Exploring Geospatial Analysis and Conservation Strategies

Technology and Conservation: Saving Elephants in the Mara

ELEPHANAT

A Lesson in Geospatial Analysis and Community Action

A collared elephant

Masai Mara, Kenya

How does technology help save wildlife?

- Wildlife conservation now depends on advanced technology.
- We can track and protect animals in a new, powerful way.
- It's a way to connect with communities and solve conflicts.

OUR GOALS

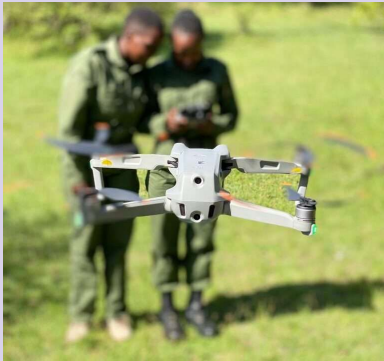**By the end of this lesson, you will be able to:**

- **Understand how technology is used to monitor wildlife.**
- **Explain the role of geospatial analysis in conservation.**
- **See the link between technology, conservation, and communities.**

A Real-World Case Study

The Mara Elephant Project

- **Located in the Mara ecosystem in Kenya.**
- **Uses GPS collars to track elephants in real-time.**
- **Uses a system called EarthRanger to view data and predict movement.**
- **Works with local communities to reduce human-elephant conflict.**

HANDS ON AND CREATIVE

Become a Conservation Designer

- **Activity 1: Create a Collar.** Design your own elephant tracking collar with new tech features.
- **Activity 2: Role-Play.** Step into a real-world conflict scenario and find solutions with technology.

Innovating software solutions to solve conservation's
most pressing operational challenges.

Activities: Data & Analysis

Become a Data Scientist

- **Activity 1: Map it.** Use Google Earth to map elephant habitats and migration paths.
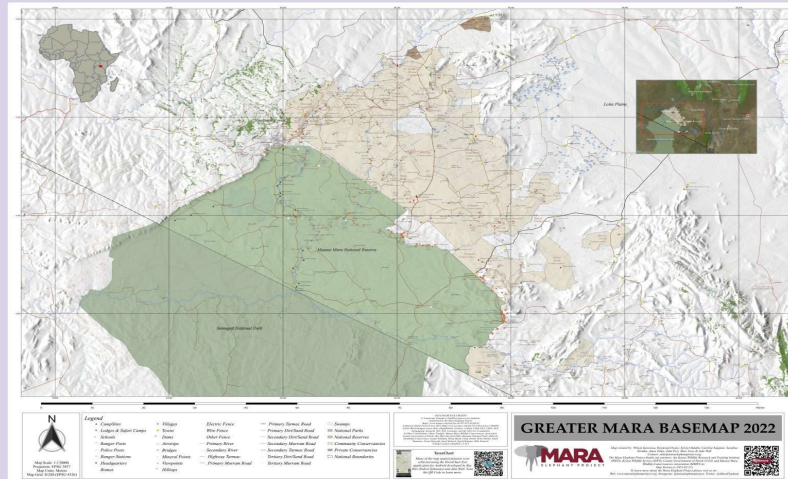- **Activity 2: Visualize the Data.** Analyze mock data to predict elephant behavior and find conflict zones.

RESEARCH AND INNOVATION

Become a Tech Innovator

- **Activity 1: Research.** Explore how technologies like RADAR and GPS work for conservation.
- **Activity 2: Innovate.** Design a new technology solution to solve a real elephant conservation problem.

GREATER MARA BASEMAP 2022

In Conclusion

The Interconnected World

- **Technology is a powerful tool for monitoring and protecting wildlife.**
- **Data helps us understand complex ecosystems.**
- **Community involvement is key to long-term success.**

Thank You & Next Steps

What can you do?

- **Task: Write a brief reflection on how technology can solve a local wildlife challenge.**
- **For more information on Geospatial technology contact @maraelephantproject**