BBC TEACH

3: Achieving water security in Southern Africa

In partnership with Geographical Association

Video summary	Before watching	While watching
Chioma is in Cape Town where she explores the issue of a large and growing population and unpredictable rainfall. In South Africa 50% of the water supply is used by the agricultural sector, with the remaining 50% available for the growing population. There has been anxiety in the city that 'Day Zero' will come - a day when pressure on the water supply is so severe that taps run dry. This video explores how such a crisis was averted. The video also expores the Highlands Water Project in Lesotho to understand how a water transfer scheme moves water from that country to South Africa to help increase water security. Lesotho is a small landlocked country in Southern Africa and it is completely surrounded by the country of South Africa. As well as water transfer schemes this video also explores other solutions to water security, such as harvesting rainwater and desalinisation stations.	Ask students why water is an important resource and what could happen if one day we turned on our taps and no water came out. Locate South Africa and Lesotho on a map. Discuss with students the differences between water security and water insecurity. Ask students what factors might lead to water security and insecurity. **Introduce key terms such as:** **Reservoir**: a large natural or man-made lake used as a source of water supply. **Water insecurity**: the lack of adequate and safe drinking water. **Infrastructure**: the facilities, systems and services needed to serve a country or city such as roads, power supplies and sewage systems. **Rationing**: only allowing a small amount of something because there is a limited supply. **Water transfer scheme**: moving water from an area of surplus to an area of deficit.	You may wish to stop at relevant points during this short film to pose questions and check understanding, or wait until the end. Useful questions might include: • Why does a growing population require more water? • What is water insecurity? • What is 50% of the water used for in South Africa? • What is 'Day Zero'? • Why did water need to be rationed? • How was water consumption reduced? • How was Day Zero averted? • What is a water transfer scheme? • What other solutions are there to water security?

After watching

Divide the class into groups to research ways in which water security can be reached - for example, drilling boreholes, building desalinisation plants and harvesting rainwater. Students should look for examples of each and investigate the positives and negatives of each scheme. These can then be presented to the rest of the class to build up a case study of water security solutions in South Africa.

Students could then rank the solutions from most effective to least effective using the advantages and disadvantages they have investigated.

Students could then create their own water conservation campaign, using inspiration from their investigation as well as their own ideas.

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Curriculum notes	Where next?	Links
This clip will be relevant for teaching Geography at KS3 in England and Northern Ireland, 3rd/4th Level in Scotland and Progression Step 4 in Wales. In the English National Curriculum this video can be used to help teach the following: • *Using maps of the world to focus on Africa, focusing on the environmental regions, hot deserts, key physical features, countries and major cities.* • *Understand geographical similarities, differences and links between places through the study of human and physical geography of a region within Africa.* • *Physical geography relating to hydrology and coasts.* • *Understand how human and physical processes interact to influence and change landscapes, environments and the climate and how human activity relies on effective functioning of natural systems.*	Why was the Day Zero campaign so successful in averting a water crisis? In mid-January 2018 the city authorities in Cape Town announced they would be forced to shut off most of the water supply if conditions didn't improve and the water levels of the major dams declined to 13.5%. Thankfully Day Zero never arrived. Research the campaign and communication strategy around Day Zero. What was done by both the residents and city leaders which made the campaign so successful? Some of the strategies were very simple - even light-hearted - including 'two-minute shower songs' and catchy slogans for toilet use, some of which were also used in the UK in the 1970s. Others relied on much wider city communication and stronger messaging. Share some of the poster campaigns with students. Why do they feel the campaign worked?	Impacts of water insecurity: https://www.bbc.co.uk/bitesize/guides/zg2mycw/revision/6 Strategies to increase water supply: https://www.bbc.co.uk/bitesize/guides/zybtjty/revision/3 Water resources: https://www.bbc.co.uk/bitesize/articles/zkxsn9q Increasing water supply: https://www.bbc.co.uk/bitesize/articles/zwhvydm Water supply and consumption: https://www.bbc.co.uk/bitesize/guides/zgx382p/revision/2