



Leandro and the mysterious case of the disappearing and reappearing river (ages 12+)

Billions of people around the world enjoy tea for breakfast.

This learning activity for learners aged 12+ in Geography focuses on our favourite breakfast drink, and builds learners' understanding of hydrology, climate change, and of how human and physical processes interact to influence environments and the climate. Through a focus on sustainable food production, they'll also be able to reflect on how all of us rely on effective functioning of natural systems for our food and livelihoods.

The activity focuses on learning through developmental group work, a constructivist approach to learning that is directed by learners themselves.

Learning objectives

- Work together to think about the importance of rivers to humans, and about the consequences and impact for people and environment when rivers are unpredictable
- Explore how our food can be produced sustainably, and what forces farmers to use unsustainable production methods
- Critically evaluate Fairtrade as a way of ensuring sustainable food production and whether it is having an impact on farmers' lives

You will need

- PowerPoint presentation projected on screen
- A set of mystery clues for each group
- A few pairs of scissors
- My Next Fairtrade Adventure film for learners aged 12+ (episode 1)

Key terms and concepts

Adaptation / mitigation
Carbon footprint
Climate change
Downstream
Drought
Evapotranspiration
Fairtrade
Fairtrade Premium
Flooding
Mean temperature
River catchment
(un)sustainable farming
Tree-planting
Unpredictable rainfall

Key questions

- What different human and physical factors can cause flooding, or cause a river to dry up, and is there anything that we can do to mitigate against this unpredictability?
- What's the impact of unsustainable farming?
- Is Fairtrade making a difference?
- What factors account for the predicted changes in patterns of tea production up to 2050? What will be the impact on people where these changes are greatest?
- What impact can we have on the world around us as citizens, consumers and members of a community?



Starter: What impact do rivers have on people? (about 10 mins)

Start by asking what people use rivers for, and what they think the impact can be for people when rivers do something unexpected, for instance flooding or drying up. *What different human and physical factors can cause flooding, or cause a river to dry up, and is there anything that we can do to mitigate against this unpredictability?* You could use learners' responses to fill the simple chart on **slide 2**, and if there's time you could ask if they think there are certain people who would be more vulnerable to rivers than others – for instance people who are already living in poverty, or people who rely on rivers for drinking water.

Main activity: Developmental group work (about 20 mins)

Show learners **slide 3** and introduce them to Leandro, a farmer from Kenya who has experienced first-hand the impact of unpredictability of the river on his land. Ask them what they think being a Fairtrade farmer means. If needed, show **slide 4** as a quick introduction or recap about Fairtrade.

Ask learners to spend two minutes reflecting and writing down their own answer to the mystery question: **“A few years ago the small river at the bottom of his farm dried up and Leandro’s well went dry, but now the river’s back. What do you think made this change happen?”**

Learners then work in small groups for about 10 minutes to come up with their own reasons why they think these changes happened.

Once learners have cut up and read through the clues they could sort them into two piles – important and not important. Then, using the clues they think are important, they could sort them into past and present, to begin to find out what happened on the farm. Then it's up to them to work together to come up with their own theory as to why the river disappeared, and why it's back now. In addition to written clues there are also some photo clues on **slide 5**.

Learners then share their answers with the rest of the group. Did everyone come up with the same explanation? To build on learners' own interpretations, show them **slides 6-7** - system diagrams that show the connecting factors that led to the changes on Leandro's farm, and what difference Fairtrade has made.

Plenary: My Next Fairtrade Adventure (about 15mins)

Show learners **slides 8-9**, which maps predictions about where tea will grow well in Kenya by 2050.

What factors could account for the changes? Will Leandro's farm be affected? What do learners think will be the impact on people where the changes are greatest?

Slide 10 shows how climate change is already having an impact on tea farmers in Kenya. If there's time, use one or two of the discussion questions on the slide notes to delve deeper into.

Learners then watch **My Next Fairtrade Adventure – episode 1** (age 11+) and learn more about what's been going on in the tea growing valley where Leandro lives. While they're watching, you could ask learners to take notes about a few topics using a simple chart like on **slide 11**.

What did learners note about the impact of unsustainable farming? Do they think that Fairtrade has made a difference to farmers like Leandro?

If there's time you could finish by asking students what they think the links are between the choices we make about how we live, and the livelihoods of farmers like Leandro, thinking about the impact we all have as citizens, consumers and members of a community.

Extension idea

Watch **My Next Fairtrade Adventure – episode 2** (ages 11+) which delves deeper into the issue of climate change and how it's already having an impact on tea farmers, what they are doing in response and how Fairtrade is helping.