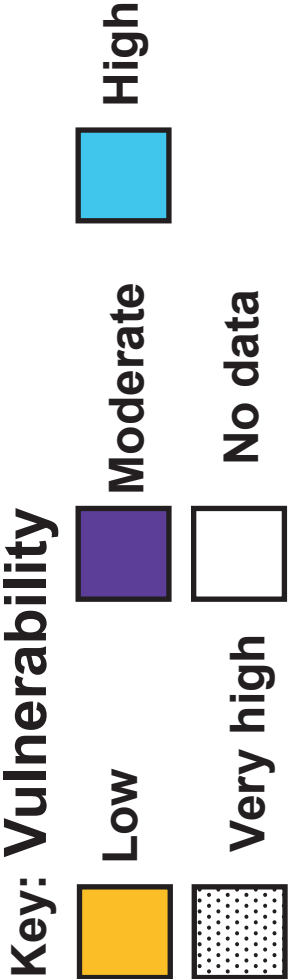


Figure 7b (Part 5 Enlarged) – Colour  
A global map of vulnerability to desertification

The diagram is not drawn to scale

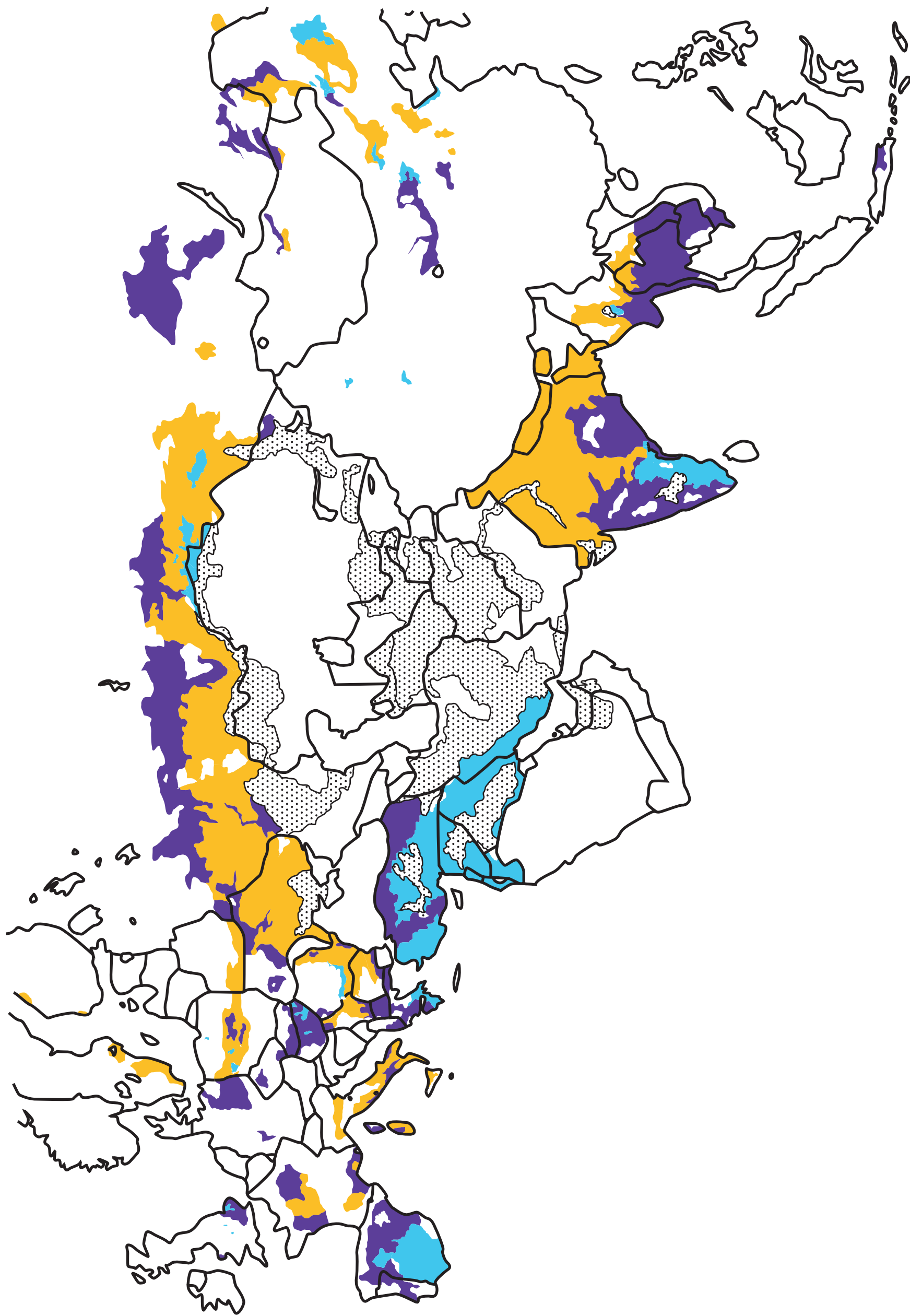




Figure 7b (Part 6) – Colour  
A global map of vulnerability to desertification

The diagram is not drawn to scale

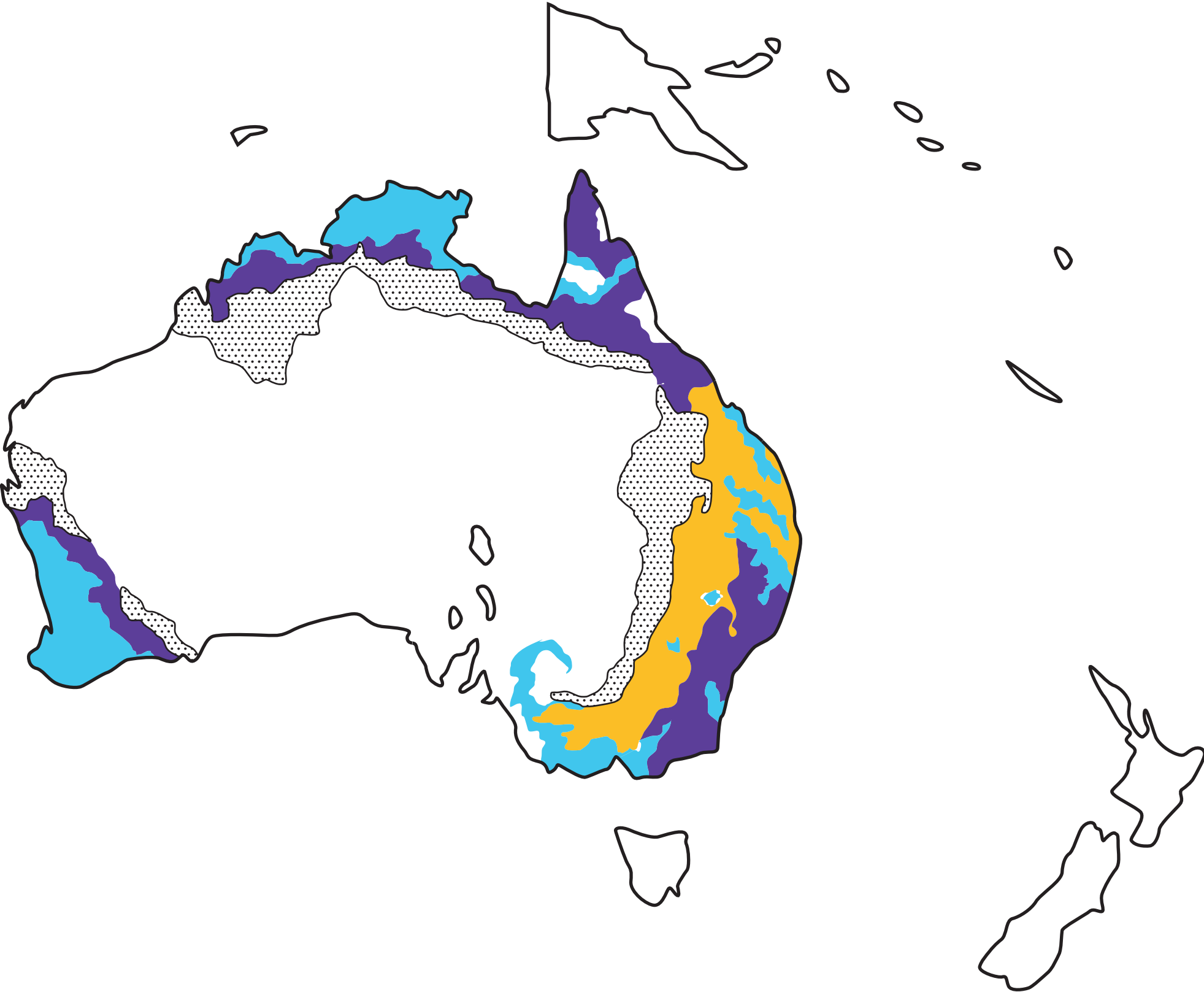


Figure 7b (Part 1) – Black and White  
A global map of vulnerability to desertification



Figure 7b (Part 2) – Black and White

A global map of vulnerability to desertification

The diagram is not drawn to scale

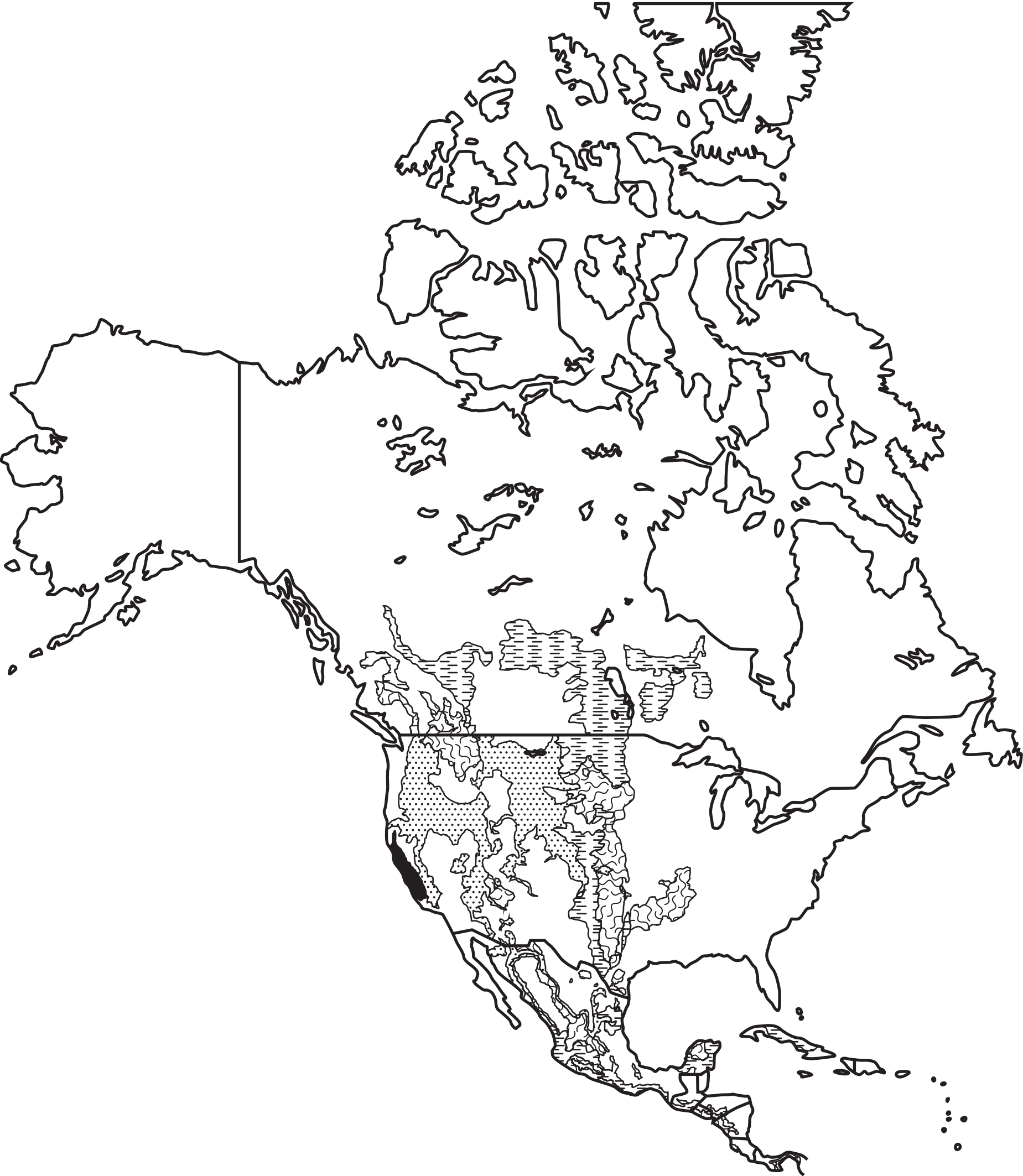


Figure 7b (Part 2 Enlarged) – Black and White

A global map of vulnerability to desertification

The diagram is not drawn to scale





Figure 7b (Part 3) – Black and White

A global map of vulnerability to desertification

The diagram is not drawn to scale

Key:  
Vulnerability

	Low		Moderate		High		Very high		No data
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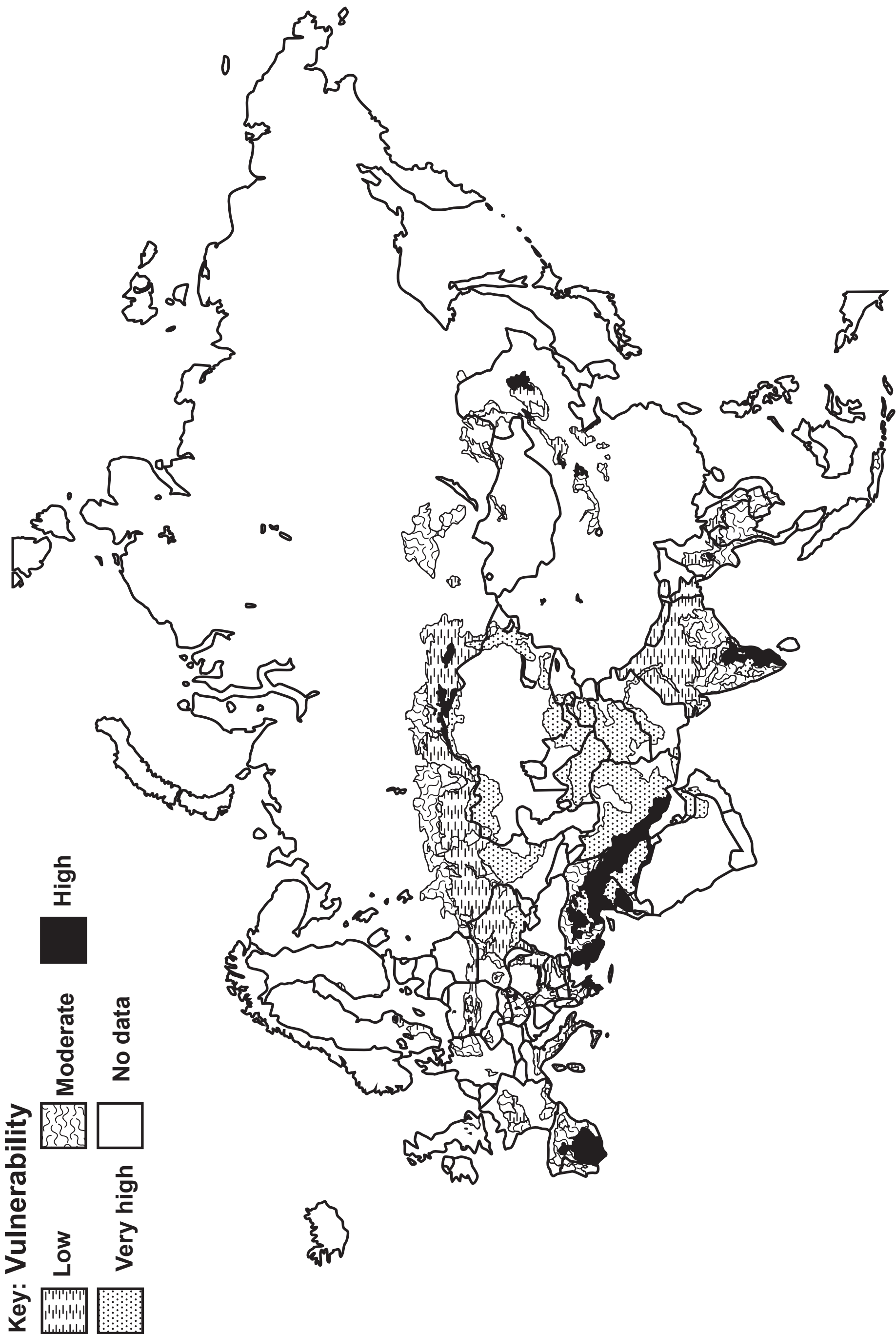
Figure 7b (Part 4) – Black and White

A global map of vulnerability to desertification

The diagram is not drawn to scale



Figure 7b (Part 5) – Black and White  
A global map of vulnerability to desertification  
The diagram is not drawn to scale



**Figure 7b (Part 5 Enlarged) – Black and White**  
**A global map of vulnerability to desertification**

The diagram is not drawn to scale

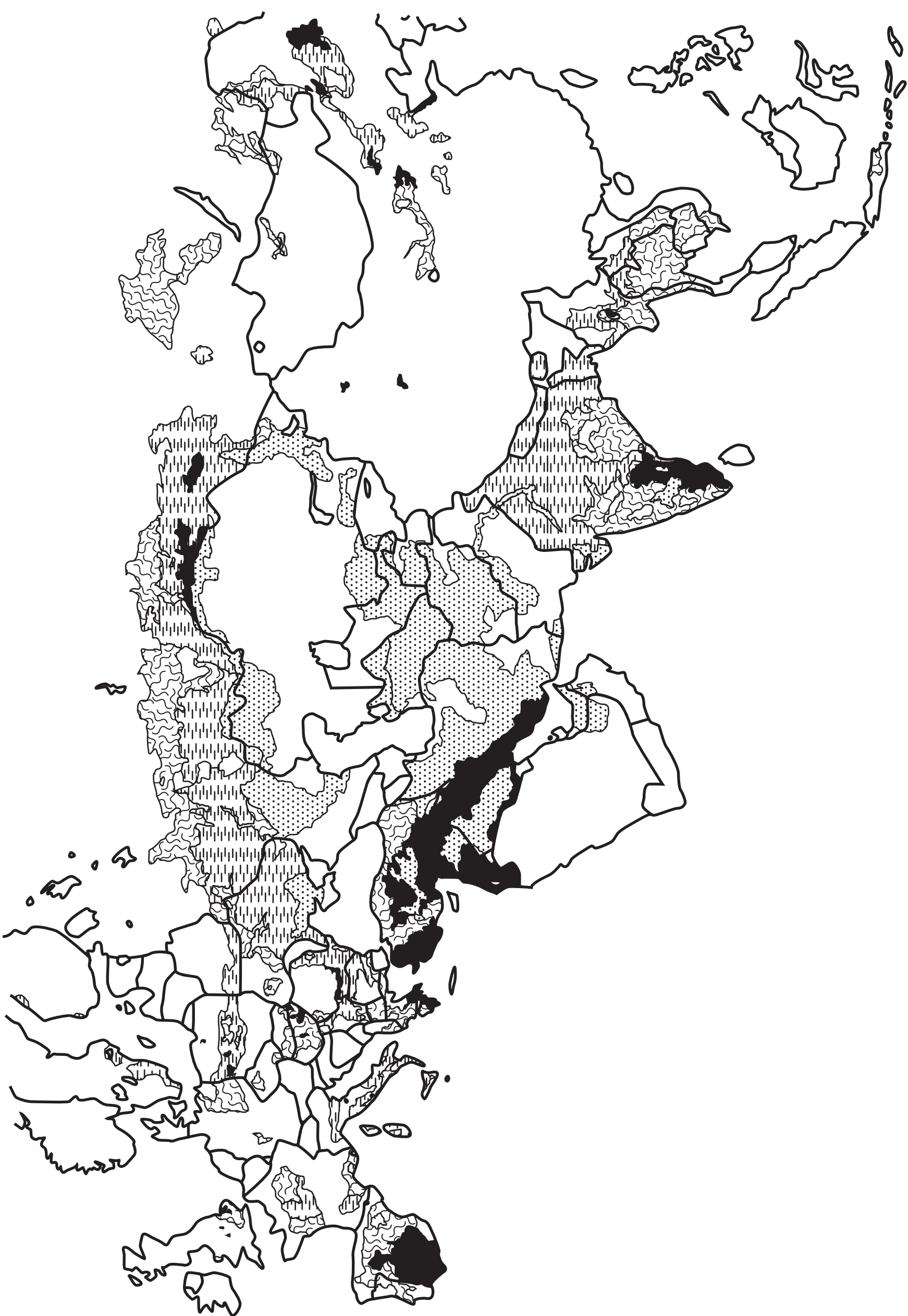




Figure 7b (Part 6) – Black and White

A global map of vulnerability to desertification

The diagram is not drawn to scale

Key:  
Vulnerability



Low



Moderate



High



Very high

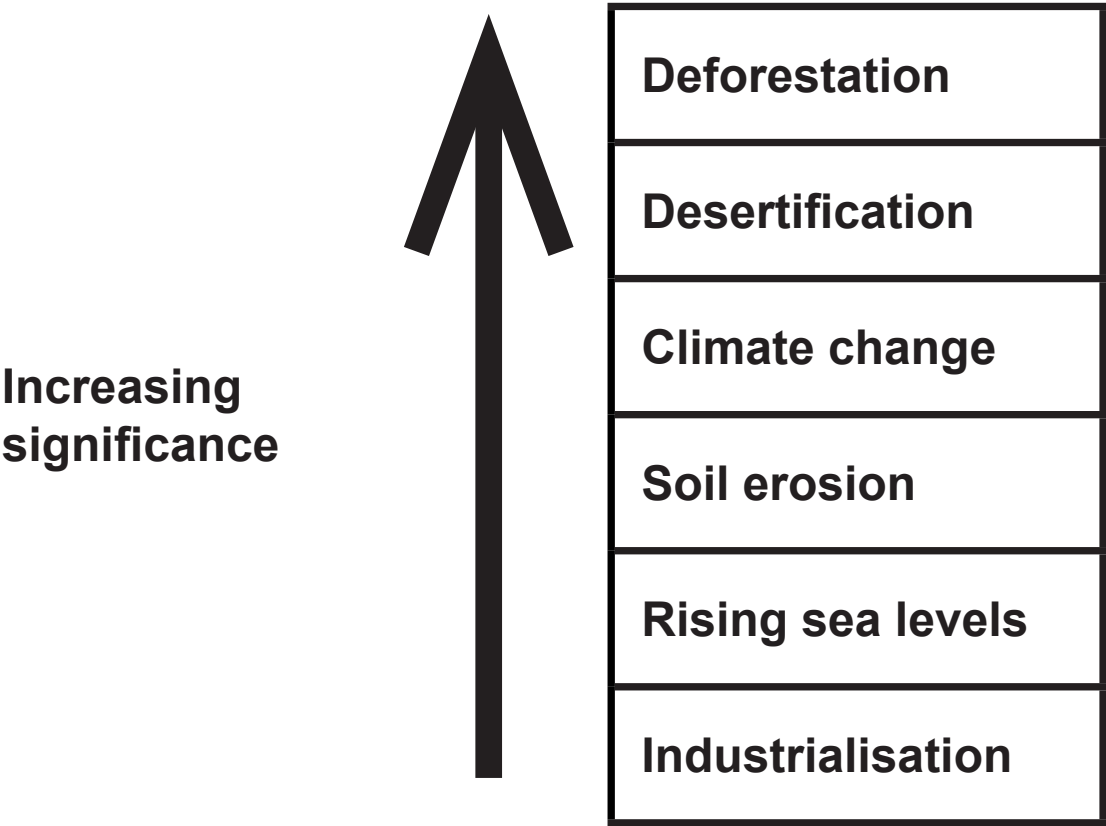


No data



Figure 7c

Selected threats to fragile environments



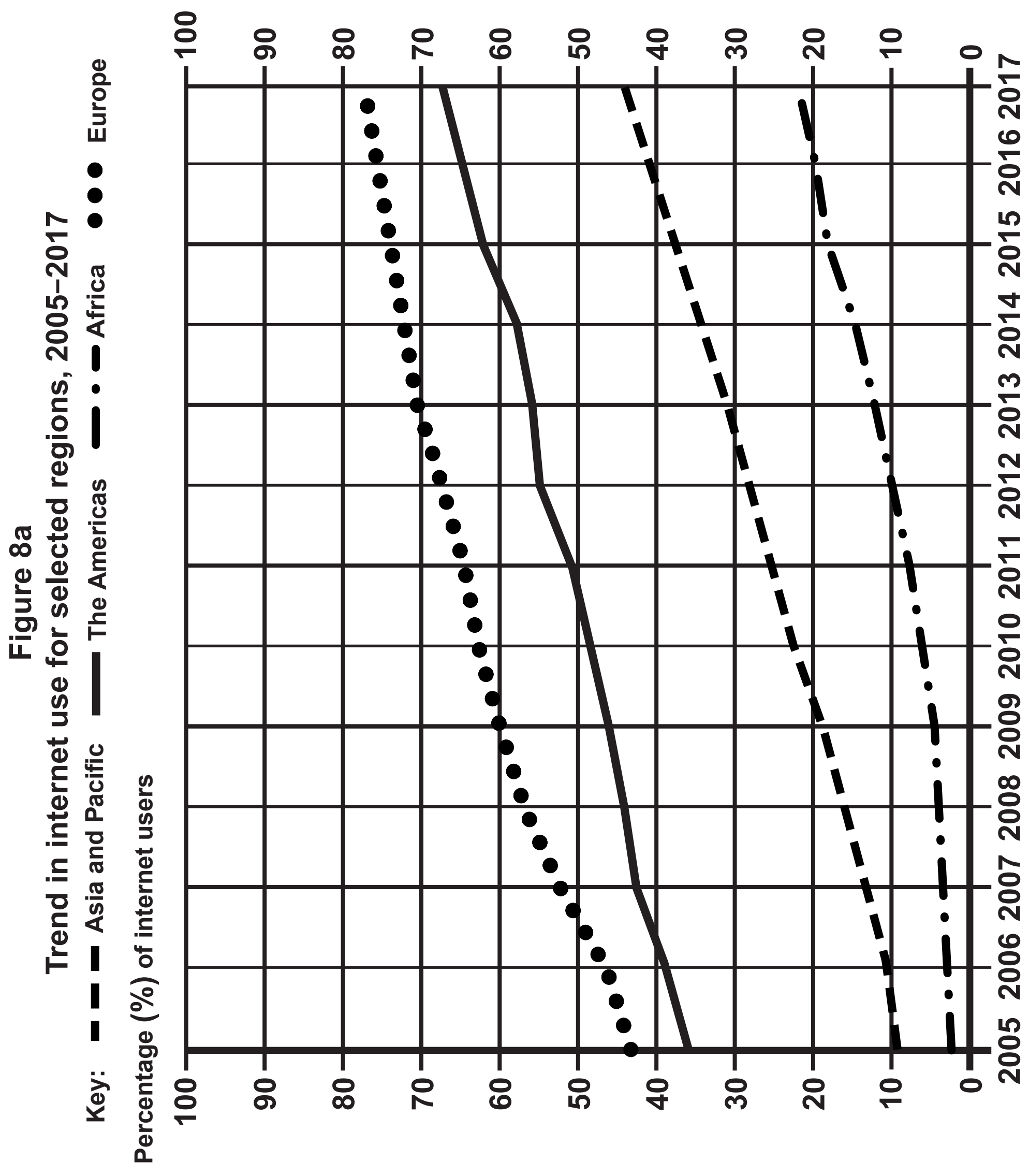


Figure 8b (Part 1) – Colour

Global map of net migration, 2017

Key: Number of migrants (millions)



No data



< -1.74



-1.74 -- -0.24



-0.25 -- 0.43



0.44 -- 1.42



> 1.42

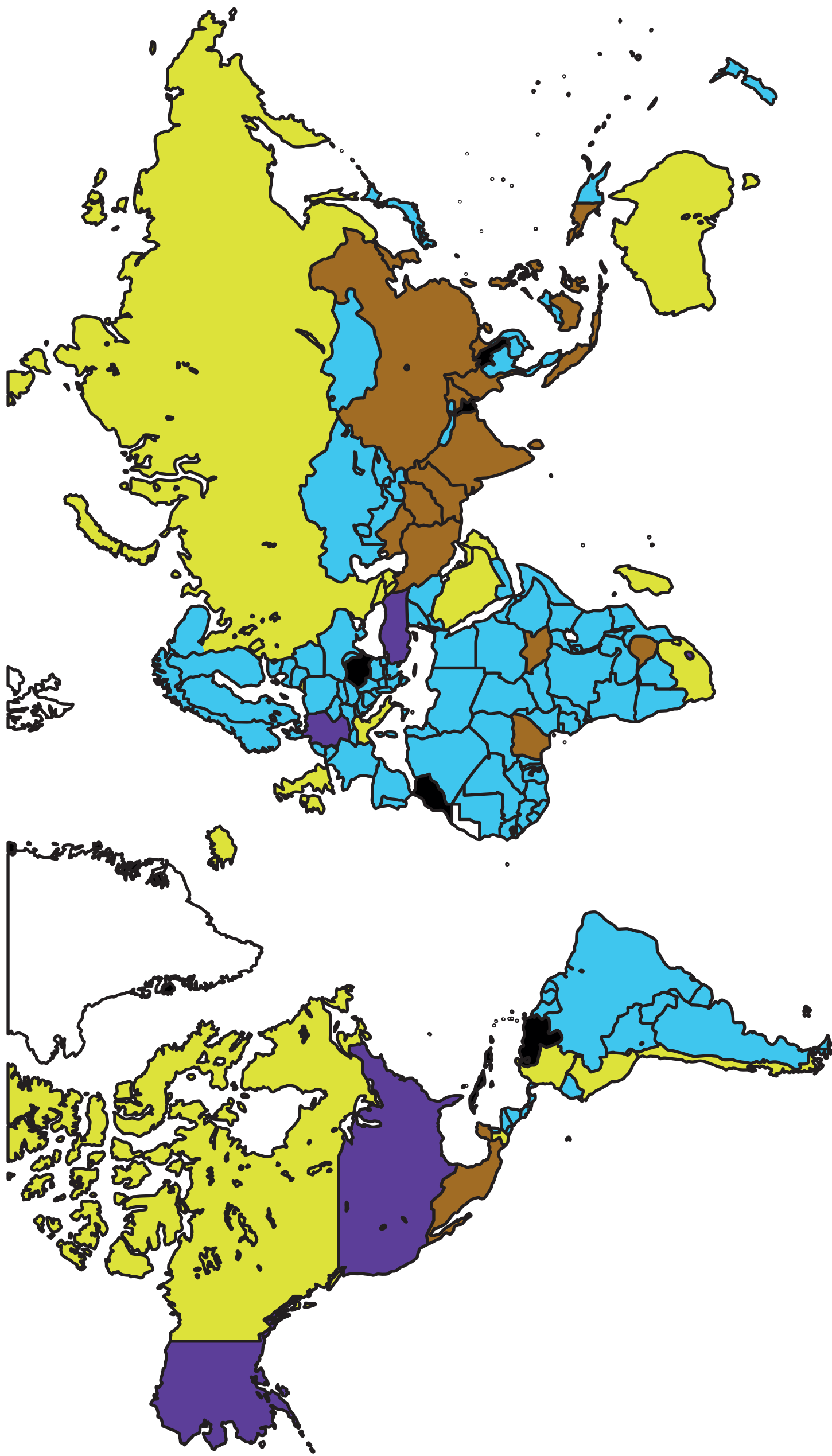


Figure 8b (Part 2) – Colour

Global map of net migration, 2017

Key: Number of migrants (millions)



Figure 8b (Part 3) – Colour

Global map of net migration, 2017

Key: Number of migrants (millions)

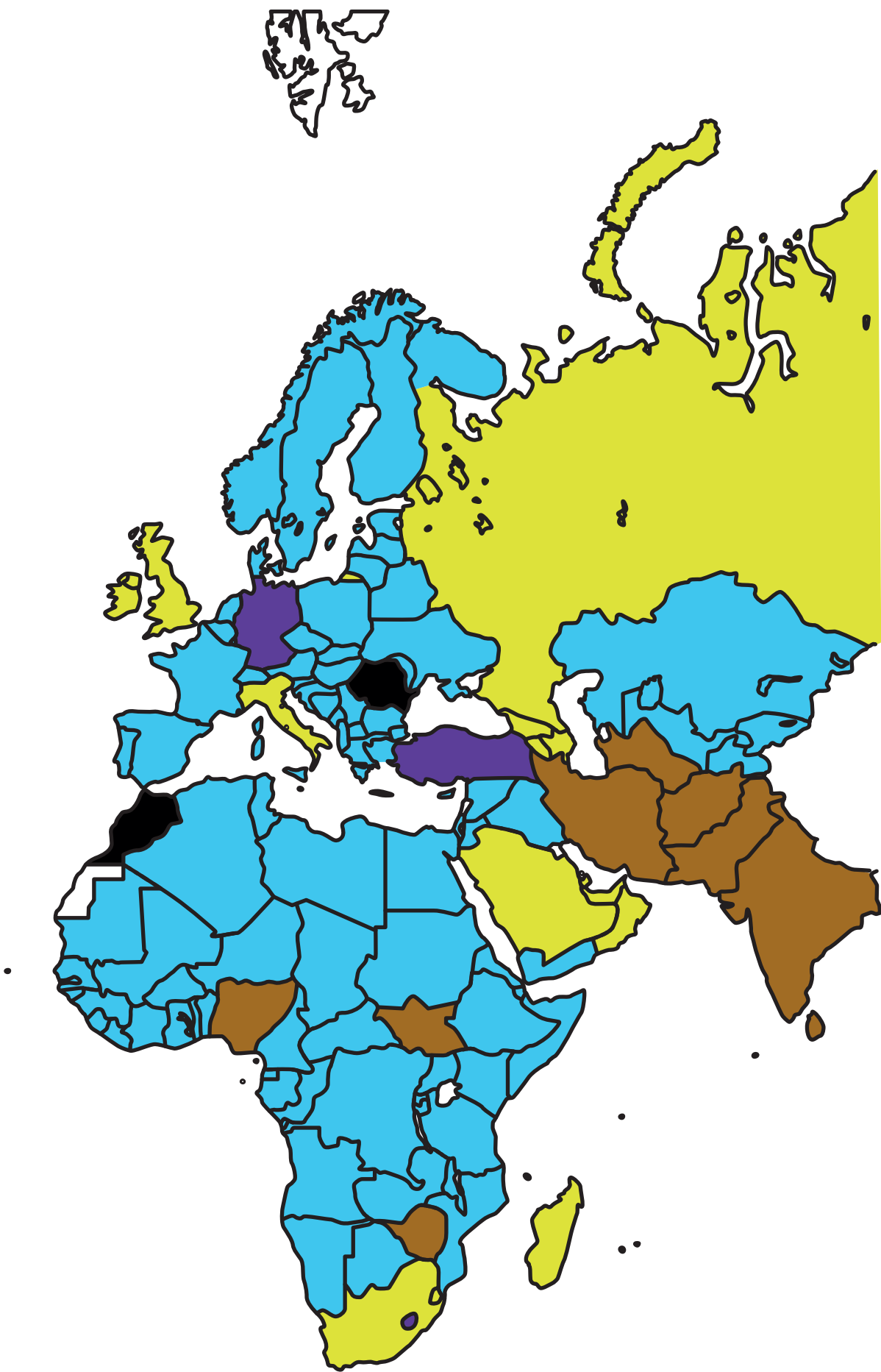
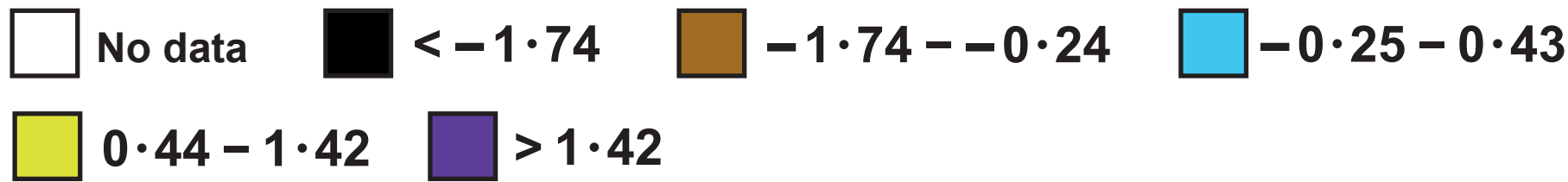




Figure 8b (Part 4) – Colour

Global map of net migration, 2017

Key: Number of migrants (millions)

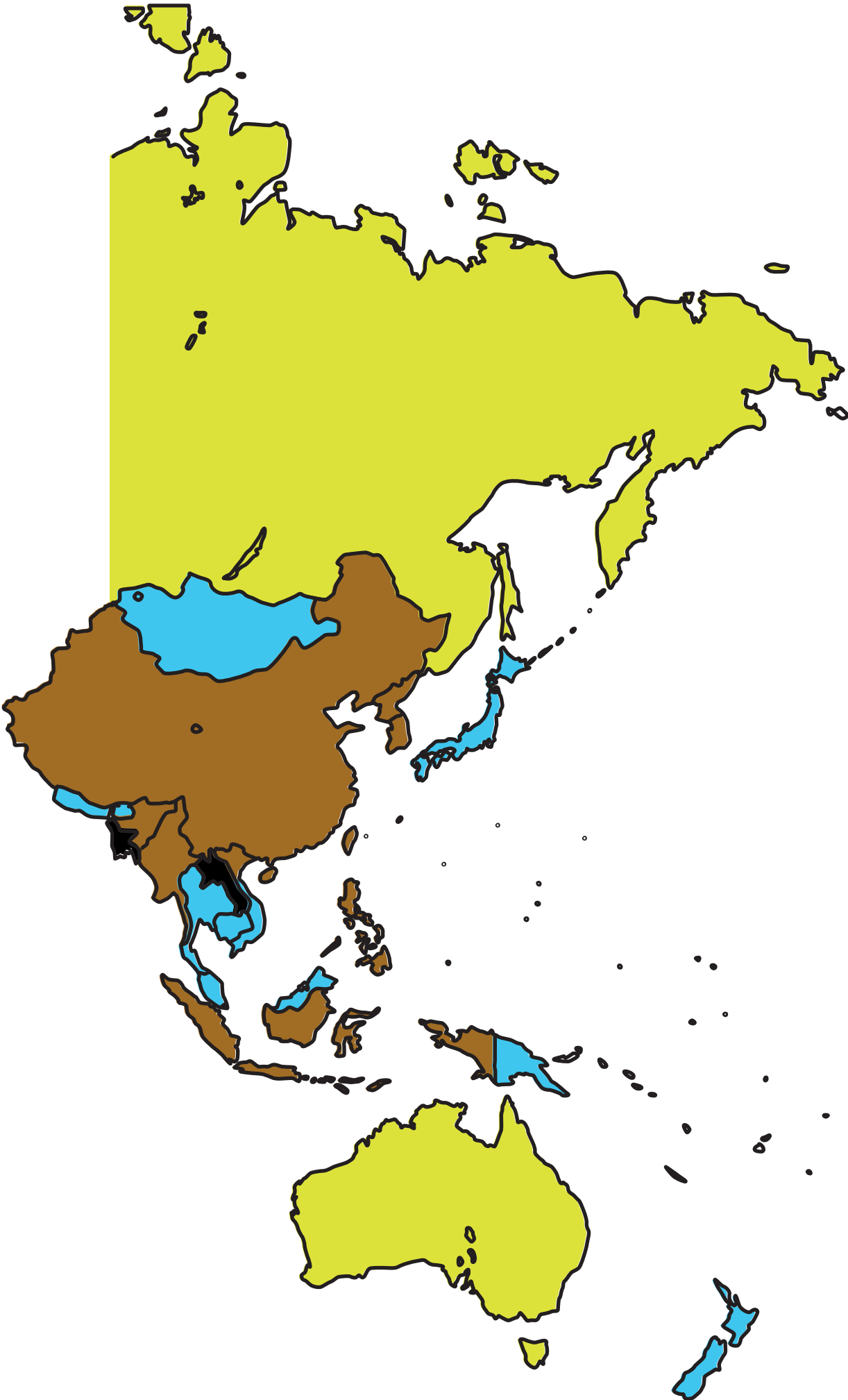
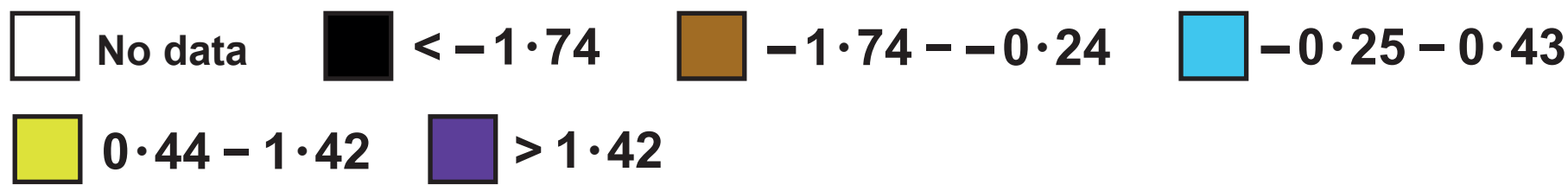


Figure 8b (Part 1) – Black and White

Global map of net migration, 2017

Key: Number of migrants (millions)



No data



$< -1.74$



$-1.74 - -0.24$



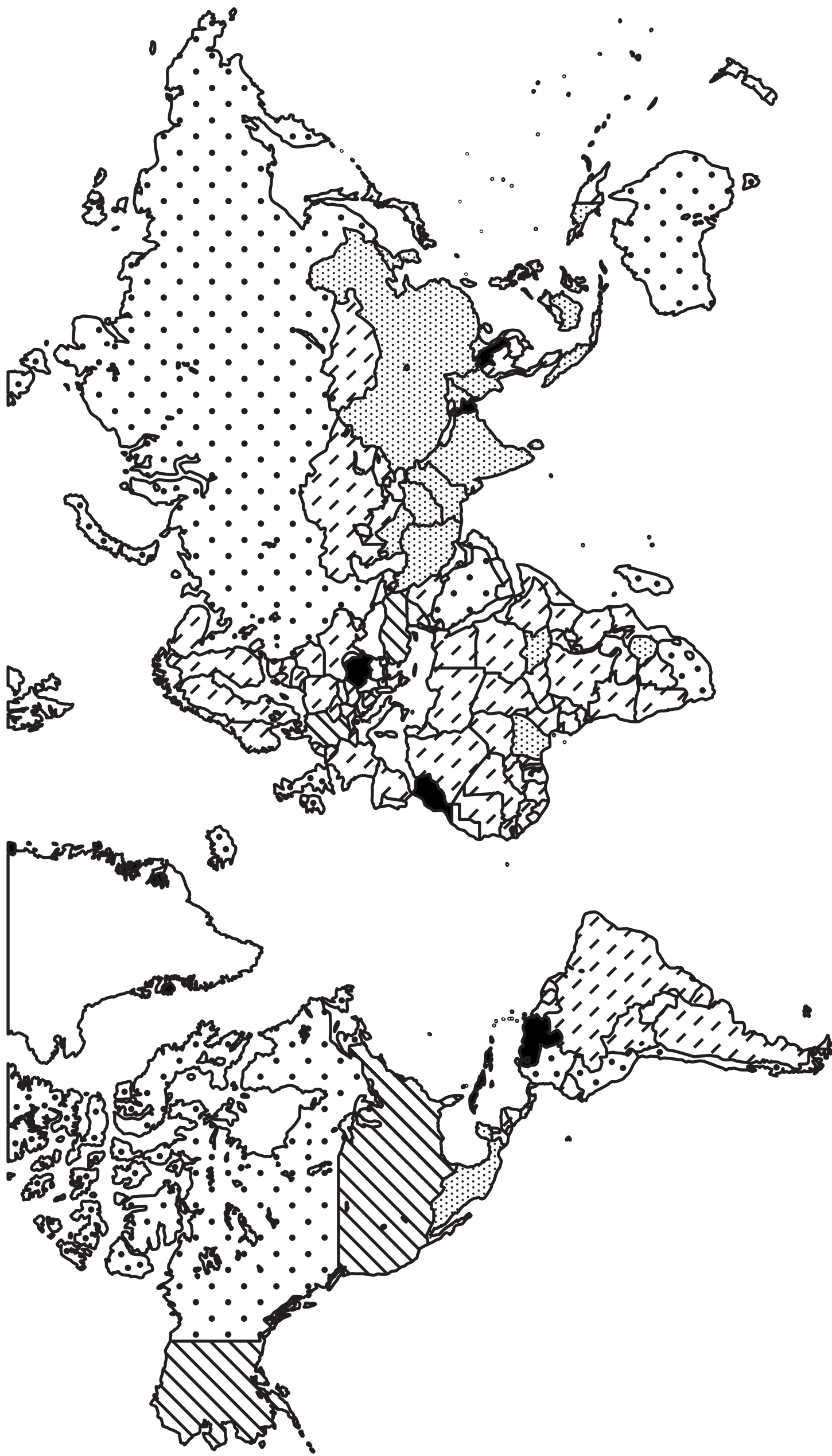
$-0.25 - 0.43$



$0.44 - 1.42$



$> 1.42$



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

## Global map of net migration, 2017

**Key: Number of migrants (millions)**

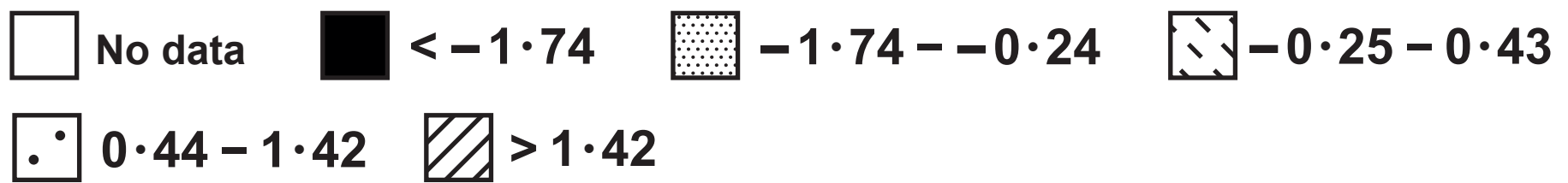




Figure 8b (Part 3) – Black and White

Global map of net migration, 2017

Key: Number of migrants (millions)

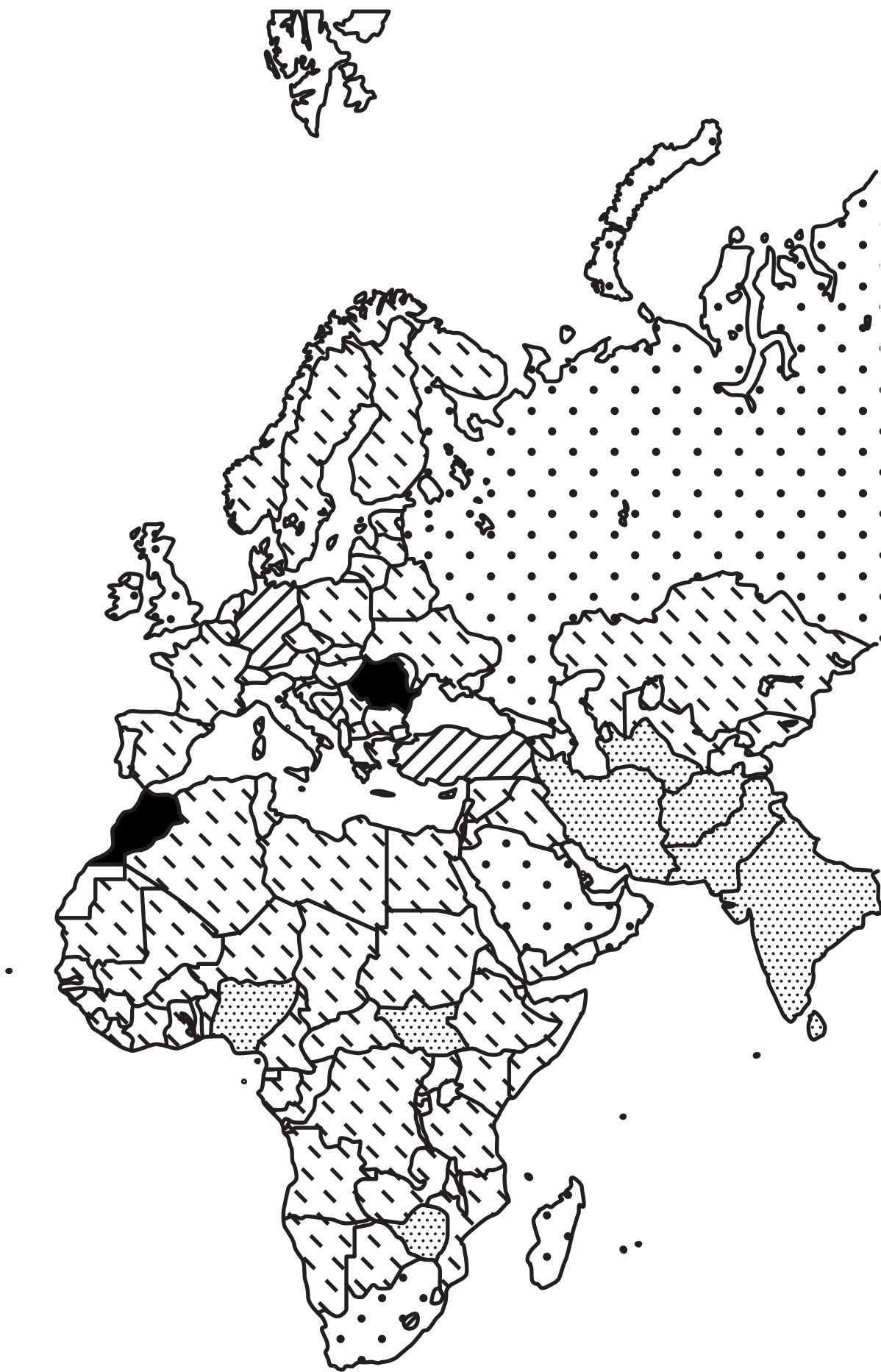


Figure 8b (Part 4) – Black and White

Global map of net migration, 2017

Key: Number of migrants (millions)

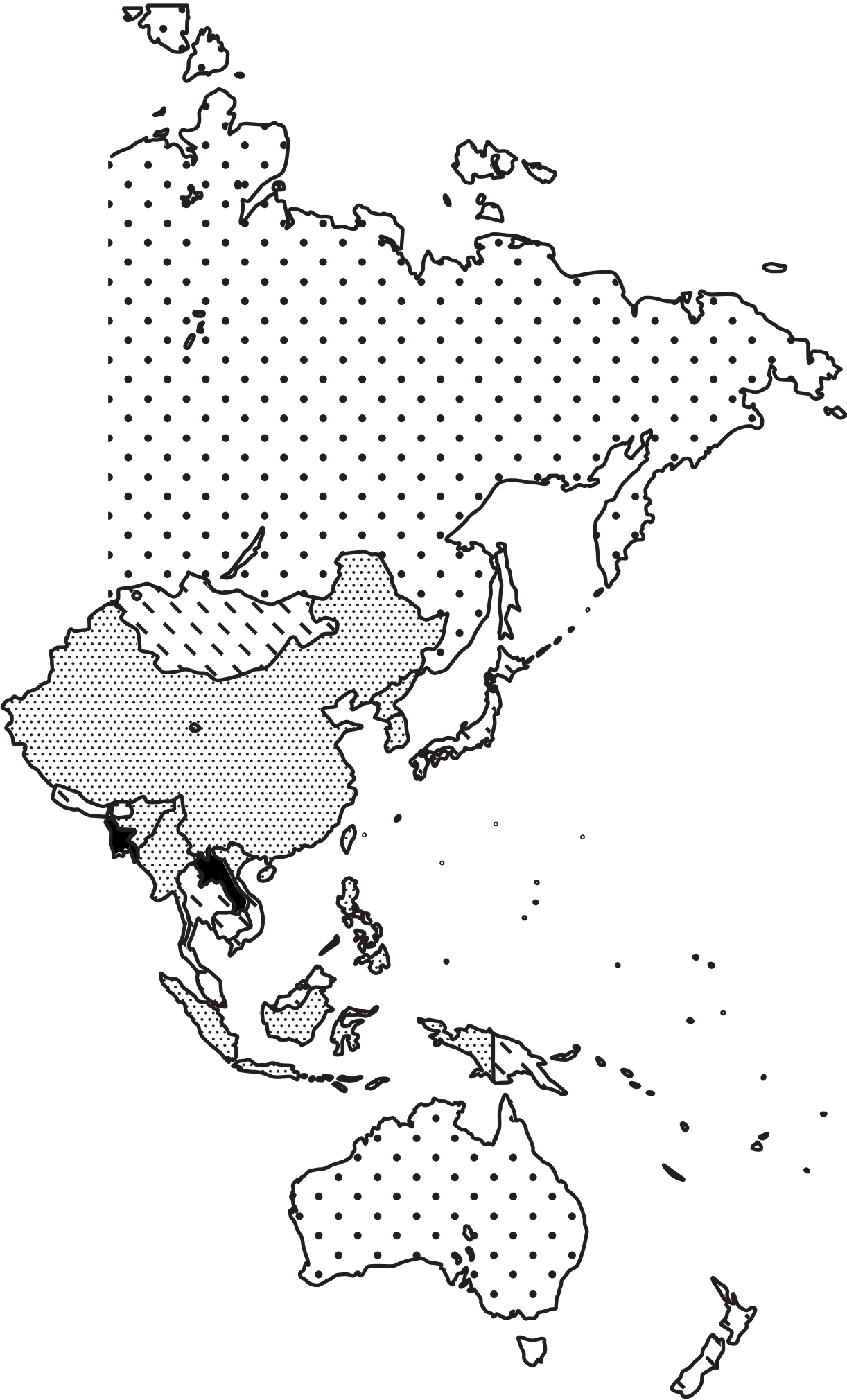
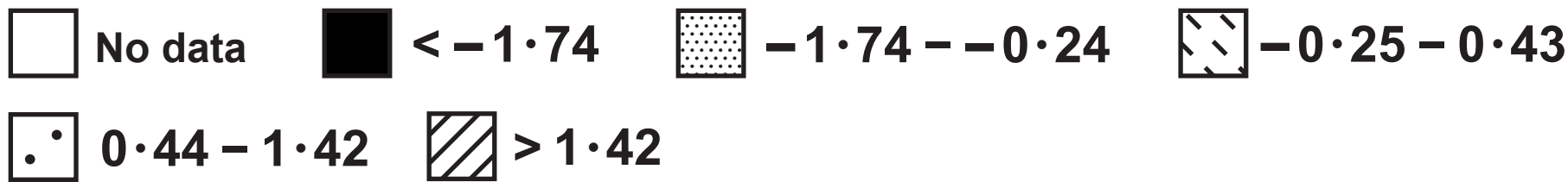


Figure 8c

Selected factors affecting the rise in the global economy

Rank Importance	Factor
1	Information and communications technology
2	Transport technology
3	Trade agreements
4	Foreign investment
5	Labour
6	Migration

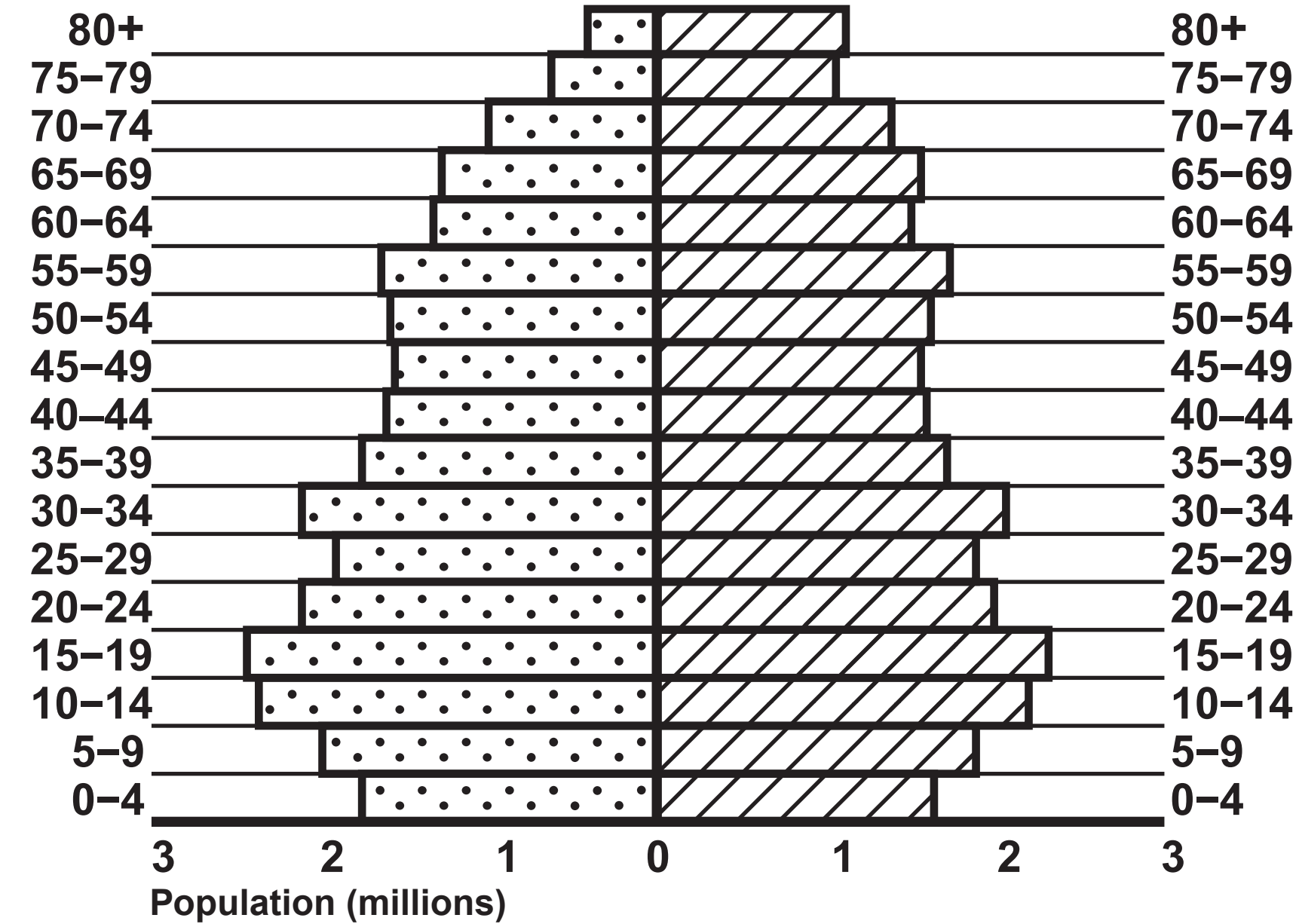


Figure 9a  
Population pyramids for the United Kingdom, 1980 and 2015

Key:  Male  Female

1980

Population age group



2015

Population age group

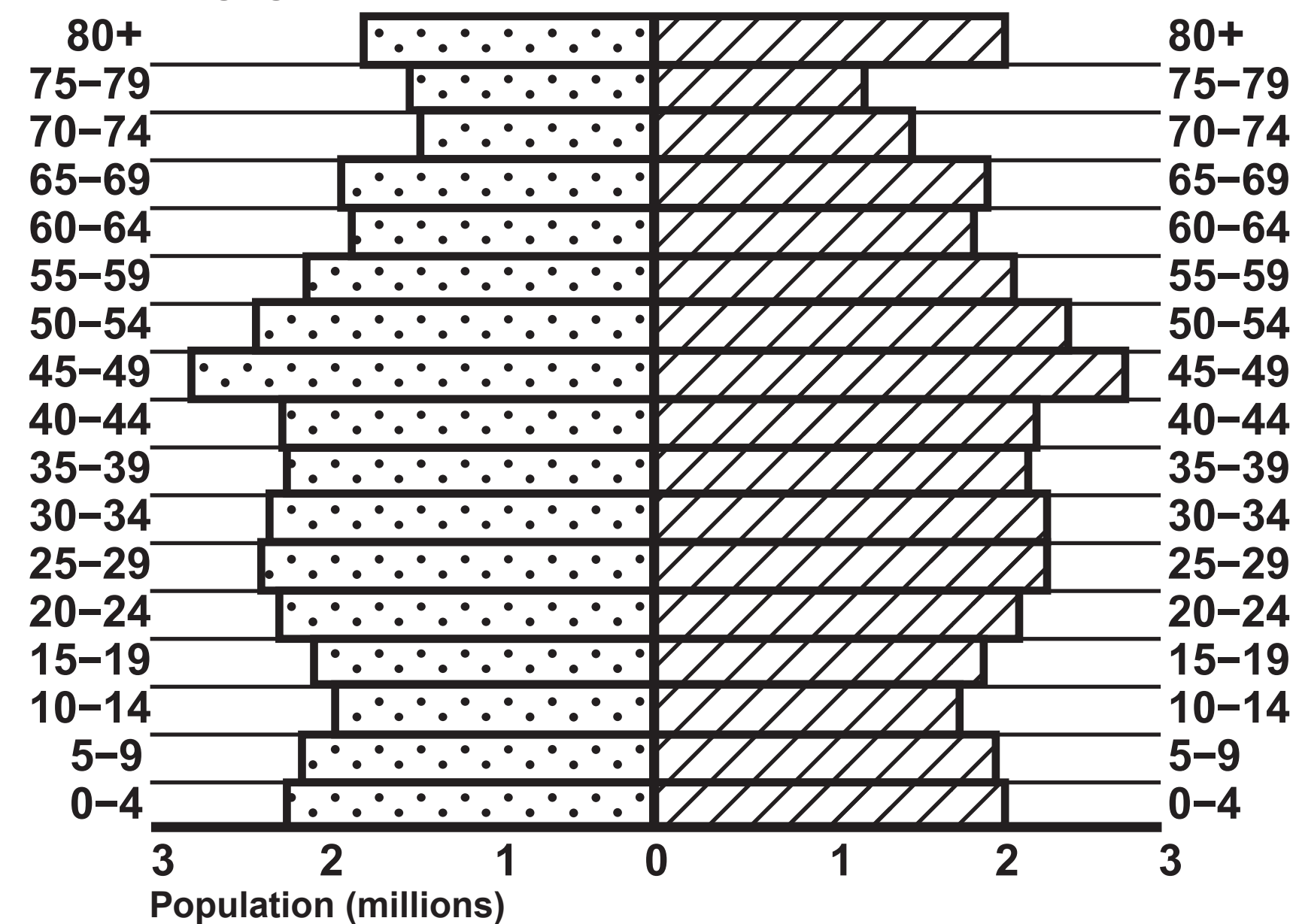


Figure 9a – Graph 1

Population pyramid for the United Kingdom, 1980

Key:  Male  Female

1980

Population age group

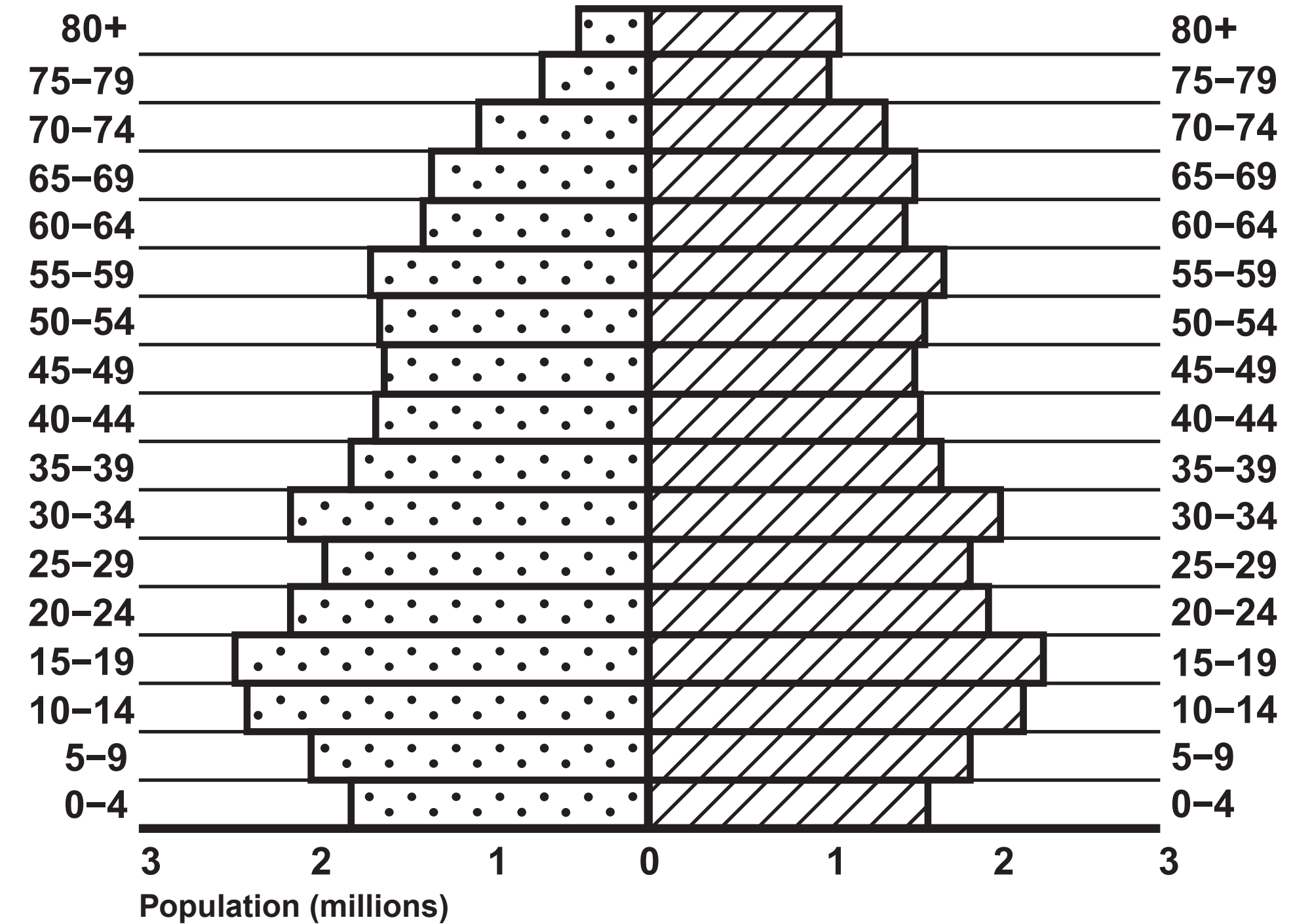


Figure 9a – Graph 2

Population pyramid for the United Kingdom, 2015

Key:  Male  Female

2015

Population age group

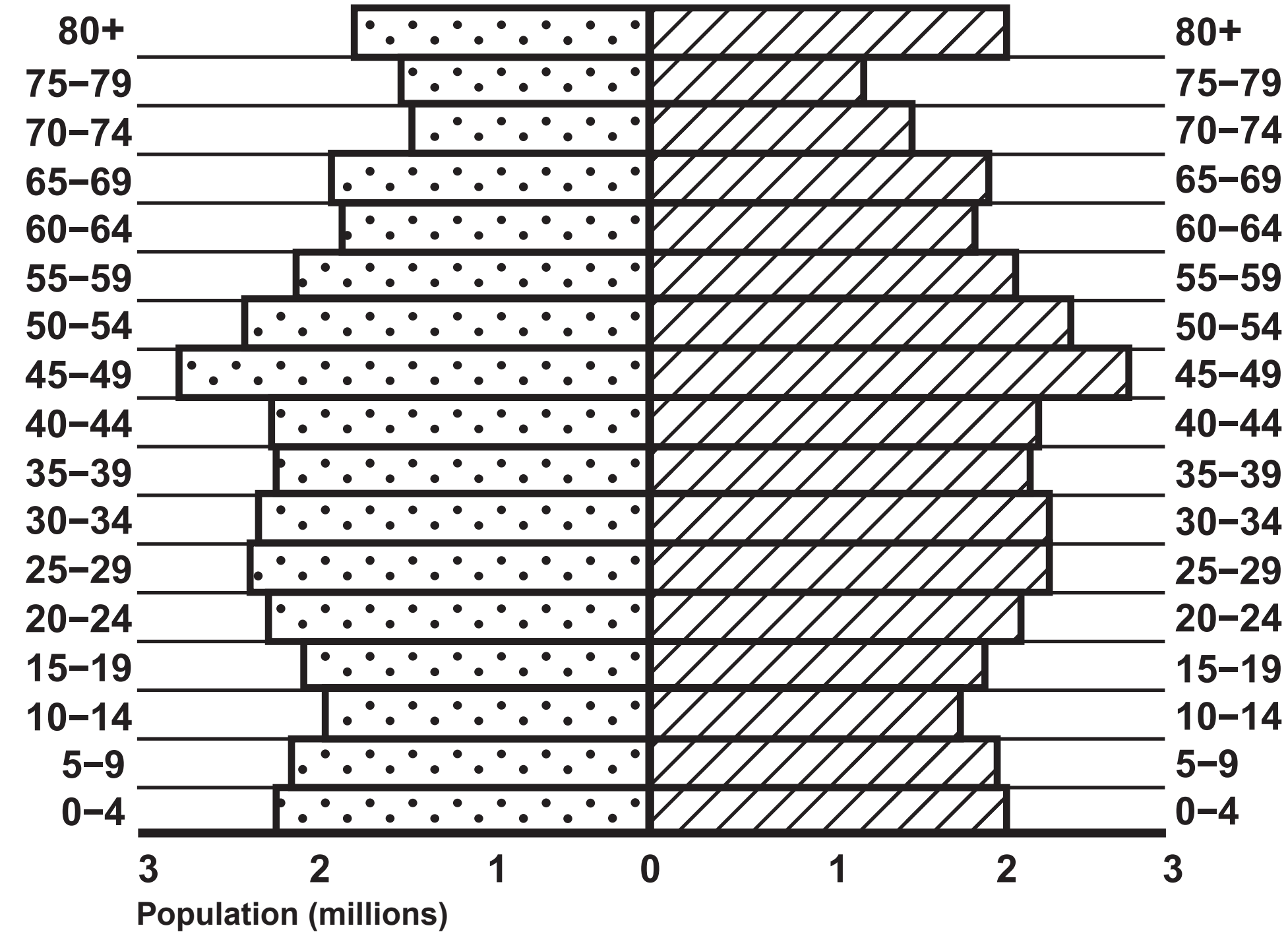




Figure 9b (Part 1) – Colour

Map of global food security

Food Security Index (Score), 2017

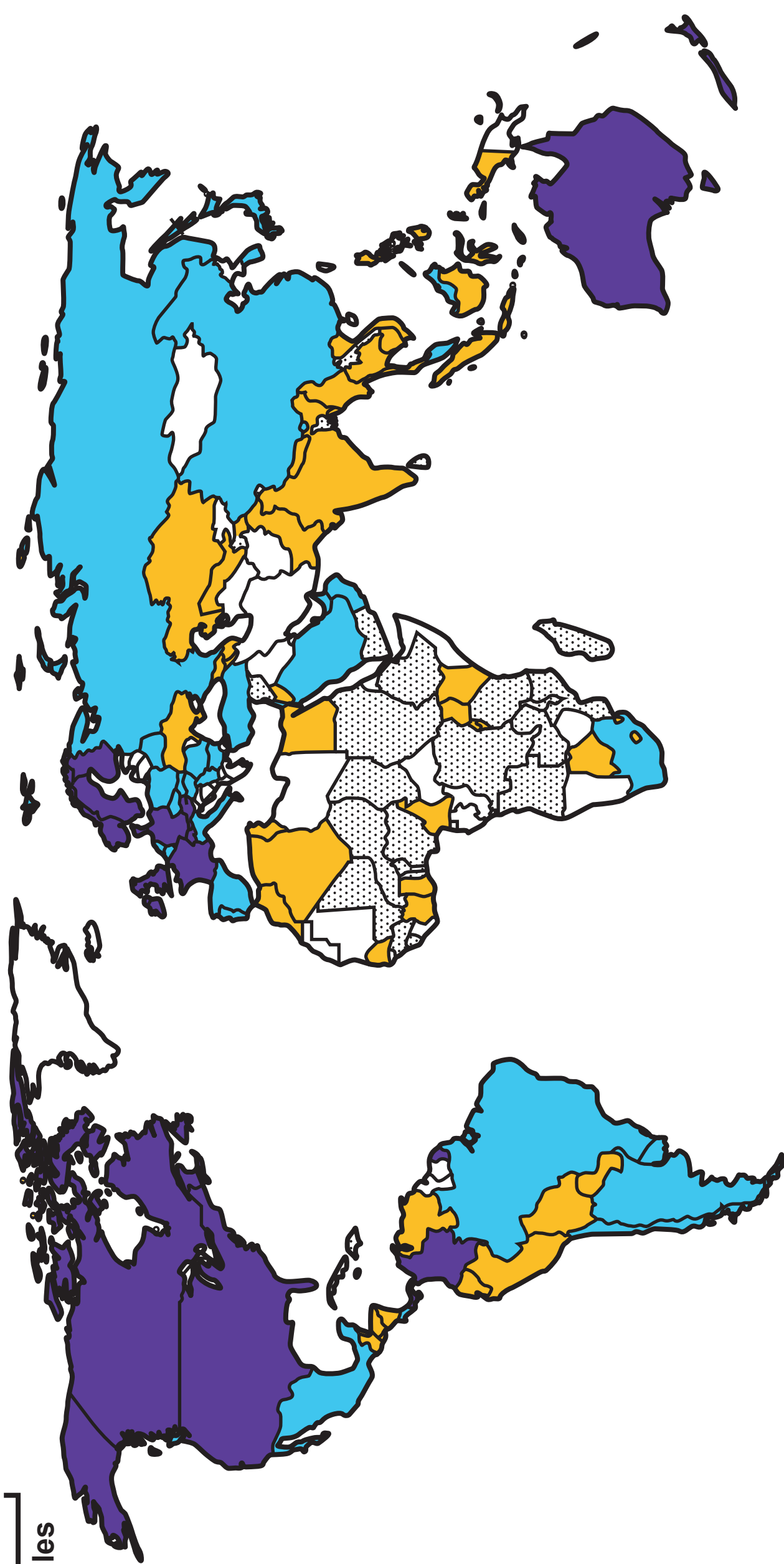
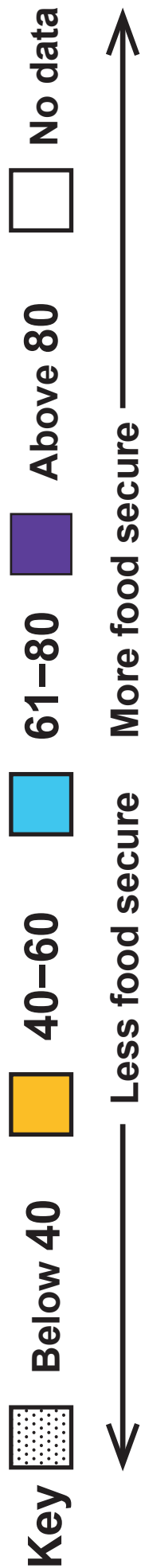


Figure 9b (Part 2) – Colour  
Map of global food security



Figure 9b (Part 3) – Colour

Map of global food security

Food Security Index (Score), 2017

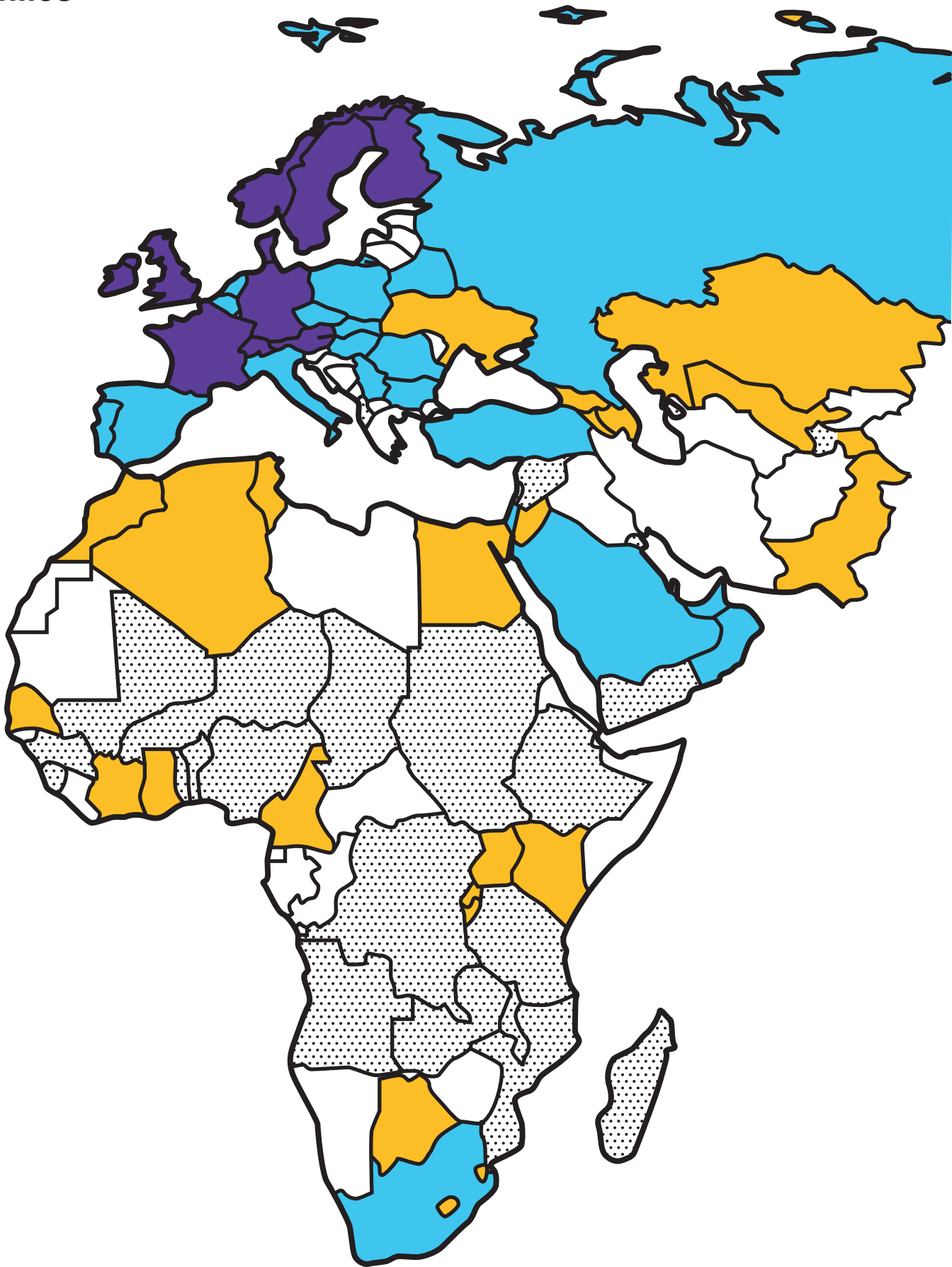
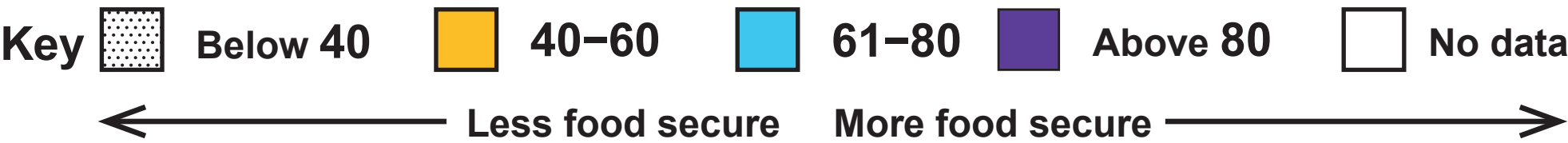




Figure 9b (Part 4) – Colour

Map of global food security

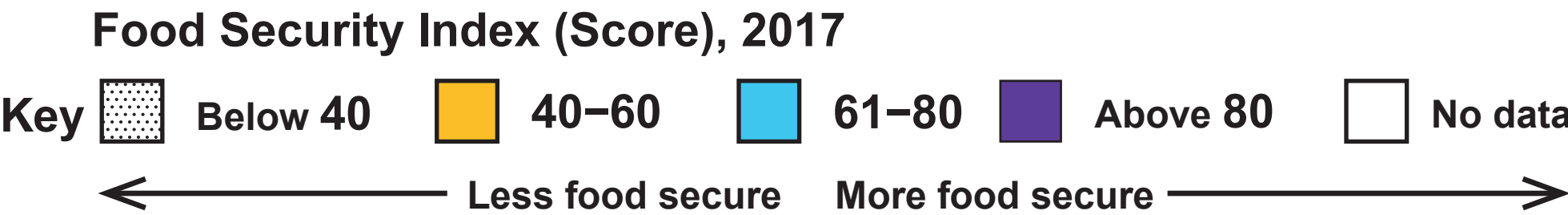


Figure 9b (Part 1) – Black and White

Map of global food security

Food Security Index (Score), 2017



0 1,500  
miles

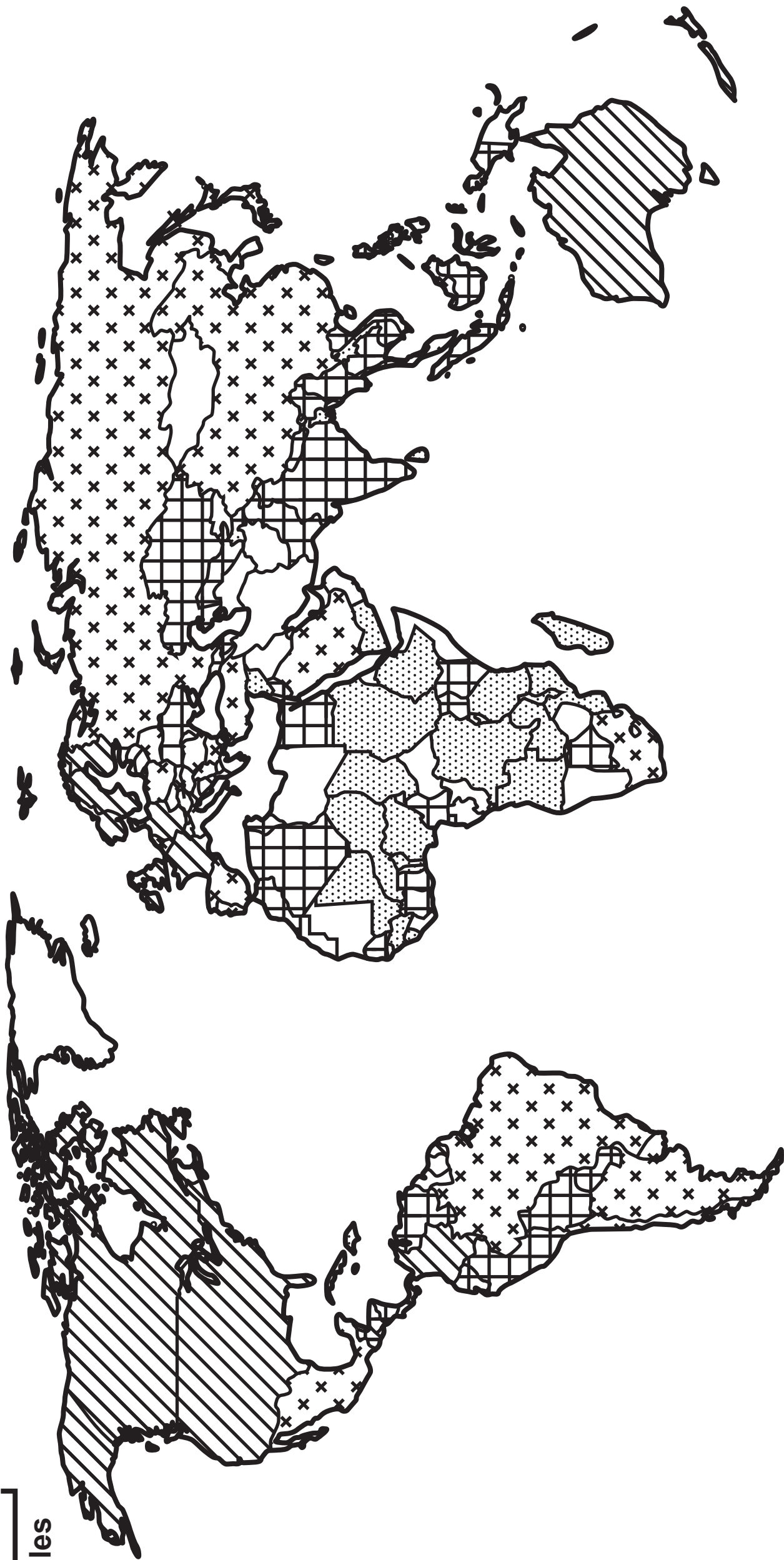
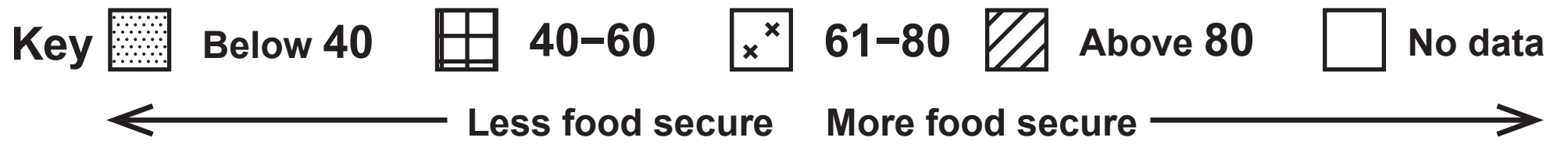


Figure 9b (Part 2) – Black and White  
Map of global food security

Food Security Index (Score), 2017



0      1,500  
miles



Figure 9b (Part 3) – Black and White

Map of global food security

Food Security Index (Score), 2017

Key

Below 40

40–60

x

61–80

Above 80

No data

←

Less food secure

More food secure

→

0 1,500  
miles

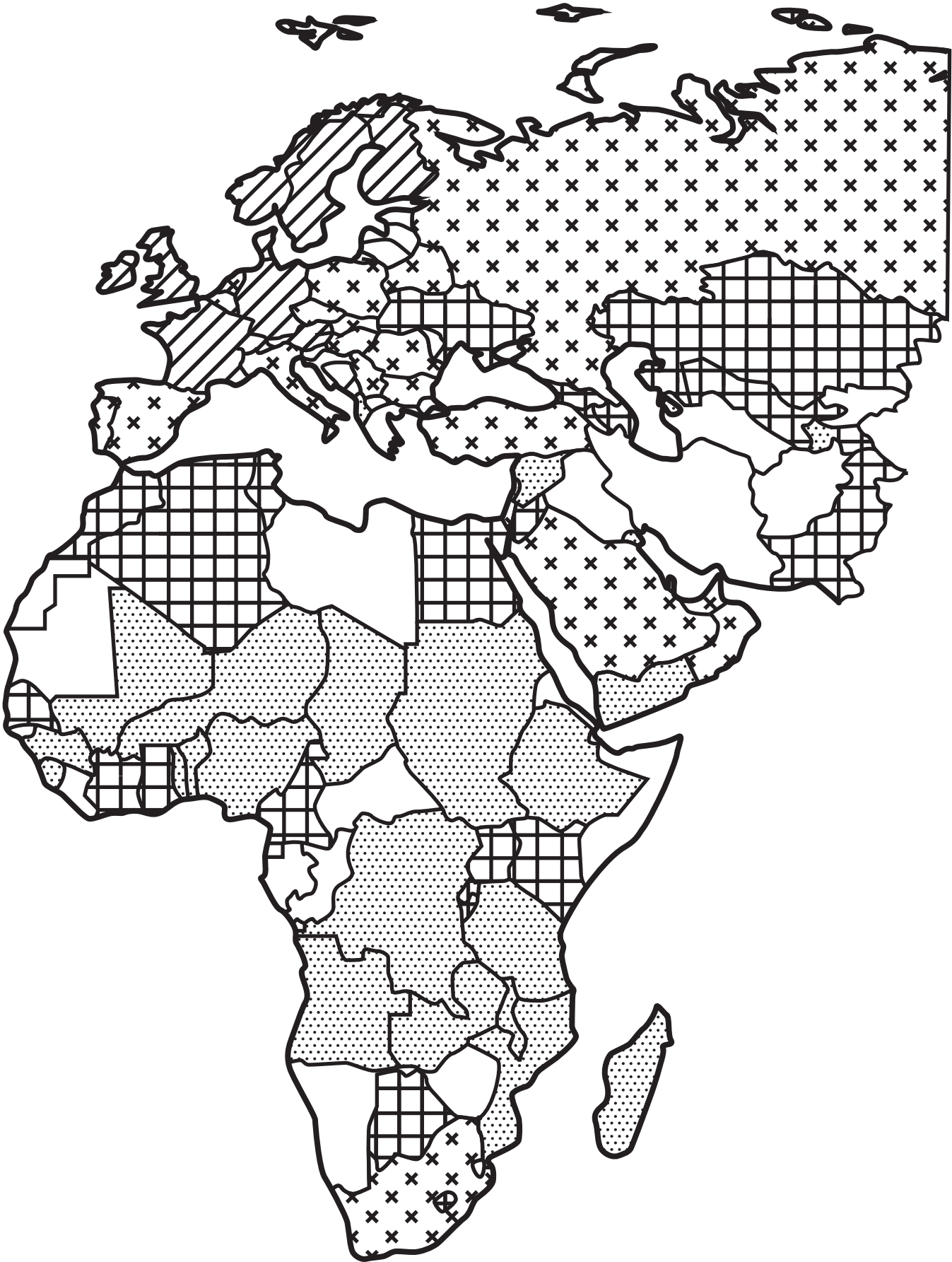
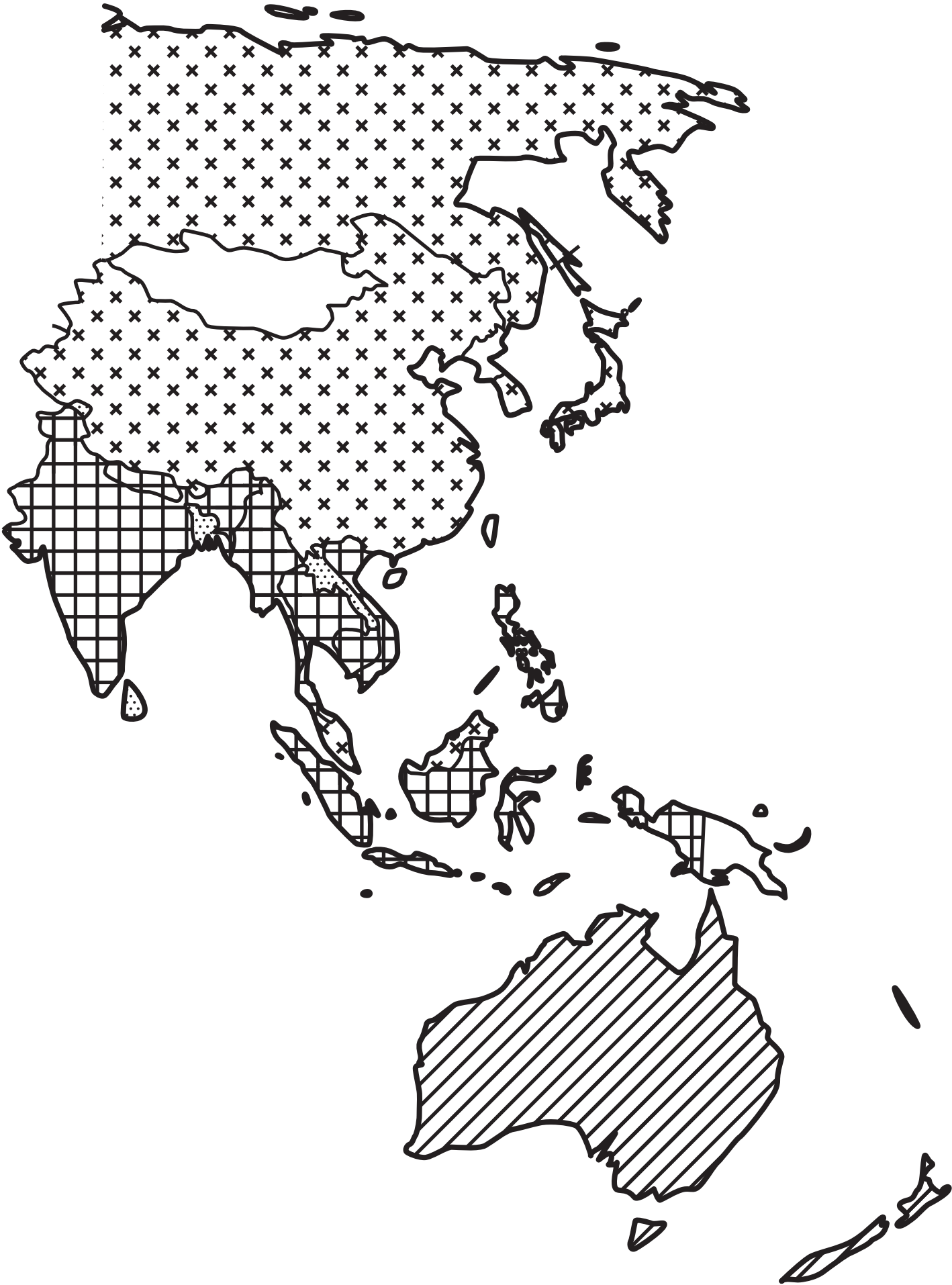
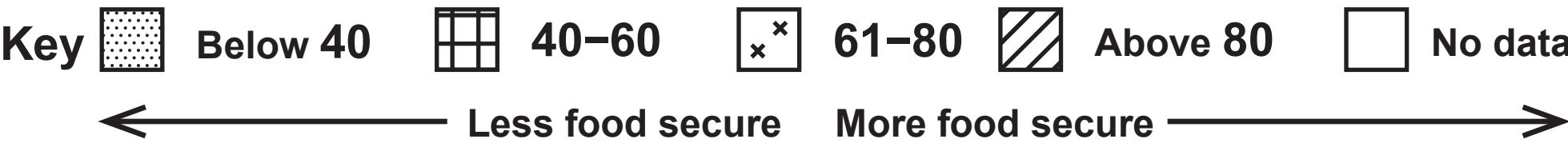




Figure 9b (Part 4) – Black and White

Map of global food security

Food Security Index (Score), 2017



## Figure 9c

### Selected factors that affect development in rank order

#### Global Development Factors

1. Demographic change
2. Literacy rate
3. Political corruption
4. Natural resources
5. Employment
6. Technology

## Acknowledgements

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

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