BACKGROUND

The U.S. Forest Service manages nearly 10% of the land in the United States including a diverse array of grasslands, Mediterranean and desert landscapes, and rangeland ecosystems. Rangelands are managed for multiple uses: forage for grazing and browsing animals, wildlife habitat, water, minerals, recreational opportunities, and biodiversity. In the face of development and climate pressures, the Agency works with land users to maintain resiliency within rangelands in order to provide these services for future generations. Rangeland management is critical to landscape level efforts to safeguard water. The U.S. Forest Service has over 100 years of experience managing grazing areas and was originally designated by Congress as the pioneer watershed and grazing management agency in the United States. In fact, U.S. Forest Service management systems have served as a model for other U.S. Government agencies concerned with natural resource conservation.

Today, U.S. Forest Service rangeland conservationists work on habitat provision, sustainable grazing, research, monitoring to improve rangeland health, and restoration of watersheds and ecosystem function. Rangeland management specialists work in partnership with communities and private livestock production businesses to ensure grazing management is sustainable. The U.S. Forest Service’s multiple-use ethic, scientific-based management approach, and close coordination with community livestock producers positions the Agency to provide technical assistance internationally on rangeland conservation.

PROGRAM OVERVIEW

In the Democratic Republic of Congo, as part of the U.S. Agency for International Development/Central Africa Regional Program for the Environment, the U.S. Forest Service supports the World Wildlife Fund, communities, and a ranching concessionaire. U.S. Forest Service teams are convening diverse stakeholders to develop a collaborative rangeland management plan and fire management plan for a fire adapted mosaic macro-zone (range and forest) within the Lac Tumba Landscape near Malebo. The joint rangeland management and fire management planning process helps restore degraded ecosystems, while facilitating collaboration and protecting key forested areas. Stakeholders are interested in both enhanced management and ecosystem health in rangeland macro-zones and increasing forest carbon stocks in endangered Bonobo habitat. Since 2009, U. S. Forest Service assistance has focused on training, convening fire management teams through steering committees, and long-term application of these principles in critical rangeland ecosystems in Lac Tumba.

Conserving rangelands in the Hashemite Kingdom of Jordan is incredibly important for the myriad ecosystem services they provide, including soil and water conservation. Land restoration to increase soil and vegetative cover, thereby protecting water throughout Jordan, requires long-term investment in natural
resource management. Jordan’s rangeland landscapes are extremely overgrazed, slowing vegetative growth and causing watershed degradation. The lack of vegetation causes catastrophic flooding and evaporation of scarce water resources. The U.S. Forest Service, in partnership with a local non-governmental organization, provides technical assistance on rangeland management in Jordan. U.S. Forest Service teams provide guidance on timing, duration and intensity of grazing, rangeland vegetation inventories, and restoration protocol in degraded rangeland areas.

In response to a growing international demand for technical assistance on rangeland management, the U.S. Forsest Service pioneered an annual *International Seminar on Rangeland Management* in 2014. The seminar presents key concepts, principles, and methods of sustainable rangeland management, designed to support international natural resource professionals working on sustainable management of grazing areas. Seminar participants learn about and develop planning tools and techniques to address rangeland vegetation and livestock management, interacting extensively with livestock producers and land-owners, land managers at state and federal agencies, and various citizen groups. The seminar was designed to stimulate deliberation and interactive problem solving, taking advantage of the rich experiences and diverse cultural points of view represented among program participants. Finally, the seminar also addressed emerging rangeland management practices and themes, including the role of healthy rangelands in mitigating and adapting to climate change.

Overgrazing is one of the most significant threats to the *Kingdom of Morocco’s* water security, impacting watersheds and natural resource health in the Middle Atlas region. The U.S. Forest Service and the Government of Morocco address overgrazing through the enhancement of rangeland management programs, fostering cooperation between local grazing communities and forest managers, and encouraging collaborative stakeholder involvement in the forest planning process. Additionally, these interventions integrate the socioeconomic interest of herding communities to promote long-term economic stability in rural areas. U.S. Forest Service technical assistance teams and partners in Morocco developed the first international Range School, a training and application platform designed to convene land managers and land users to discuss range science and create a sustainable rangeland management plan.

Pastoralism is deeply rooted in cultural identity in the *Federal Democratic Republic of Ethiopia*. Drought, soil erosion, overgrazing, poor land management practices, and climate change are all a threat to Ethiopia’s pastoral areas and the rural people who rely on rangelands to survive. For over a decade, in partnership with the U.S. Agency for International Development, U.S. Forest Service teams have assisted counterparts in Ethiopia with rangeland planning, remote sensing analysis and mapping for land use/land cover, field-based rangeland monitoring, prescribed fire for rangeland restoration, and invasive species management. Technical programs are focused in the Afar, Oromiya and Somali regions of Ethiopia to enhance resiliency of pastoral communities across the country.