BBC TEACH

Climate change: Ade on the frontline
Planting trees in Bhutan

Video summary	Before watching the film	During the film
Ade Adepitan meets Sonam Phuntsho, who has planted more than one hundred thousand trees in Bhutan. Planting trees is one of the cheapest and most effective ways we have of tackling climate change. Sonam has spent most of his life planting trees by hand - first as a forest ranger, and now in retirement. Sonam hopes that these trees will benefit future generations. Download/print a transcript of the video.	It is helpful to have watched the clips about glacier melt in Bhutan, the impact of land loss in Bangladesh and climate refugees travelling to Dhaka first. The effects and impacts of climate change being felt in this region could be discussed and revised beforehand. You might say that this film clip reveals an effective mitigation strategy and ask students to guess what it might be.	You may wish to stop at relevant points during this short film to pose questions and check understanding or wait until the end. A useful question might include: • How does planting trees help tackle climate change? You could discuss how forests act as great carbon sinks, with the ability to absorb atmospheric carbon and lock it up for centuries. Trees are able to do this through photosynthesis, and established woodland eco-systems with their mix of living and deadwood, surrounding soils and vegetation and also play an integrated role in carbon capture. Trees also help prevent flooding and help conserve soils. Sonam says he loves nature more than anything else, you might discuss with students the difference between nature- based and technological solutions and the merits of both.

After watching the film

The Woodland Trust says that here, 13% of the UK's land area is covered by trees (compared with an EU average of 37%). You could ask students if they think the UK could play a greater role in carbon capture by increasing its forest area and to explain where and how this might be done.

Students could investigate their own school and local area and identify planting sites where trees might be added and create their own programme of environmental restoration, identifying which local species of trees would be best for the landscape, climate and wildlife.

New research estimates that a worldwide planting programme could remove two-thirds of all the emissions from human activities that remain in the atmosphere today, a figure the scientists describe as 'mind-blowing'. (The Guardian, 2019)

You could discuss the research mentioned in this article and its claim that tree planting is the most powerful solution to tackling climate change. This research suggests it is possible to plant enough trees worldwide to sufficiently reduce carbon emissions and has even mapped potential areas where tree planting might happen on a large scale.

After watching the film (continued)

You could ask students if this is a realistic idea and why / why not. They might also summarise a range of mitigation strategies, explaining which ones are best and giving reasons why. This should include strategies for reducing carbon emissions as well as carbon capture.

This short film is suitable for teaching KS3 and KS4 students.

While this film can be watched on its own, it links well with the three other clips: climate refugees in Dhaka, sea-level rise in Bangladesh, and melting glaciers in Bhutan. All the films build on students' understanding of climate change issues and enable them to make global connections.

This film supports the KS3 geography curriculum by investigating our changing climate and how people respond to and try to manage changing environments in sustainable ways.

At KS4 this clip supports understanding the impacts of climate change and how environments are managed.

This clip could be used to support the delivery of geography to KS3 and KS4 students. Specifically, this topic appears in OCR, Edexcel, AQA, WJEC KS4/GCSE in England and Wales, CCEA GCSE in Northern Ireland and SQA National 4/5 in Scotland.