

Pre-release

AQA Geography 2019

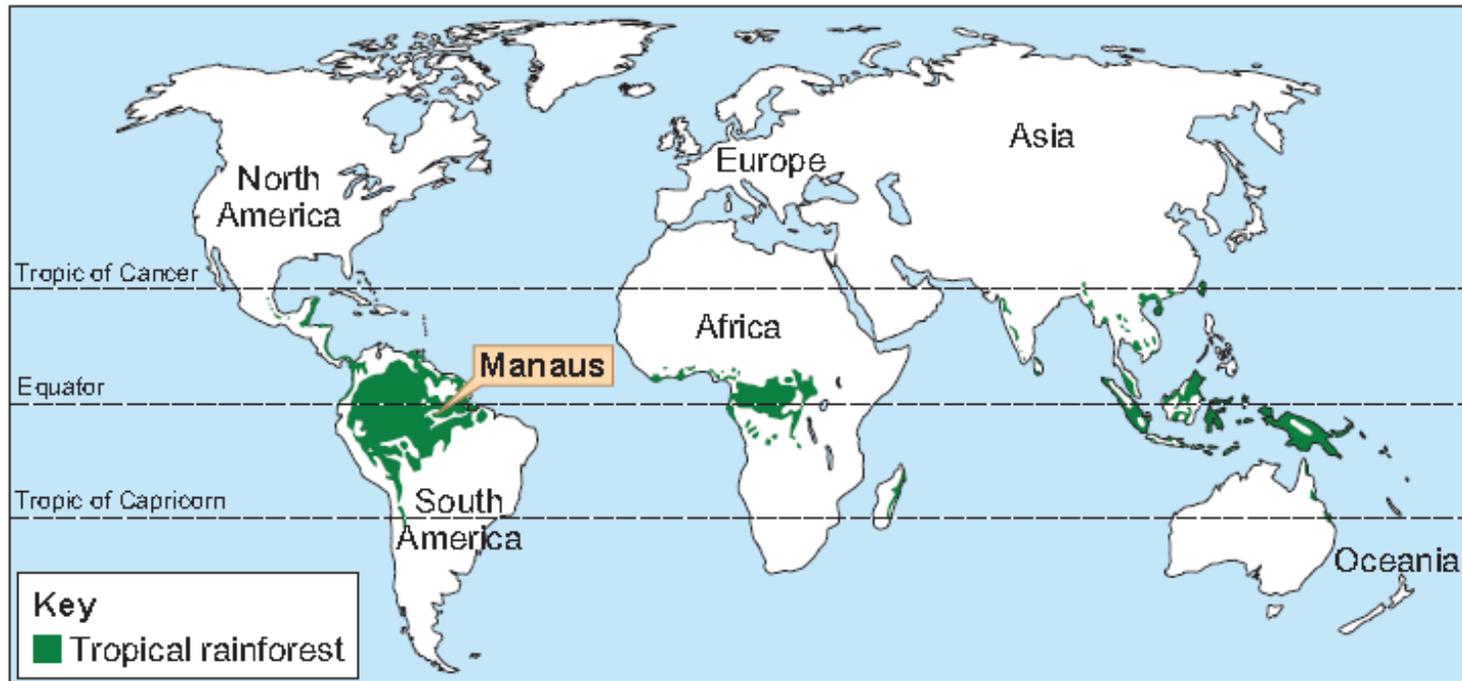
Video link page:

https://uk.news.yahoo.com/peru-ends-era-apos-roadless-145322725.html?guccounter=1&guce_referrer=aHR0cHM6Ly93d3cuZ29vZ2xlLmNvLnVrLw&guc_e_referrer_sig=AQAAKYrDUZ9x_ENetCZIXkC5gYmcneCfihlsijVKbze8Sn-Rsw3K8o6Ggyexj9J-CHpj3F1AuAZMa2-8XhP3a99Kth7KJ1doPy2fyrnSIh0kpFuYplfBwtUxz4smey_kmIFTNDwbUtMkNw-r1ME5ODxh30XY1xLCseLSNPv72MmUsI

Keywords – fig 1

Biodiversity	The number of different species in an area.
Climatic Characteristics	The temperature and rainfall common to an area.
Micro-organisms	Tiny lifeforms like bacteria and fungus.
Decay	When something rots.
Leaching	The washing away of nutrients from the soil.
Biomass	The amount of organic matter..
Climate regulator	Controls climate.
Indigenous tribes	People native to the rainforest.
Understory	Under canopy
hectare	Size of a rugby pitch.
Global carbon balance	Forests balance out total carbon on our planet given out by humans.
Global carbon sink	Forests store carbon.
Pharmaceutical	Medicines/drugs.
Derived	Taken from

Figure 1 - distribution



Describe the **distribution** of tropical rainforests.

So...where are they?

Think about:

- Latitude
- Continents
- Inland/coastal
- Countries?
- Concentration/cluster?

Challenge: Why are they found at here?

Figure 1 - climate

Example of a rainforest climate – Manaus (Brazil) 3°S 60°W

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Temperature (°C)	28	28	28	27	28	28	28	29	29	29	28	28
Rainfall (mm)	278	278	300	287	193	99	61	41	62	112	165	220

- Calculate the total annual rainfall for Manaus.
- What is the temperature range for Manaus?

Challenge

How many seasons does a tropical rainforest have? Justify your answer using evidence from figure 1.

Figure 1 – The tropical rainforest ecosystem.

1. Why do plants grow quickly in the rainforest?
2. Why is biodiversity so high in the rainforest?
3. Explain the importance of decomposition in the rainforest.
4. Explain 2 reasons why rainforests are important. (think about people and the environment)

Challenge:

What would happen if an animal species became extinct in the rainforest?

Tropical rainforests – the World's medicine cabinet

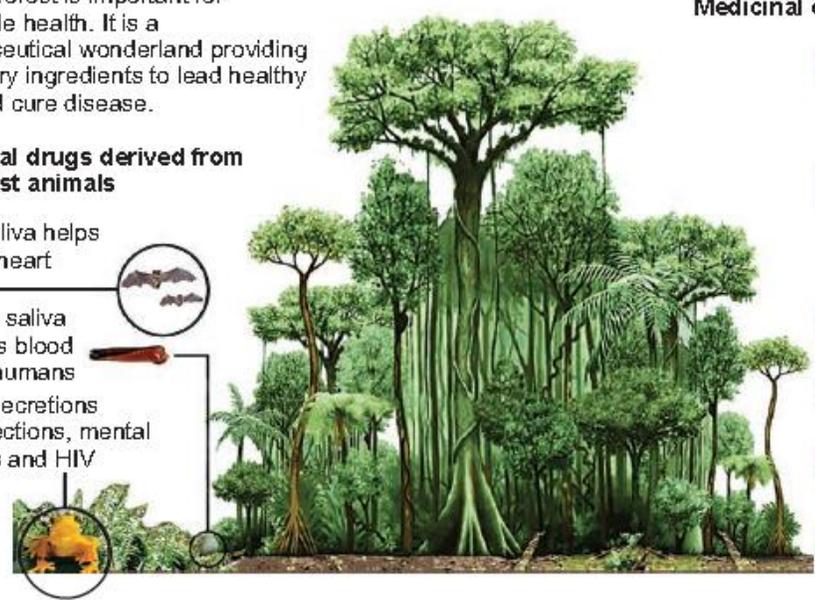
The rainforest is important for worldwide health. It is a pharmaceutical wonderland providing necessary ingredients to lead healthy lives and cure disease.

Medicinal drugs derived from rainforest animals

Bat – saliva helps prevent heart attacks

Leech – saliva dissolves blood clots in humans

Frog – secretions treat infections, mental illnesses and HIV



Medicinal drugs derived from rainforest plants

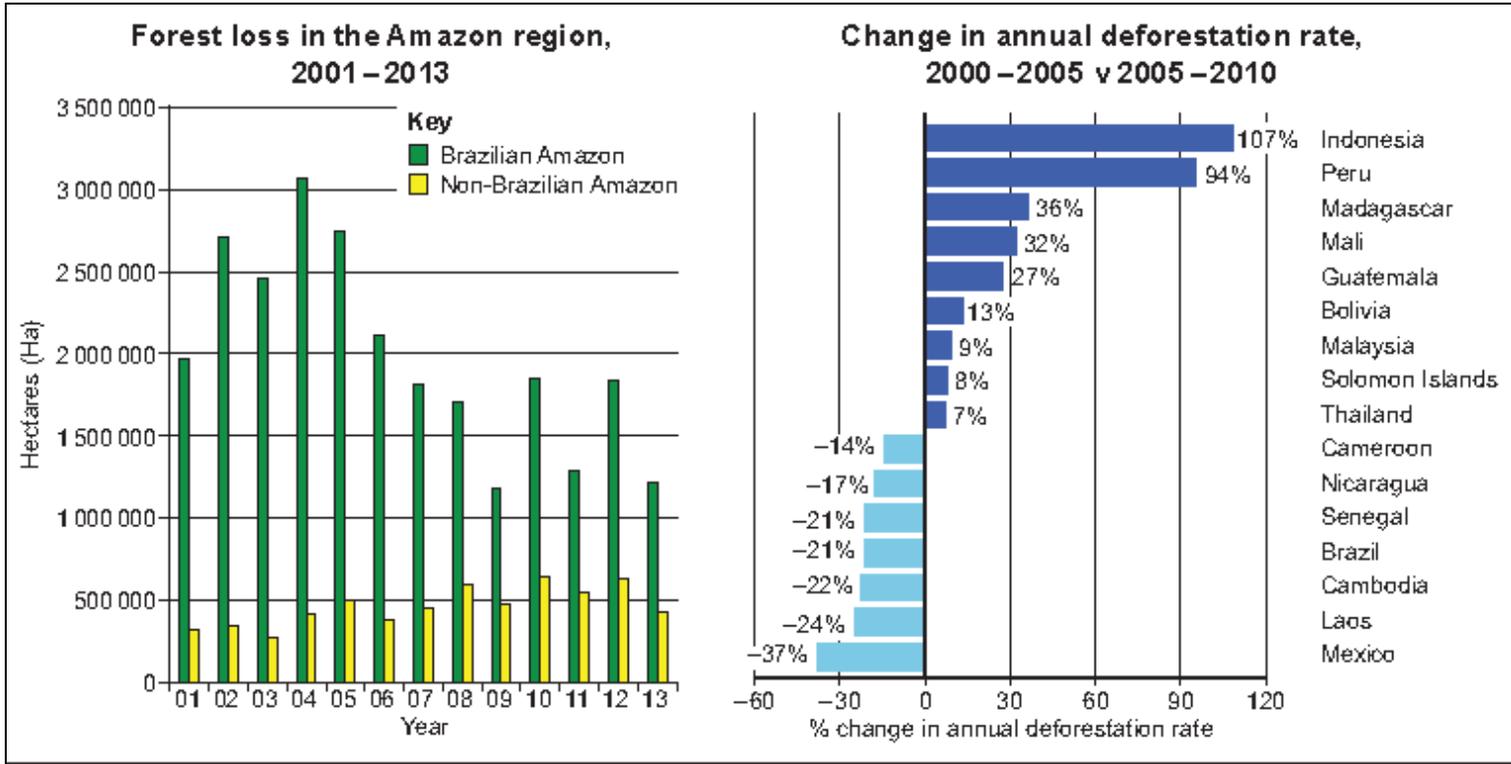
- Vincristine/Vinblastine** – from Rosy Periwinkle, used to treat Leukaemia and Hodgkin's Disease
- Tubocurarine** – from Curare Liana plant, used to treat Multiple Sclerosis and Parkinson's Disease
- Cortisone** – from Wild Yams, used in birth control pills
- Quinine** – from the Cinchona Tree, used to treat Malaria
- Neostigmine** – from the Calabar bean, used to treat Glaucoma
- Novocaine** – from the Coca plant, used as a local anaesthetic

The tropical rainforest is reducing by 1–2% each year	120 prescription drugs are derived from rainforest plants	Statistics 25% of Western pharmaceuticals are derived from rainforest ingredients	Two-thirds or more of all drugs with cancer-fighting properties come from the rainforest
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Keywords – fig 2

Exploitation	Making use of and benefitting from a resource.
Conflict	disagreement
Swathes	Large areas
Impoverished	Live without basic needs
traditional protectors	Someone who has always looked after something
Unregulated	No checked/illegal?
Commercial agriculture	is a large-scale production of crops for sale
Illegal agriculture	Farming that has not been given permission to take place
Paris Climate Summit 2015	An agreement to reduce greenhouse gas emissions and prevent global temperature rise
Acre	$\frac{1}{4}$ of a rugby pitch.
Soy	Also known as soya bean
Pulp plantation	Timber forests grown to make pulp for paper.
felled	Cut down/deforested
Palm oil	An edible vegetable oil harvested from plantations in the rainforest

Figure 2 - Deforestation



1. Which year saw the highest loss of forest in the Amazon?
2. Describe the pattern of forest loss between the Brazilian and non-Brazilian Amazon between 2001 and 2013.
3. Which country has the highest change in annual deforestation rate?
4. Which country has the lowest change in annual deforestation rate?
5. Why are some countries increasing their rate of deforestation?
6. Why are some countries decreasing their rate of deforestation?

Challenge:

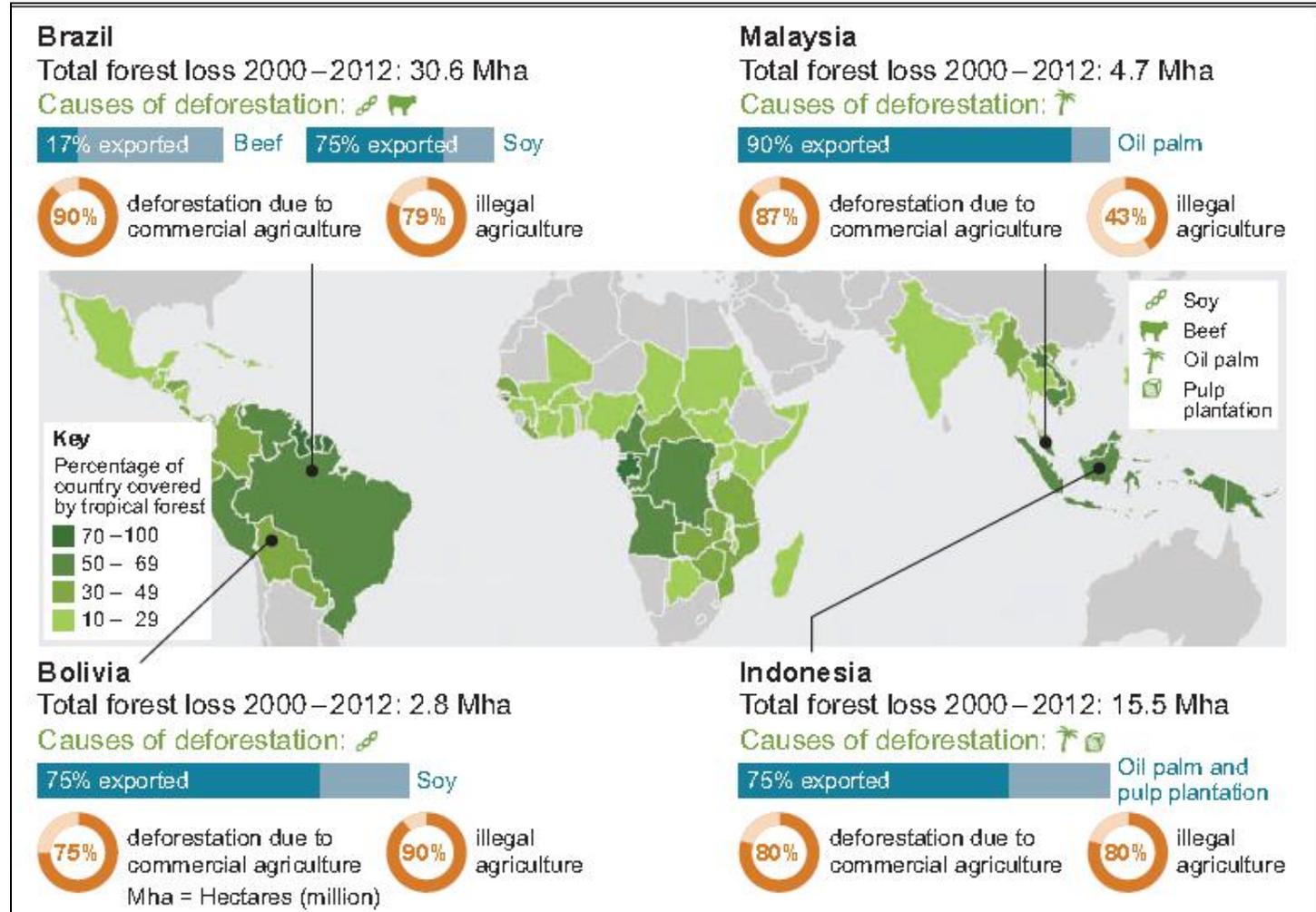
The Paris Climate Summit 2015 could only be a success if richer countries help poorer countries. Discuss.

Figure 2 – Deforestation – illegal activity

1. Which country has the highest illegal agriculture?
2. What are the main causes of deforestation in Indonesia?
3. How much palm oil is exported from Malaysia?
4. What percentage of Bolivia is covered in rainforest?
5. Which country has lost the most forest between 2000-2012?

Challenge:

To what extent is illegal activity damaging to the rainforest and its people?



Keywords – fig 3

Trade corridors	Routes used to trade
Conservation	Looking after
Navigable rivers	Rivers you can travel down
Preserving	Keeping it the way it is
Biodiverse countries	Countries with lots of different species
Poverty	Living without basic needs
Rural dwellers	People who live in countryside
Export earnings	Money made from selling goods to other countries
inhabitants	People living there
Inexhaustible larder	Never-ending food supply
Enabler of destruction	A person who encourages destruction
Middle income country	Not rich or poor
Peruvian	From Peru
Remote	Far from other places

Figure 3 – Road development in the Peruvian Amazon

Peru: development fact file

Gross national income	\$11 295	(2016)
Infant mortality	19 per 1000 population	(2015)
Doctors	1.1 per 1000 population	(2013)
Access to clean water	91% urban, 69% rural	(2015)
Access to sanitation	82% urban, 53% rural	(2015)
Internet access	40%	(2014)

Challenge:

Why are roads thought of as a 'suitable' way to develop Peru?

1. How developed is Peru? Give evidence for your answer.
2. How do roads help a country/people develop?
3. Why does Peru want to develop its rainforest?
4. Why are roads through the forest needed?

Figure 3 – Decision time! Should Peru build a new road through the Amazon?

	Economic	Social	Environmental	Local	National
Advantages					
Disadvantages					

Figure 3 – Decision time!

Possible Questions:

- **Basic: “Should the road through the Peruvian Amazon go ahead” YES or NO? BUT what have they told you about the road in the booklet already?**

Therefore, perhaps you are more likely to see questions such as:

- “Road development in the Peruvian Amazon is crucial to the country’s development” Do you agree with this statement? Justify your answer
- To what extent could new road developments bring long term economic gain with reduced environmental damage?
- To what extent could new road developments bring short term economic gain for long term environmental loss?

Think about:

- Social
- Economic
- Environmental
- Local
- National
- Alternatives for development in Peru?