**Project Overview**

There are over 225 million pastoralists in Africa, with 4-7 million pastoralists living in Kenya where livestock production accounts for US$800 million per year, or 24% of total agricultural output. Pastoralists migrate their livestock during dry seasons using traditional methods—such as scouting, word of mouth, and indigenous knowledge—that have inherent limitations and increasing unreliability due to climate shocks and land use changes. In PCI’s target areas, pastoralists are on average losing one third of their herd per year.

**In response, PCI created Satellite Assisted Pastoral Resource Management (SAPARM) to provide pastoralists with community grazing maps overlaid with current vegetation conditions using satellite imagery.** These maps provide critical information to empower pastoralists to make better decisions on where and when to migrate herds for grazing in order to reduce potential livestock loss and mitigate the effects of climate change.

**Key achievements in pilot phase:**

- **78%** used the maps for migration decision-making
- **52%** considered the maps their most important resource
- **48%** decline in herd mortality, resulting in a savings of over $5 million.

Through cross-sector partnerships with **USAID, Google.org, Fordham University** and **Hoefsloot Spatial Solutions**, PCI is currently expanding the field testing of SAPARM through a randomized control trial (RCT) covering a population of over one million people in Ethiopia and Tanzania. Early findings continue to reinforce pilot results and potential for

1. **Greater resiliency**
2. **Decreased livestock losses**
3. **Improved rangeland management**
4. **Reduced need for drought-related food aid**

PCI is currently developing the next evolution of SAPARM, a mobile application called **AfriScout** that will launch in Kenya in 2017. As access to smartphones continues to increase across Eastern Africa, the **AfriScout** app will offer pastoralists localized digital content and real-time vegetation and surface water conditions, eliminating the need for paper maps and creating long-term sustainability.