

Paper Reference 1GB0/03
Pearson Edexcel
Level 1/Level 2 GCSE (9–1)

Geography B

PAPER 3: People and Environmental Issues
Making Geographical Decisions

Friday 14 June 2024 – Morning

Time: 1 hour 30 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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SECTION A

People and the Biosphere

The issue: the oil beneath Ecuador's rainforest.

- **Ecuador is an oil-rich South American country. Most of this oil lies beneath the Amazon rainforest.**
- **Ecuador's economy tripled in size between 2000 and 2020, partly due to money from oil sales.**
- **Past governments also borrowed large amounts of money from other countries. Ecuador now has a large debt to pay back.**
- **Ecuador's current government wants to pay off its debt while keeping the economy growing. Can this be done without exploiting more oil and destroying more rainforest?**

Introduction

- **When oil was discovered in 1972, Ecuador's economy began to grow faster. However indigenous Native American communities such as the Tagaeri and Taromenane people have not benefited from the extraction of oil.**
- **In the past, Ecuador's government borrowed large amounts of money (loans) from developed countries. But due to high annual fees charged for these loans, Ecuador has been unable to repay all the money. Ecuador still owed US\$ 60 billion in 2022.**
- **Over time, money that could have been spent on schools, health and housing has instead been used to pay debt fees.**
- **In 2007, Ecuador's government proposed a new plan to help its economy while protecting the rainforest. Developed countries were asked to donate money to help protect Ecuador's rainforest. In return, Ecuador would stop developing new oil fields.**
- **Not enough developed countries agreed to help though, and the plan failed. Afterwards, Ecuador's government chose to work more closely with China instead. China is now giving Ecuador economic help in return for oil.**
- **As a result, Ecuador's rainforest ecosystems and communities remain under threat from oil exploration and exploitation.**

Figure 1 (Colour) – Part 1

The three main geographical regions of Ecuador

KEY: the three geographical regions of Ecuador



Coastal zone
(includes many urban areas and farmland)



Andes mountains



Amazon rainforest



Capital city



Figure 1 (Colour) – Part 2

The three main geographical regions of Ecuador

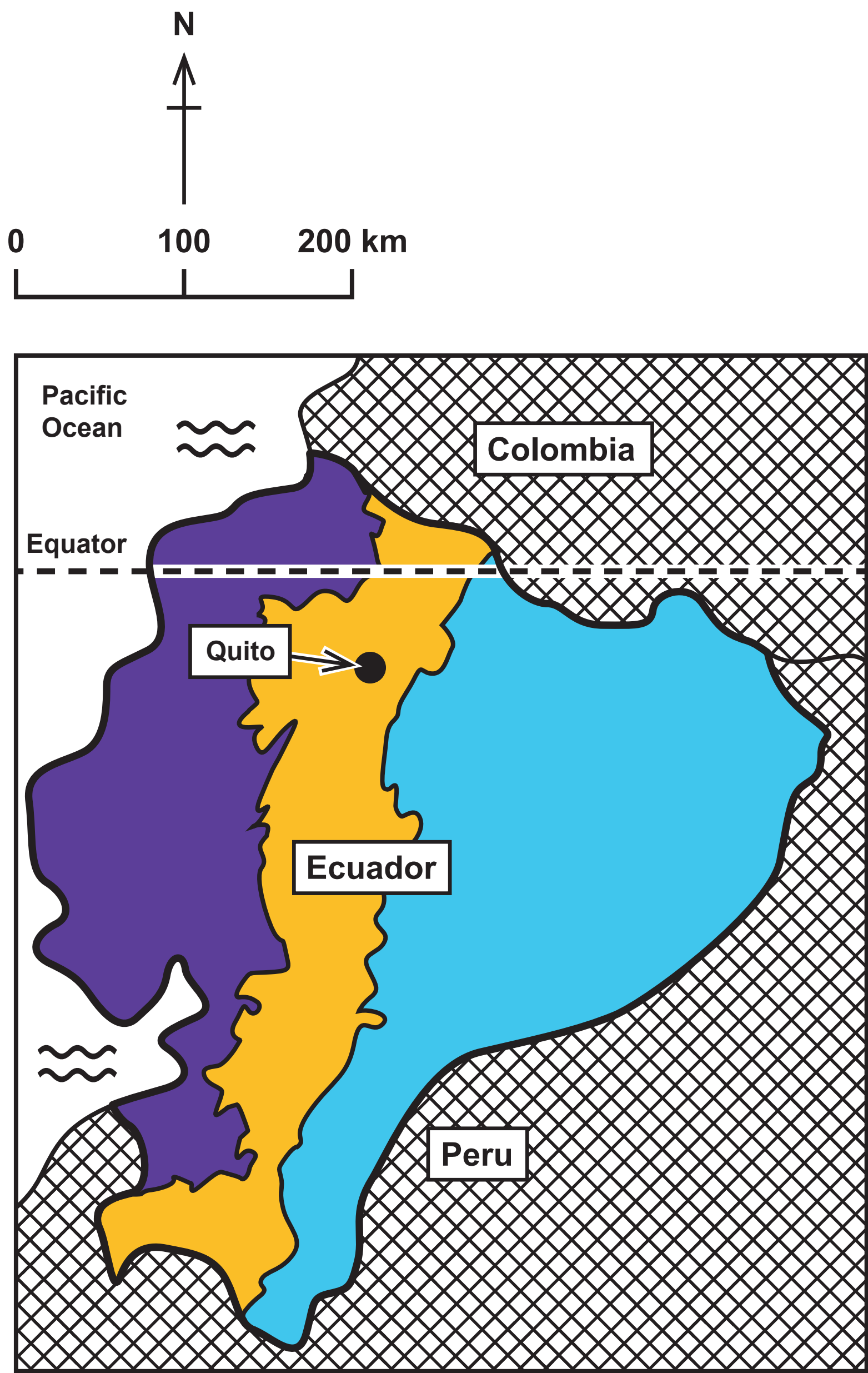


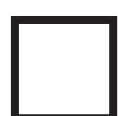
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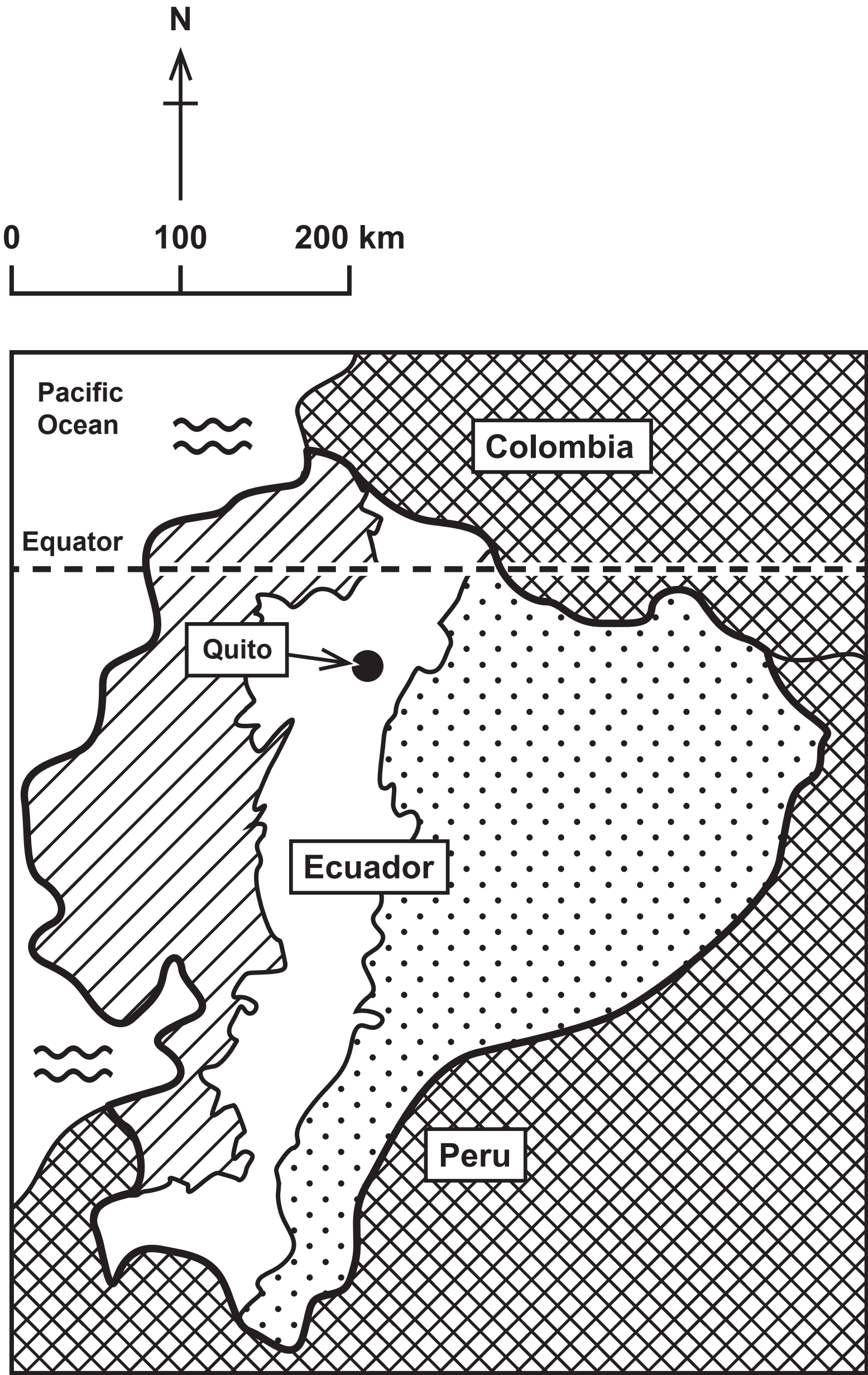
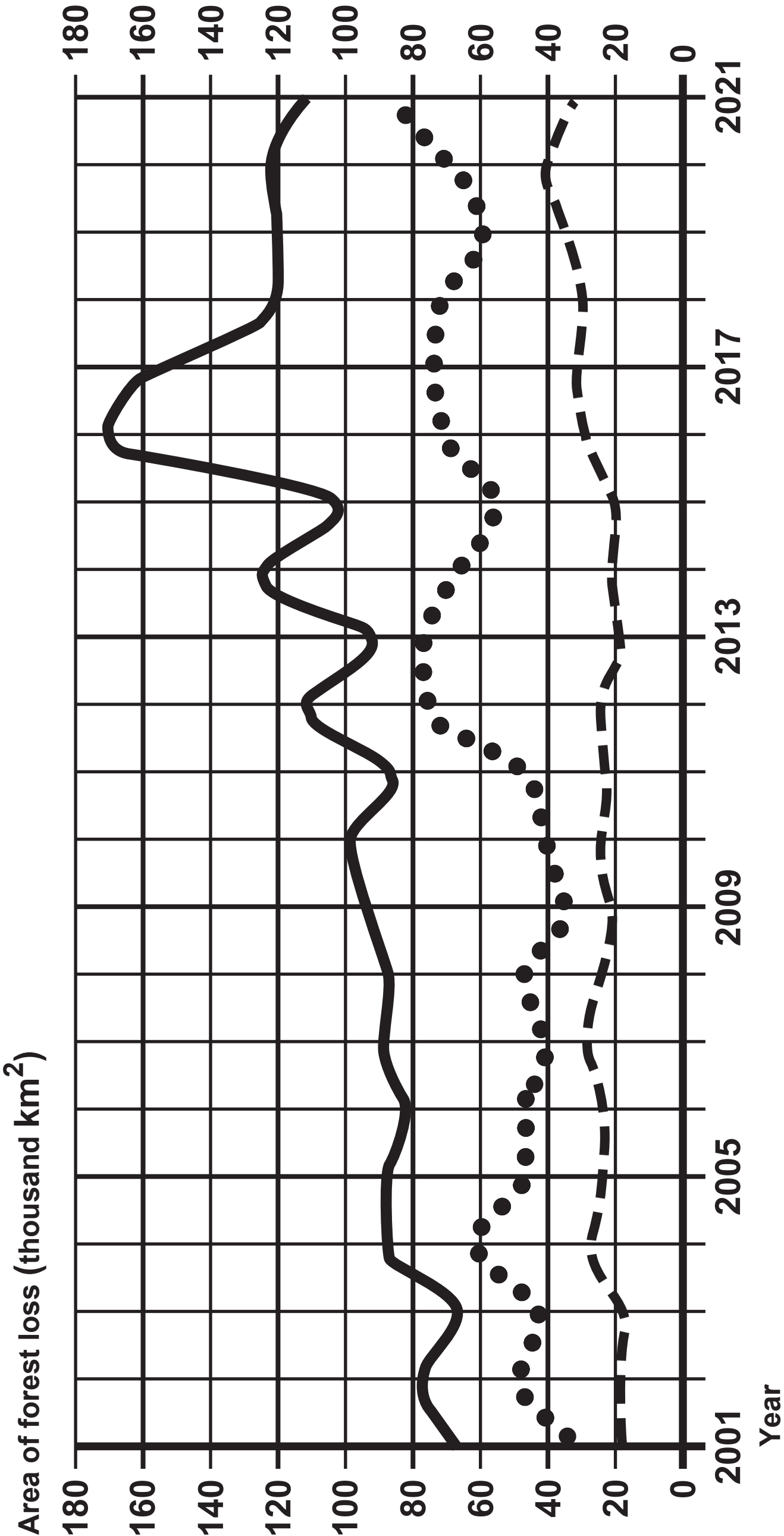


Figure 2

Forest loss in different biomes, 2001–2021

- Forests are cut down to provide resources.
- Climate change also affects the distribution and health of forests.

KEY **—** Tropical rainforest
 ••• Taiga (boreal) forest
 - - - Temperate forest



SECTION B

Forests under threat

Figure 3

Part of a newspaper article about Ecuador's failed rainforest protection plan

In 2007, Ecuador's government proposed a rainforest protection plan. The oil resources below the rainforest would be left in the ground if other countries donated **US\$ 3·5 billion** to Ecuador – half the estimated value of the oil.

At first, there was a positive response, especially from environmentalists. Germany and Italy offered money. The United Nations said it would manage the fund.

But other countries compared Ecuador's plan to blackmail (because drilling for oil was threatened unless money was given). Other countries wanted to know more about how their money would be used.

By 2013 the project had collapsed. "The world has failed us," Ecuador's president complained, accusing other governments of not being serious enough about fighting deforestation and climate change.

Figure 4

Information about global actions to protect the environment

World Region	Total countries where rainforest is found	Rainforest countries who are REDD members		Percentage (%) who are members
		YES	NO	
Africa	33	20	13	60·6
Asia–Pacific	16	15	1	93·8
South America	9	6	3	66·7
TOTAL	58	41	17	70·7

- The United Nations REDD organisation tries to prevent deforestation.
- The table shows how many rainforest countries have joined REDD so far.
- Organisations such as REDD and CITES provide advice and limited financial support for governments who are trying to protect the environment.
- REDD is entirely funded by voluntary donations from developed countries, mainly Norway. In 2022, they donated over US\$ 50 million.

SECTION C

Consuming energy resources

Figure 5

A fact file about Ecuador, 2021

Population size

- **18 million people lived in Ecuador in 2021**
- **Population is growing at 1·4% a year**

Gross domestic product (GDP)

- **US\$ 106 billion**
- **Until recently, GDP growth was helped by high oil prices**

Energy consumption

- **The country's consumption of energy is growing at a faster rate than its population**

Value of the three main exports

Oil products: US\$ 4·9 billion

Fish and seafood: US\$ 5·1 billion

Bananas: US\$ 3·8 billion

Top export destinations

USA: 30% of all exports

China: 13% of all exports

Figure 6

Changes in GDP per person in Ecuador, 1992–2021

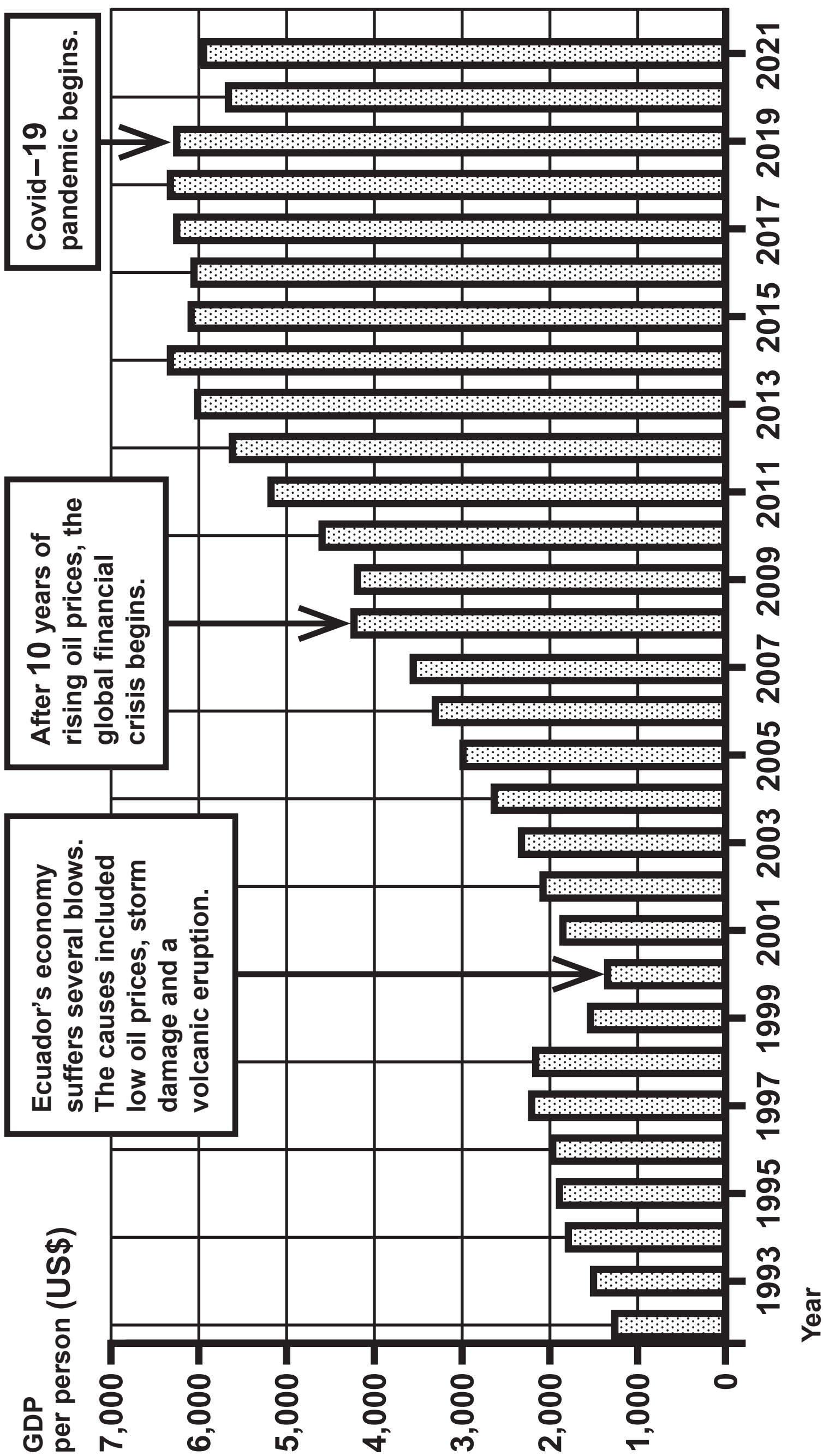
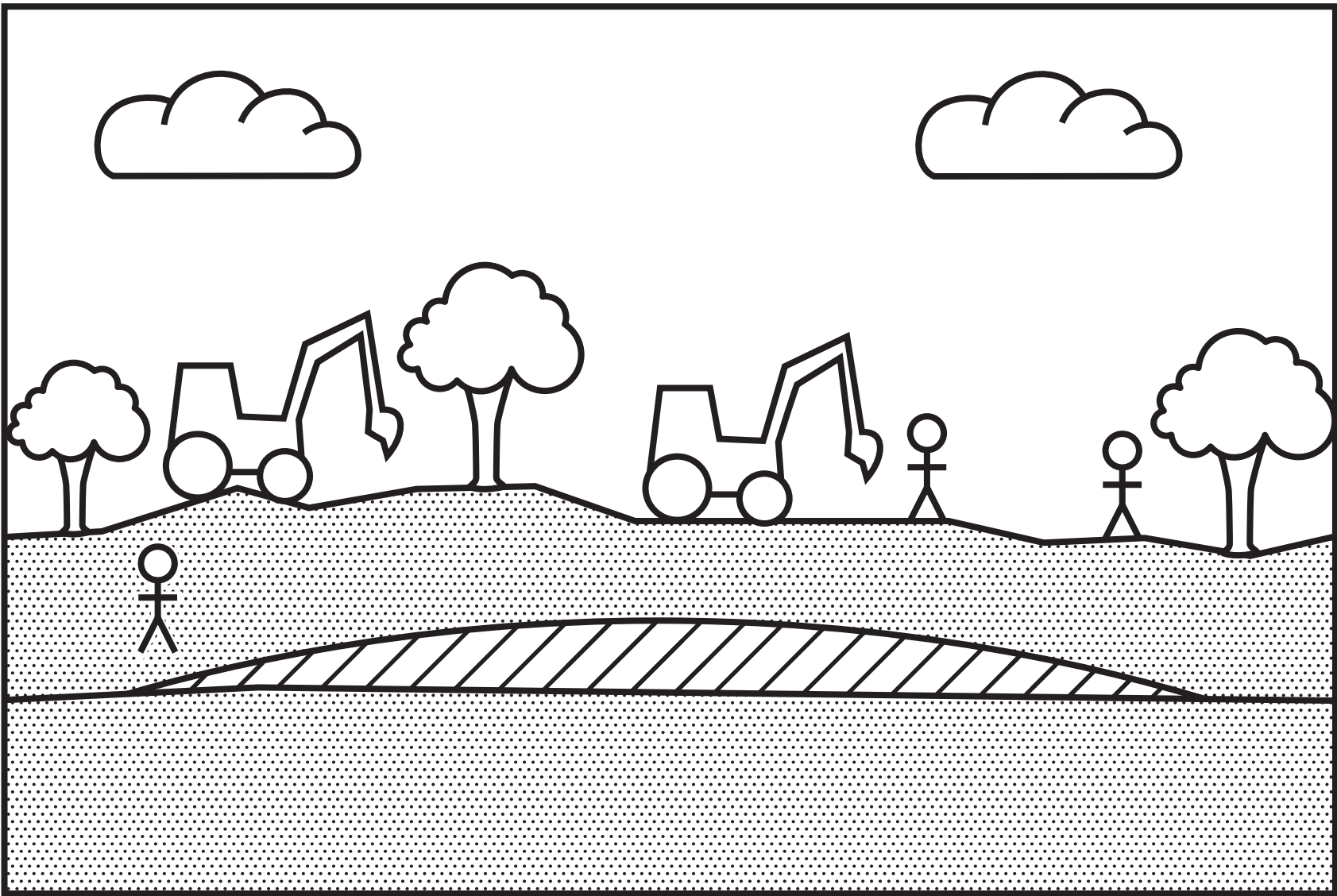




Figure 7


Environmental impacts of oil production in Ecuador’s rainforest




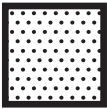
KEY

Digger

Work people

Trees

Pipe

Bare ground


Clouds

Figure 8 – Information

Yasuní National Park and the oil industry

Yasuní National Park (YNP) is home to **750** mammal and bird species, and **2,000** tree species.

Jaguars and tiny monkeys called pygmy marmosets, live there. Pink dolphins swim in the rivers.

The YNP's biodiversity is a vast resource that could provide cures for diseases.

YNP is home to the Tagaeri and Taromenane forest communities.

40% of Ecuador's conventional oil resources are located below YNP.





Oil companies, such as China's Sinopec and Ecuador's own Petroamazonas, work throughout Ecuador's rainforest. They have begun to explore parts of YNP.

More damage comes from roads and pipes the companies build. They give access to hunters and loggers, sometimes leading to violent confrontations with YNP communities.

Figure 8 – Diagram (Colour)

Yasuní National Park and the oil industry

KEY

-  Non-rainforest areas
-  Rainforest where oil exploration and/or drilling allowed
-  Fully protected national park
-  Partly protected national park – oil exploration is allowed

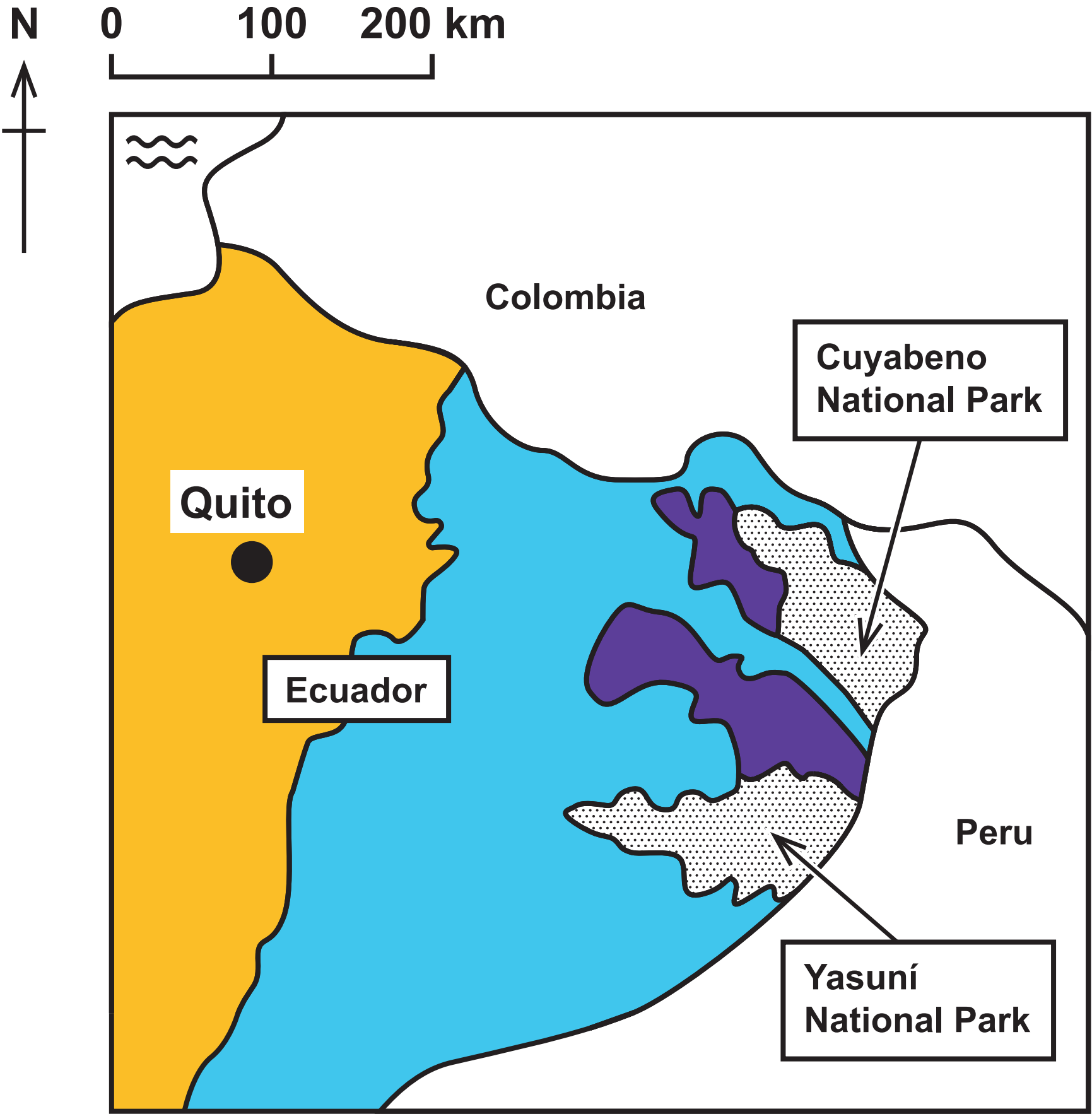


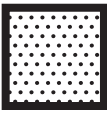



Figure 8 – Diagram (Black and White)

Yasuní National Park and the oil industry

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-  Non-rainforest areas
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N 0 100 200 km

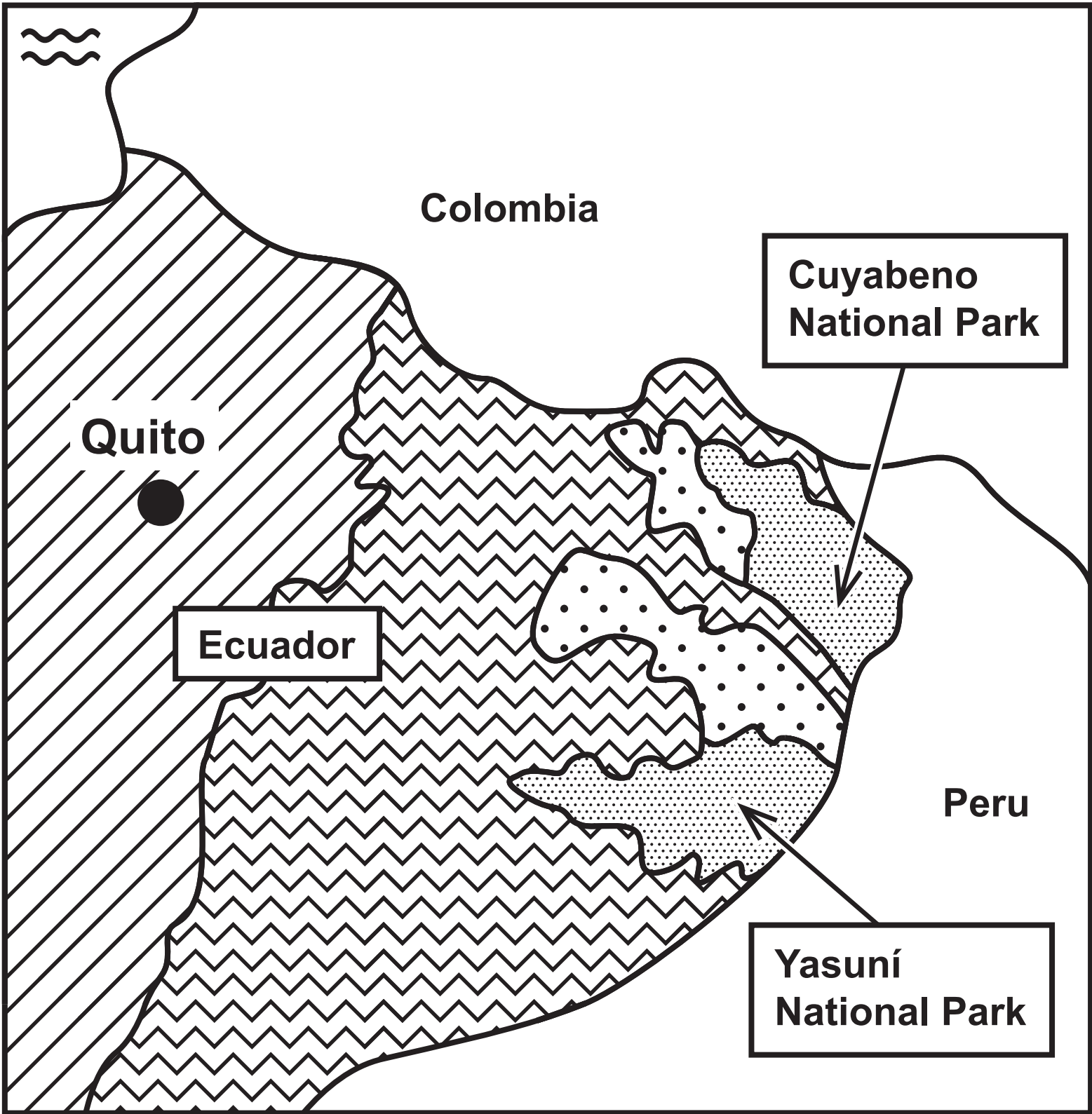


Figure 9

Views and actions of Ecuador's rainforest communities

Ecuador's rainforest communities are now taking action to protect their land.

- In **2019** in Quito, a march by rainforest communities drew attention to the government's failure to safeguard their rights.
- One community won a law case against the government for failing to consult them before opening up their ancestral lands to oil drilling. A court ruled the oil companies must leave.
- Local communities blocked roads to prevent the arrival of drilling equipment. As a result, a Chinese company stopped its search for oil near Yasuní.

But some rainforest communities are open to the idea of working with oil firms — so long as they benefit too.

Figure 10 – Information

The countries that are most and least responsible for carbon dioxide emissions over time

- The chart on page 20 shows which countries are most and least responsible for the carbon dioxide emitted by industry and fossil fuel burning since **1750**. The amount a country emits depends on its level of development and its population size.
- Following a meeting in Paris in **2016**, the world is taking climate change more seriously. More is being done to develop renewable energy instead of relying on conventional and unconventional fossil fuels.
- But governments of some developing and emerging countries say they should be allowed to keep producing fossil fuels for longer, because they've contributed least to climate change.

Figure 10 – Diagram

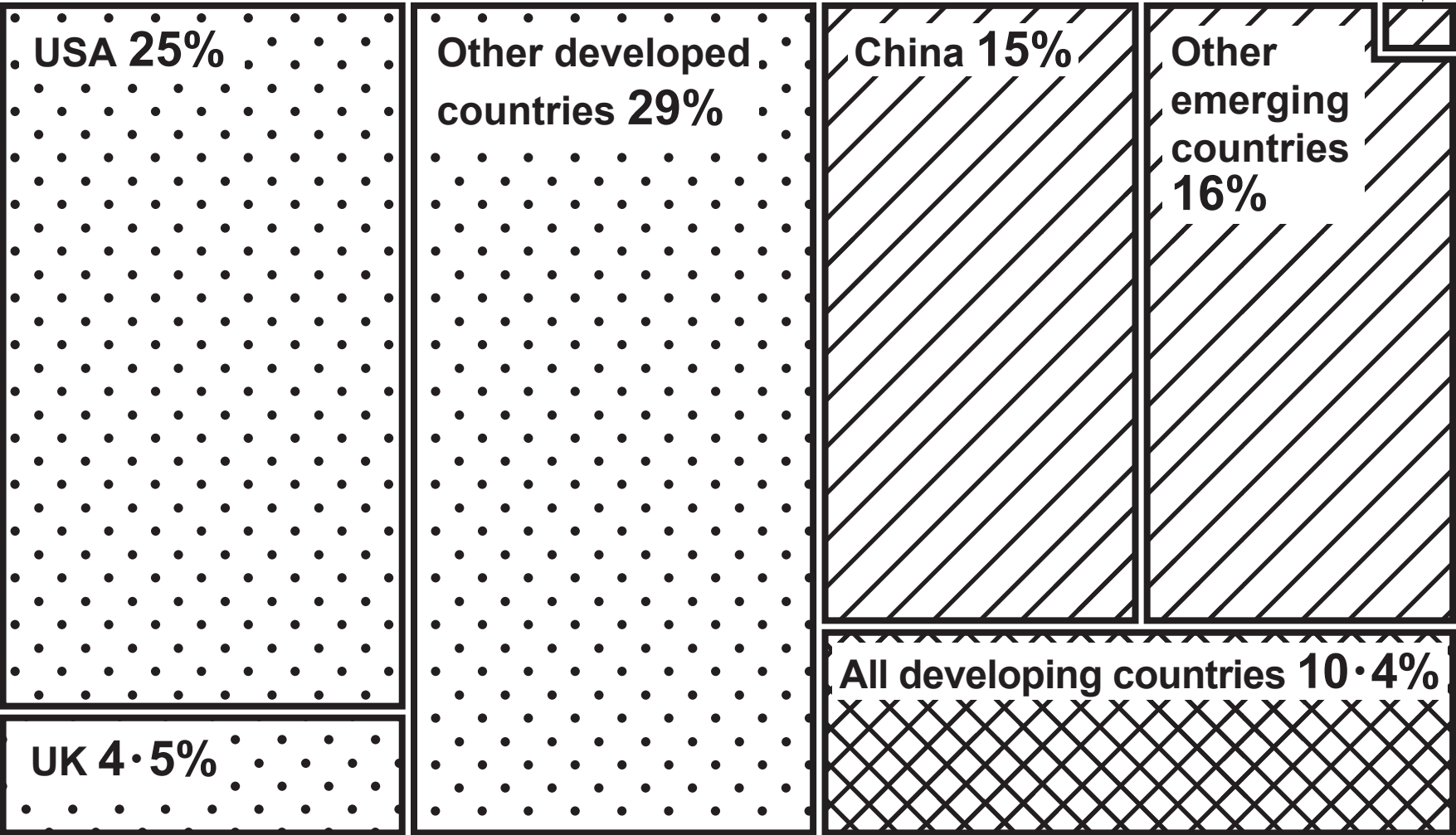
The countries that are most and least responsible for carbon dioxide emissions over time

KEY

 Economically developed countries
(1·2 billion people)

 Economically emerging countries
(2·5 billion people)

 Economically developing countries
(4·1 billion people)



Acknowledgements

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

<https://www.ft.com/content/>

Figure 1: adapted from <https://www.camiadventures.com/>

Figure 2: adapted from <https://research.wri.org/>

Figure 3: adapted from <https://www.ft.com/>

Figure 4: data from <https://www.un-redd.org/>

Figure 5: data from <https://www.cia.gov/>

Figure 6: data from <https://www.statista.com/>

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