



Coffee for Water

OVERVIEW

Coffee for Water shows how coffee farming is helping the Gorongosa ecosystem in Mozambique recover from a civil war. Experts at the nearby Gorongosa National Park and farmers on Mount Gorongosa are working together to support local communities and restore the ecosystem — in a way that benefits both nature and people. Additional information can be found on [this episode's webpage](#).

KEY CONCEPTS

- Armed human conflicts often take a toll on wild ecosystems.
- Ecosystem services, ways in which humans benefit from ecosystems, are essential for human health and well-being.
- Collaboration between different people and groups is essential for effective conservation.

BACKGROUND

Gorongosa National Park — located in Mozambique, a country in southeastern Africa — is a **biodiversity hotspot**: an area with an exceptionally high number and diversity of species that is also experiencing unusually high rates of habitat loss. The park was once home to some of the densest animal populations in Africa. But starting in 1977, Mozambique experienced a 15-year civil war that killed over one million people and displaced many others. Starving soldiers and poachers hunted many of the large mammals, reducing their populations in the park by 95%. People seeking refuge also started moving into forested areas, cutting down trees for housing and agriculture.

Mozambique's government and its partners have worked for two decades to restore Gorongosa's wildlife to nearly prewar levels. But these gains are precarious and depend on repairing the rainforests on Mount Gorongosa, a large mountain in the park that has lost 40% of its forests since 1992. The forests on the mountain retain rainwater during the rainy season and release it into the park during the dry season. They are a vital water source for both local wildlife and human communities.

Experts from Gorongosa National Park are leading reforestation programs that replant native trees on Mount Gorongosa. To ensure that these forests are maintained over time, they are also helping local farmers transition to more sustainable agricultural practices. In the past, trees were often burned to make room for unsustainable crops like maize and millet, which further degraded the land. The park is now encouraging farmers to grow shade-grown coffee, which incentivizes them to replant native trees for shade.

The park provides crucial assistance — offering free seedlings, training, and support; teaching the farmers to intersperse other crops among the coffee trees; and buying the coffee beans when they're harvested. They are also helping farmers raise bees, which provide profitable honey while also pollinating the coffee plants and other forest species.

People/groups highlighted in the film include:

- Farmers who are transitioning to more sustainable agricultural practices, such as coffee growing and beekeeping.
- Employees at Gorongosa National Park, who are supporting farmers (by providing training, jobs, infrastructure, etc.) and managing reforestation programs.

BIODIVERSITY THREATS

Five of the biggest threats to biodiversity are represented by the acronym **HIPPO**: **h**abitat loss, **i**nvasive species, **p**ollution, **p**opulation growth (of humans), and **o**verharvesting. The HIPPO threats shown in this film include:

- **Habitat loss:** Forests were cleared to make room for crops and housing.
- **Overharvesting:** Many large mammals were overhunted during the war. Trees were also overharvested for building materials.

DISCUSSION QUESTIONS

- *(Before the film)* Ecosystem services, ways in which humans benefit from ecosystems, are essential for human health and well-being. Examples include when bees pollinate crops or when wetlands clean water. Describe three additional ecosystem services that you can think of.
- What characteristics make Gorongosa National Park a biodiversity hotspot?
- Explain why armed human conflicts are not ecologically neutral.
- The film provides an example of **agroforestry**: an agricultural system that integrates food crops with native trees and shrubs. Why might agroforestry be an important conservation tool?
- Describe some of the strategies that are helping farmers to transition to more sustainable agricultural practices.
- Collaboration between different people and groups is essential for effective conservation. Describe some specific examples of collaboration in the film and how they have been successful.

REFERENCES

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CREDITS

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