



## Tree restoration

### What is happening?

In 2019, scientists estimated that 4.4 billion hectares of land on the Earth is suitable for growing trees. 2.8 billion hectares is already planted but we could plant more trees.

### How do we know this?

- Scientists compared satellite data showing tree coverage across the Earth with maps of soil and climate data. This provided a model of how many trees could be grown in different environments across the world.

### Why is this important?

- Tree restoration could be the most effective way to reduce the warming of the Earth's surface (global warming). This could offset climate change.
- Scientists predict that by 2050, certain regions will have become too hot for growing trees. We need to act now and not wait.

### What else can you find out?

- Why can we not plant trees everywhere on the surface of the Earth?
- Use the QR code to find out why one boy is trying to plant 100 trees a year throughout his life.



### KEY FACTS

#### Carbon dioxide

The amount of carbon dioxide (CO<sub>2</sub>), a gas in the Earth's atmosphere has increased since 1850 due to humans burning fossil fuels. The extra CO<sub>2</sub> acts like a blanket around the Earth and is warming the Earth's surface.

#### Trees

The Earth is home to over 3 trillion trees but we are losing many trees across the world through deforestation. Trees take in carbon dioxide - they use it to make their own food.

#### Hectare

There are 100 hectares in one square kilometre.

**Professor Tom Crowther** is one of the scientists who carried out this work. He is an **ecologist**, interested in how animals and plants could help to reduce global warming.

