

# LAND RESTORATION WITH THE REDEAL PROJECT

## TALKING POINTS

### KNOWLEDGE

1. What is land degradation, and what can it be caused by?
2. How does an ecosystem's biodiversity influence its resilience?

### COMPREHENSION

3. What are the differences between bottom-up and top-down land management approaches?
4. Why do farmers and scientists have different perspectives on land degradation and restoration?
5. Why is it so important that ReDEAL is working with local farmers to find solutions to land degradation?

### APPLICATION

6. What questions would you ask the farmers at the Kenyan study sites to learn about their priorities for their land?

### ANALYSIS

7. The ReDEAL team includes ecologists, agronomists, soil scientists, anthropologists, social scientists, environmental scientists and geographers. How do you think each type of specialist contributes to the project aims?

### EVALUATION

8. In many areas of the world, marine scientists are working with the fishing industry to find ways to sustainably manage fish stocks and conserve marine ecosystems. What lessons from the ReDEAL project do you think might be applicable in this context?
9. Africa's population is expected to almost double by 2050. How do you think this could affect the rural communities that the ReDEAL project works with?

## ACTIVITIES YOU CAN DO AT HOME OR IN THE CLASSROOM

In the 1930s, decades of poor land management led to degradation of the once-fertile grasslands of the Southern Great Plains of the USA. This period became known as the Dust Bowl as it resulted in massive dust storms and crop failure across the entire region. Many people died and it exacerbated the effects of the Great Depression, driving thousands of families into poverty. Read more here: [www.history.com/topics/great-depression/dust-bowl](http://www.history.com/topics/great-depression/dust-bowl).

Imagine you have gone back in time to the early twentieth century on a mission to change history and avert the Dust Bowl. How would you utilise the lessons learned from the present day, such as from the ReDEAL project, to address the causes of the Dust Bowl?

Consider the tools and methods that the ReDEAL project are employing to help foster land restoration in Kenya. These include scientific studies, utilisation of local knowledge, bottom-up empowerment and community engagement.

In your answer, address each of these biological, social and economic factors that contributed to the onset of the Dust Bowl:

- Intensive farming practices, such as deep ploughing
- Removal of native prairie grasses that helped prevent soil degradation
- An influx of new, inexperienced farmers due to nationwide legislation that promoted agricultural expansion
- An unfounded but widespread belief that farming the Great Plains would make the area's semi-arid climate rainier
- Rising demand for wheat, such as from Europe during World War I

Create a proposal to persuade farmers, land managers and governments to change land management practices in the Southern Great Plains. How will you encourage community engagement? How will you promote bottom-up rather than top-down approaches?

## MORE RESOURCES

- More information about the ReDEAL project can be found on the project website: [wp.lancs.ac.uk/restoringafricangrazing](http://wp.lancs.ac.uk/restoringafricangrazing)
- Watch this video from ReDEAL, which contains interviews with Kenyan farmers about their land management practices: [www.youtube.com/watch?v=lnVGWz9nVFI&t=571](http://www.youtube.com/watch?v=lnVGWz9nVFI&t=571)
- This short documentary from filmmaker Amy Browne explores how Australian farmers are tackling land degradation and promoting regenerative agriculture: [www.youtube.com/watch?v=6vQW8TI\\_KLc](http://www.youtube.com/watch?v=6vQW8TI_KLc)
- This article from the UN explores land degradation and restoration across the African continent: [www.un.org/africarenewal/magazine/december-2021/we-need-moonshot-africa%E2%80%99s-land-restoration-movement](http://www.un.org/africarenewal/magazine/december-2021/we-need-moonshot-africa%E2%80%99s-land-restoration-movement)

HEAD TO MARIANA AND JOSEPH'S FUTURUM WEBPAGE FOR A SWAHILI TRANSLATION AND AN ANIMATION ABOUT THEIR RESEARCH:

[www.futurumcareers.com/bringing-life-back-to-kenyas-grasslands](http://www.futurumcareers.com/bringing-life-back-to-kenyas-grasslands)