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USAID PREPARED Project in East Africa
USAID/Kenya and USAID/East Africa

Summary

The United States Agency for International Development (USAID)/Kenya and East Africa PREPARED project addresses the need to improve data collection and use in protected areas in East Africa, where poaching has been an intractable problem. Challenges include lack of trust between some organizations and limited ability to use data for decision-making due to outdated and inconsistent information collection systems. PREPARED formed the Partnership with a range of stakeholders. Partners articulated their needs for technology to improve the collection and use of wildlife data which informed the design and testing of the Wildlife Information and Landscape Data application. This comprehensive, off-the-shelf data collection and reporting tool is now used by rangers of different literacy levels as they implement anti-poaching initiatives in the landscapes of East Africa.

Problem

Despite progress, anti-poaching efforts in East Africa are challenged by various factors associated with data collection and use, including:

- Lack of information-sharing and trust among national agencies, conservancies, and other conservation organizations.
- No common data standards or data repository, making it difficult to understand dynamics at the landscape level.
- Rudimentary data collection tools and methods for communicating incidents, making data collection, analysis, and use unnecessarily slow or ineffective.
- Limited use of analytics to understand poaching dynamics and how to adapt management approaches.
- Inconsistent perceptions of data accuracy by organizations working on the same landscape, including the extent of under- or over-reporting on endangered species at a regional or national level.
- Apathy and lack of trust among the public, partly due to poor communication.

Learning Question Addressed:

What are some successful examples of partnerships used to deliver competency-building activities, and what made them work?

Approach

USAID's PREPARED project convened the multi-stakeholder Anti-Poaching Partnership to discuss how information and communications technology could bolster anti-poaching efforts in East Africa. Partners included information and communications technology firms, government agencies, conservation organizations, and tourism-oriented businesses. Through facilitated workshops, the Partnership discussed opportunities for engaging communities in anti-poaching efforts through information and communications technology, including specific recommendations on expertise, technology, and resources. Partners reviewed existing tools for collecting wildlife data and felt these tools were either too complicated or lacked required features, such as real-time data transfer,

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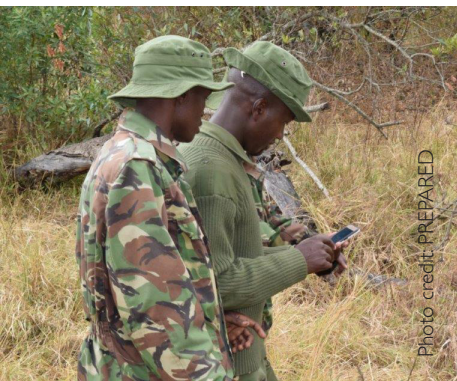
Rangers test data collection tools.

data collection on human-wildlife conflict, or the ability to easily share information across organizations. The Anti-Poaching Partnership requested development of a simple, off-the-shelf tool to allow semi-literate rangers to collect data quickly and accurately and transmit real-time data to headquarters. Partners also wanted the ability to easily share selected data among them. PREPARED and the Partnership worked with Kenya's Strathmore University to design, refine, test, and perfect the Wildlife Information and Landscape Data (WILD) application. The initial design was informed by recommendations from organizations whose scouts conducted wildlife patrols daily. Rangers then tested the tool and recommended refinements through four iterations of the software. A final version launched in September 2016.

Results

The two primary benefits of this work were significantly improved communication and trust among organizations that combat poaching on the same landscape and the successful roll out of an application that addressed the partners' needs and dramatically increased the usability of data. This application was made available for free on android-based smartphones via the Google Play Store.

The final WILD mobile application improves the effectiveness of East Africa's anti-poaching initiatives by:

- Allowing scouts or rangers to submit live reports on incidents such as poaching, animal mortality, and human-wildlife conflict. These incidents are tagged by location, time, and date.
- Tracking a unit's movement by taking GPS points and overlaying them on maps.
- Automatically transferring information and photos back to headquarters when a patrol has signal or storing information until a network or wireless connection is secured.
- Allowing managers to customize data collected.
- Storing information in a secure cloud-based database.
- Allowing users to share selected information with other organizations and make evidence-based management decisions.
- Allowing administrators to view reported incidences geospatially by patrol unit, time period, or incident type.

Lessons

- **The process of iteratively bringing stakeholders together to jointly inform the conceptualization and design of WILD yielded benefits beyond those initially anticipated.** Participants were able to establish consensus on historically sensitive issues and build trust for ongoing coordination. Prior to participating in the Partnership, some participants said it was challenging to communicate effectively with other organizations working toward similar goals in the same landscape, due to a lack of an appropriate platform. They are now able to communicate and coordinate on matters that extend beyond WILD.

- **WILD data must be secure to ensure information is used to promote conservation and does not fall into the wrong hands.** Conservancy organizations needed to be assured that their highly sensitive data would remain safe and secure, so WILD was encrypted and hosted on a secure server. Administrative access was pre-approved, password-protected, and a change record automatically generated and saved to record all modifications made. WILD has been designed and tested to ensure data is safe from both external and internal attackers, so users can focus on collecting data to protect wildlife.

- **Strong management capacity is required to ensure that rangers are recording the desired data.** Incoming data must be reviewed by management, so they can identify any needs for further data training for rangers. Unlike previous paper data collection methods, WILD allows managers to have a real-time check on what data rangers are recording. The process of rolling out such a data collection system can reveal gaps. Incentives, such as a simple rewards system for accurate data collection, can be helpful for encouraging consistent collection.

- **Rapid input and rapid access are essential for data tools. Allowing rangers to input data quickly enables them to focus on responding to incidents.** Real-time access to data is a high priority for intelligence efforts aimed at combating wildlife crimes strategically and effectively.

To learn more about PREPARED, visit: https://www.usaid.gov/documents/1860/support-planning-resilience-east-africa-through-policy-adaptation-research-and