

# Natural Resource Management

## U.S. Government's Global Food Security Strategy Activity Design Guidance

*This is one of several Activity Design Guidance documents for implementing the U.S. Government's Global Food Security Strategy. The full set of documents is at [www.feedthefuture.gov](http://www.feedthefuture.gov) and [www.agrilinks.org](http://www.agrilinks.org).*

### Introduction

The focus of this document is natural resource management for terrestrial food systems. The GFSS 2022–2026 aims to sustainably reduce global poverty, hunger, and malnutrition across three interconnected strategic objectives: inclusive and sustainable agriculture-led economic growth; strengthened resilience among people and systems; and a well-nourished population, especially among women and children. The GFSS recognizes natural resource management as essential to achieving its strategic objectives through Crosscutting Intermediate Result (CCIR) 5: Improved natural resource management, and CCIR 6: Improved water resources management. The GFSS also highlights “healthy ecosystems and biodiversity” and “enhanced climate change adaptation and mitigation” as complementary results that are necessary for improving food security and nutrition.<sup>1</sup>

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*Natural resource management refers to the management of natural resources, such as land, water, soil, plants, and wildlife, for sustainable human use.<sup>2</sup>*

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**Gender considerations in natural resource management:** Women and girls depend on and manage natural resources for a variety of purposes, including food and water security, livelihoods, and energy production. Yet, they face discrimination and barriers that limit their access to and use of natural resources. Inclusion of women and girls in natural resource management, decision-making processes, and resource tenure and ownership is key to generating more equitable benefits and meeting conservation goals. For instance, a study involving 31 villages in Indonesia, Peru, and Tanzania found that when forest user groups were required to include 50 percent or more women, they conserved more trees and shared benefits more equally from payment for ecosystem services interventions compared with groups that included 30 percent or fewer women.<sup>3</sup>

Natural ecosystems, like forests, mangroves, peatlands, and rangelands, provide a variety of essential benefits (collectively referred to as ecosystem services), such as soil formation, water cycling, pollination, pest control, wild foods, and insect protein, that are crucial to food security.<sup>4</sup> Natural ecosystems and resources are, therefore, important inputs into agricultural food systems. Natural ecosystems also underpin the resilience of food systems, providing benefits such as flood control, wind protection, local climate regulation, provision of water for irrigation, and control of soil erosion.<sup>5</sup>

Even as agriculture and food systems rely on natural resources, they also have significant climatic and environmental impacts. Today, about 38 percent of global land surface is used for food production;

of this, approximately two-thirds is used for grazing livestock and a third is cropland.<sup>6</sup> Notably, recent research concluded that food systems account for 34 percent of global greenhouse gas (GHG) emissions, and are a key driver of habitat and biodiversity loss due to land conversion.<sup>7,8</sup> These impacts are primarily due to agriculture and land use activities, such as land conversion, followed by supply chain activities, such as transport, retail, and waste management. Less than 10 percent of emissions come from primary production, with impacts spread unevenly across countries and among U.S. Agency for International Development (USAID)-funded activities. The agricultural sector also accounts for 70 percent of freshwater withdrawals every year.<sup>9</sup>

Unsustainable agricultural and natural resource management practices, particularly those that result in deforestation, pollution, overfishing, and overgrazing of rangelands, threaten the food security, nutrition, and livelihoods of millions of people.<sup>8</sup> Currently, about 1.2 billion people live in areas where severe water scarcity and droughts threaten irrigated agriculture, rainfed cropland, and pastureland.<sup>8</sup> More than 60 percent of land in Africa is already degraded, which could result in an estimated 60 million people being displaced by 2045.<sup>10</sup> Climate change amplifies many of these environmental issues, further increasing risks to food systems and threatening food security and nutrition, particularly for smallholder farmers and their families.<sup>8</sup>

Implementation of sustainable agricultural production practices—such as conservation agriculture in its diverse forms, crop rotation, integration of perennials and agroforestry, and water resource management—are crucial to improving productivity as well as the condition of natural resources and conserving ecosystem services.<sup>3,8</sup> These practices also have climate adaptation, climate mitigation, and agricultural profitability co-benefits. In addition, interventions across agricultural production and market systems—including improved land use planning and land and water resource governance—can foster sustainable natural resource use and support improved natural resource management at the landscape and farm/plot levels.<sup>11</sup> Notably, promoting clear, transparent, and secure land and resource rights and tenure can incentivize sustainable improvements in agricultural productivity and natural resource management, promote gender equality and women’s economic empowerment, promote stability and prevent conflict, support livelihoods, and enable on- and off-farm investment.<sup>12,13</sup>

With the human population projected to reach 10 billion by 2050, improved natural resource management is a critical foundation for sustainable food systems that can meet future needs. Smallholder farmers, who are estimated to produce about 35 percent of the world’s food, are highly dependent on the ecosystem service benefits provided by natural resources.<sup>14,15</sup> Protecting natural resource assets through improved governance and management supports smallholder producers and also presents opportunities to build economic capital, mitigate risks from climate change and other shocks, promote equity and inclusion, and increase returns on food security investments.

## Terminology and Context

Term	Definition
<b>Ecosystem services</b>	The benefits that people obtain from ecosystems. These include provisioning services (e.g., mangrove and estuarine habitats critical to fish stocks, forest foods, and water), regulating services (e.g., flood control), cultural services (e.g., places for recreation), and supporting services (e.g., soil formation). <sup>3</sup>
<b>Nature-based solutions</b>	Actions that protect, sustainably manage, and restore natural ecosystems to benefit nature and people by addressing societal challenges like climate change, food and water insecurity, and environmental degradation. <sup>16</sup>

<b>Climate-smart agriculture</b>	An integrated approach to address climate change and food security challenges with three objectives: (1) sustainably increasing agricultural productivity to support equitable increases in farm incomes, food security, and development; (2) adapting and building resilience of agricultural and food security systems to climate change at multiple levels; and (3) mitigating climate change by increasing carbon sequestration or reducing GHG emissions associated with agriculture. <sup>2</sup>
<b>Landscape</b>	A socioecological system characterized by physical, environmental, economic, institutional, and cultural resources. “Production” landscapes are multifunctional and provide different goods and services to various stakeholders. Landscape-level approaches take into account the needs and objectives of multiple, diverse stakeholders to optimize land use and management practices. <sup>17</sup>
<b>One Health</b>	A multisectoral approach that works at the local, regional, national, and global levels to improve health outcomes by recognizing the interconnection of people, plants, animals, and their shared environment. <sup>2</sup>
<b>Regenerative agriculture</b>	An approach that seeks to maintain or increase agricultural productivity while improving ecosystem health. Examples of regenerative agricultural practices include reducing tillage, decreasing use of chemical inputs, growing cover crops, and rotating crops. <sup>18</sup>
<b>Regenerative grazing</b>	A livestock management practice that involves rotating herds through multiple areas in short bouts of grazing interspersed with longer periods of recovery to boost regrowth of vegetation. <sup>19</sup>
<b>Sustainable intensification</b>	An approach that focuses on increasing agricultural productivity and incomes on the same amount of land while reducing negative economic, environmental, and social impacts. <sup>20</sup>
<b>Tenure</b>	The bundle of formal and informal rights and rules that determine how individuals, communities, and institutions access, use, and benefit from resources such as land, water, trees, and fisheries. For large areas in Africa, Asia, and Latin America, land tenure can be informal (derived from customary or community-based systems), formal (based on and enforced by written laws and procedures), or a combination of the two. <sup>21</sup>
<b>Tenure security</b>	The certainty that an individual’s rights to land and other resources will be recognized by others. Sources of tenure security include legal systems, community organizations (e.g., local farmers’ organizations and water user associations), and governments. <sup>21</sup>
<b>Common property resources</b>	Natural resources, such as forests, fisheries, and forage and grazing lands, that are owned and/or managed collectively by communities, countries, or societies. <sup>22</sup>

**Natural Resource Management Supports GFSS Strategic Objectives**

**Objective 1: Inclusive and sustainable agricultural-led economic growth.** The ecosystem goods and services provided by natural resources are essential inputs into sustainable food systems and serve as a critical foundation for inclusive, sustainable, agriculture-led economic growth. Investing in natural resource management through approaches like climate-smart agriculture, regenerative grazing, sustainable intensification, and sustainable fisheries management improves the condition of land and water resources, forests, and wild fisheries. It also builds natural resource assets and can provide a significant return on investment.<sup>2,17</sup>

A study in Uganda found that scaling up existing sustainable land and water management practices to cover 75 percent of agricultural land with a one-time investment of \$4.4 billion would generate an estimated \$4.7 billion annually in income for smallholders within three to five years of full implementation. These practices were also projected to improve food security and decrease land degradation.<sup>23</sup>

**Objective 2: Strengthened resilience among people and systems.** Sustainable natural resource management can provide critical ecosystem goods and services that strengthen resilience among people and systems in multiple ways. These include providing wild foods, which can augment diets, including when crop yields or income sources are compromised, buffering the impacts of extreme weather events on agriculture, regulating pest and crop disease outbreaks, and strengthening livelihoods through the provision of nontimber forest products that can supplement incomes.<sup>4</sup>

An analysis of almost 8,000 rural households in 24 tropical countries found that environmental income (income derived by extracting goods from noncultivated ecosystems) accounted for an average of 28 percent of total household income; the poorest households had a higher proportion of total income from environmental income compared with nonpoor households.<sup>24</sup>

**Objective 3: A well-nourished population, especially among women and children.** Natural resources provide a host of benefits that support a well-nourished population, including nutrient-rich aquatic and terrestrial wild foods, insect protein, and pollination. In particular, Indigenous Peoples' traditional food systems—grounded in harvesting local species and sustainable, climate-resilient agricultural practices—provide nutrient-rich foods.<sup>25</sup>

A study of households in 37 smallholder-dominated forested sites in 24 tropical countries found that in 11 and 13 sites households obtained a greater proportion of fruits and vegetables from forests compared with agriculture, and meat and fish from forests compared with domestic livestock and aquaculture. Among households that consumed large quantities of forest foods, these foods made a substantial contribution to nutrition.<sup>26</sup> Natural ecosystems also provide services that support nutritious diets. Animal pollinators improve the yield and quality of many crops that provide vitamin A, iron, and folate, such as avocado, mango, melon, and pumpkin.<sup>27</sup>

## Designing Activities

USAID's food security activities can integrate natural resource management through approaches that include climate-smart agriculture; sustainable intensification; improved soil, water, and vegetation management, including of pastures and watersheds; colocation of and blended funding for biodiversity and food security programming around protected areas; and strengthened land and resource tenure. The following guiding questions can help improve upon current integration approaches by addressing these challenges and opportunities in a more coordinated, systematic manner:

- 1. How does natural resource management contribute to the broader food system and food security and nutrition goals in the target geography?** Aspects to consider include how natural resources support a food security activity's priority value chains; the role of natural resources in overall food security and nutrition, for instance through the provision of wild foods, fodder, pasture, and pollination services; and how other donor and national development strategies and programming impact natural resources in the target geography. It is important to understand the ecosystem benefits that are most relevant for a particular value chain, to help target interventions. For instance, animal

pollinators increase both the productivity and quality of value chain crops like coffee, mango, and avocado. Activities that have pollinator-dependent value chain crops can consider assessing the status of animal pollinators as well as the condition of forests and other habitats that support wild pollinators, like birds in their target geography, and implementing measures to support pollinator populations.<sup>27</sup>

- 2. What is the role of natural resource management in helping the activity contribute to climate change adaptation and mitigation?** Climate-smart agricultural approaches that integrate natural resource management—such as agroforestry, no-till agriculture, forest and rangeland conservation and restoration, and improved water resources management—can help a food security activity support climate adaptation and mitigation objectives. Improving rangeland management in Ethiopia by creating reserve areas that exclude grazing and restore native vegetation in degraded areas improved the land’s potential for carbon sequestration.<sup>28</sup> Activities should work to avoid deforestation and degradation of carbon-rich ecosystems.<sup>2</sup> Projects should also pay explicit attention to strengthened landscape-level governance.<sup>29</sup> Ecosystem-based adaptation (EbA), a type of nature-based solution, can strengthen climate resilience and improve food security by maintaining natural ecosystems and the benefits they provide. Examples of EbA approaches include planting shade trees to improve soil fertility and support pollinators, restoring watersheds to maintain water supply for agriculture and livestock, and preserving vegetated buffers next to farm plots to protect crops from extreme weather.<sup>30, 31</sup>
- 3. What is the condition of natural resources at the farm/plot and landscape levels in the target geography? What threats to natural resources and drivers of unsustainable natural resource use exist at the farm/plot and landscape levels and how do they interact? What opportunities exist to improve sustainable natural resource management at the farm/plot and landscape levels?** Degradation of natural resources at the farm/plot and landscape levels can decrease crop and livestock productivity and increase the vulnerability of food systems to shocks and stressors. Consider assessing existing and projected climate impacts; the condition of soil, land, watersheds, forests, and fisheries; and the conservation status of species that provide pollination services and natural pest control. Because the complex interactions between food systems and natural resources are context-specific, modeling these interactions can help an activity systematically assess how natural resources affect the viability of value chains in a target geography. Situational models are a commonly used tool in USAID biodiversity programming that a food security activity can adapt to assess the economic, political, institutional, social, and cultural influences and factors that impact natural resources in the target geography.<sup>32</sup> This information can inform and guide targeted natural resource management interventions.
- 4. What strategic approaches may improve natural resource management at the farm/plot and landscape levels?** A food security activity should choose strategic approaches informed by factors including which ecosystem benefits support its priority value chains and the condition of local natural resources that provide these benefits. Digital tools can help support decision-making around strategic approaches. For example, to enable analysis of land cover and soil health and improve land management, the Land Potential Knowledge System (LandPKS) tool may be useful.<sup>33</sup> In Kenya, the SERVIR project has supported improved rangeland management and climate insurance products.<sup>34</sup> Other considerations include the affordability of and labor burden associated with implementing these approaches, as well as farmers’ tenure security, which can incentivize investments in these approaches. [USAID’s Sector Environmental Guidelines](#) provide information on how to improve natural resource management in the context of crop production and livestock production, including the interventions highlighted in Table 1.

Table 1. Illustrative interventions to integrate natural resource management in crop and livestock production.

Natural resource management goal	Illustrative interventions at the farm/plot level*	Illustrative interventions at the landscape level*
<b>Crop Production<sup>35</sup></b>		
Conserve land and water resources	Plant windbreaks; promote practices like agroforestry, composting, mulching, crop rotation, drip irrigation, and farmer-managed regeneration; increase rainwater harvesting; allow adequate fallow periods	Improve water resource management and land use planning; restore degraded watersheds and cropland
Prevent pollution of air, water, and land	Improve management of organic matter and soil amendments; promote organic fertilizers and responsible use of inorganic fertilizers and chemical pesticides; support alternatives to burning crop residue; implement integrated pest management	Plant riparian buffers; integrate terracing and tree planting in hilly areas; conserve/restore mangroves
Conserve and sustainably use biodiversity	Promote local and/or climate-resilient crop species and evidence-based, improved crop rotation or intercropping practices; provide pollinator habitat like flowering cover crops; improve management of organic matter and soil amendments; promote organic fertilizers and responsible use of inorganic fertilizers and chemical pesticides	Minimize land clearing for agriculture; avoid shifting cultivation in ecologically sensitive areas
<b>Livestock Production<sup>36</sup></b>		
Conserve land and water resources	Balance mix of foraging and grazing species; establish and enforce quota systems matched to ecosystem carrying capacity for livestock and wildlife; use local livestock species	Avoid overgrazing and grazing on marginal lands; incorporate grazing lands and marginal lands into land use planning
Prevent pollution of air, water, and land	Use manure as fertilizer; promote climate-resilient forage species; plant hedgerows or grass strips to trap or filter animal waste	Protect water sources from animal waste through herding techniques
Conserve and sustainably use biodiversity	Implement vaccination and other animal disease control techniques to reduce transmission of diseases from domestic species to wildlife; choose livestock species and breeds that have minimal overlap of fodder preference with local wildlife	Minimize fences that interfere with wildlife migration; minimize land clearing for pasture and expansion of grazing into protected areas; implement One Health approaches to prevent zoonotic disease outbreaks

\*Enhancing tenure security through improved land governance provides one of the necessary conditions to enable or incentivize individual or community-led decisions and investments in these interventions.

- 5. Who will benefit from natural resource management strategies within agricultural systems and what social, economic, or political factors may influence the distribution of benefits? What objectives should be included to ensure there are inclusive and equitable benefits, particularly for the poor, women, youth, Indigenous Peoples, persons with disabilities, and other marginalized and underrepresented groups?** Food security activities that include natural resource management strategies should ensure that these strategies do not create or exacerbate disparities in access to and control over resources or add to women's and girls' workloads. They should also identify opportunities to empower vulnerable groups and ensure their meaningful participation in resource governance. Activities should consider strategic interventions that achieve gender equality

and women's empowerment goals, while building on women's existing knowledge and roles in agriculture and natural resource management. Specific questions to ask about natural resource management strategies include:

- How will the strategy benefit or disadvantage poor households or groups and those in vulnerable situations?
- How will the strategy benefit or disadvantage women, youth, Indigenous Peoples, persons with disabilities, and other marginalized and underrepresented groups?
- How will the strategy affect gender and power dynamics (e.g., by benefitting one group over another or by increasing the likelihood of gender-based violence) and monitor any shifts in these dynamics? How can any negative impact be mitigated, and any progress be harnessed?

- 6. What are the existing resource governance rules, frameworks (policies, laws, regulations, and de facto situations), and actors within the target geography, and how do they enable or constrain effective natural resource management, tenure security, and poverty reduction within and beyond this geography? To what degree do these governance factors enable or constrain the participation of marginalized or underrepresented groups in natural resource management activities? Do these governance rules, frameworks, and actors take into account evolving climate change risks?** Understanding resource governance systems in the target geography can help an activity determine how factors such as insecure tenure drive unsustainable natural resource use in the context of food systems. When land tenure is insecure, farmers may hesitate to adopt practices like agroforestry and conservation agriculture that sustain land productivity over the long term because of uncertainty that they will benefit from their investments of time and money. Conducting a political economy analysis can help an activity identify key actors, local power dynamics and other information to support more nuanced analysis of key aspects of natural resource governance to inform more inclusive, effective management approaches.<sup>37</sup>
- 7. How can a food security activity improve tenure rules and inclusive resource governance in ways that enhance its outcomes and impact?** In a number of Feed the Future countries, food security activities have incorporated measures to strengthen land tenure, an enabling condition that can support more sustainable production practices for many value chains.<sup>12</sup> Secure tenure is a necessary, but not sufficient, condition, which can create incentives to make long-term investments, adopt diversification strategies, and participate in land rental markets, all of which can improve landholder resilience. In some contexts it may be appropriate to support recognition of private, individual rights while in other contexts activities to recognize the collective rights of Indigenous Peoples and other customary communities will be appropriate. Strengthening formal or informal land leasing can also help increase access to land. Activities should identify needs of local stakeholders, including smallholder farmers, women and youth, and any Indigenous Peoples, persons with disabilities, and other marginalized and underrepresented groups who are present but have traditionally been less involved in agricultural production and food systems and natural resource management. The Food and Agriculture Organization of the United Nations' (FAO) [Voluntary Guidelines on the Responsible Governance of Tenure](#) provides guiding principles for land tenure and resource governance to support food security.
- 8. Who are effective partners to engage in this activity?** A priority for food security activities that integrate natural resource management is to coordinate and, where possible, integrate with other sectors within USAID to achieve multisector objectives. Coordinating with water and natural resource management-related stakeholders to manage, conserve, or restore a watershed can help activities meet agriculture, climate adaptation, and water, sanitation, and hygiene objectives. Design teams should consider partners that work across a range of scales and leverage a variety of natural resource management tools. These partners can include corporations that contract with smallholders and adopt

environmental, social, and governance standards; national governments that set the laws and policies for land tenure and water management and climate change commitments in-country; local nongovernmental organizations and universities that provide context-specific knowledge about the status and management of natural resources; environmental defenders who create transparency into what can otherwise be hidden drivers of natural resource degradation; and local governments that can exercise strong influence over land conservation and management. [Climate finance opportunities](#) may help advance natural resource management and food security and have the potential to unleash private and public capital to advance natural resource management and food security activities, as well as USAID's climate strategy targets.

- 9. How can the activity's monitoring, evaluation, and learning plan capture natural resource management actions and their impacts?** To capture these actions and their impacts, a food security activity may consider enhancing the two most commonly used standard indicators, "number of people using improved management practices or technologies" and "number of hectares under improved management practices or technologies." Enhancements include disaggregating these indicators by specific practices, results, or other factors, such as "number of farmers adopting/hectares under mixed cropping and crop rotation practice" and "number of farmers adopting/hectares under improved water use efficiency." Activities can also consider custom indicators that capture benefits from integrating natural resource management, such as "people with improved crop or livestock production benefits derived from sustainable natural resource management" or "hectares with improved ecosystem function." [USAID's Health, Ecosystems, and Agriculture for Resilient, Thriving Societies \(HEARTH\) monitoring toolkit](#) provides a suite of indicators that can capture the benefits of integrating natural resource management. Food security activities that expect to reduce agriculture-driven deforestation and associated carbon emissions, or increase carbon sequestration through expanded agroforestry, can consider using the relevant standard indicators, "greenhouse gas emissions, estimated in metric tons of CO2 equivalent, reduced, sequestered, or avoided through sustainable landscapes activities" and "number of hectares under improved management expected to reduce greenhouse emissions."

## Programming in Practice

USAID's investments in improving natural resource governance and management in the context of food security programming focus on implementing approaches that increase the sustainability of food systems, minimize negative impacts on the environment, and promote more inclusive approaches. The following programming examples illustrate the diversity of these investments:

**Feed the Future Ghana Agriculture and Natural Resource Management (AgNRM, 2016–2018):** AgNRM took an integrated, landscape-level approach in northern Ghana to improve food and nutritional security, increase farmer and community security/access to land, strengthen environmental stewardship, and increase income from natural resource products. The activity worked with eight of Ghana's Community Resource Management areas to improve soil fertility and pest management; partner with the private sector to develop a market for natural resource value chains; help farmers implement climate-smart agricultural approaches; and provide training to prepare nutrient-dense meals using local food ingredients. The activity addressed land conflict and insecure tenure rights by working with local leadership structures, community associations, and faith leaders to increase cooperation between customary and government decision-makers and harmonize land and resource tenure frameworks. AgNRM helped women's groups acquire long-term tenure rights and increased access to finance by supporting over 100 village savings and loan associations. AgNRM trained over 4,100 farmers in improved agricultural practices; proposed, adopted or implemented 30 land use plans; and assisted 238 food security private enterprises. Under this activity more women than men adopted natural resource management measures, which it attributed to improving land tenure security among women, supporting



agricultural extension services for women, and designing climate-smart agricultural strategies with the feedback of female farmers.<sup>38</sup>

**Feed the Future Honduras ACCESS to Markets (MERCADO, 2015–2019):** This activity worked at the farm, household, and community levels in western Honduras to enable economic growth and improve nutrition among smallholders. The activity matched local, regional, and international buyers with small suppliers of higher-value crops, including fruit, coffee, vegetables, and root crops. MERCADO promoted uptake of renewable energy to reduce pressure on forests, and promoted drip irrigation and integrated pest management. It trained over 1,000 students in partnership with agricultural technical institutes. Alongside MERCADO, USAID/Honduras supported complementary programming to improve landscape-level management of the forests and watersheds in the region that are crucial to food security activities. The Mission’s *Gobernanza en Ecosistemas, Medios de Vida y Agua (GEMA) Activity (2016–2020)* helped establish 413 ecosystem services compensation mechanisms and protect 58 micro watersheds, totalling over 4,500 hectares, to improve watershed and forest management and promote agroforestry. MERCADO participants experienced significant increases in per capita income compared with baseline income, with the greatest increases (114 percent) seen among the poorest households.<sup>39,40</sup>

**Feed the Future Ethiopia Pastoralist Areas Resilience Improvement and Market Expansion (PRIME, 2012–2019):** PRIME worked with pastoral communities in the drylands of Ethiopia to increase resilience to environmental shocks. The activity improved livestock health and productivity, strengthened management of natural resources, secured pathways to alternative livelihoods, and improved nutrition for mothers and children. The activity used new technologies and management practices to improve livestock health, revitalized Rangeland Councils to rehabilitate rangelands, established Participatory Scenario Planning groups to help communities incorporate climate forecasts into local planning processes, provided vocational training to people transitioning out of pastoralism, facilitated access to financial services, and collaborated with the government to train healthcare workers on improved maternal and child nutritional practices. Through PRIME, 2.2 million marginalized people enhanced their resilience to environmental shocks and stresses, and households in target areas increased their nominal income by 78 percent. Despite severe droughts during the period of performance, PRIME-targeted households experienced only a 4 percent decline in food security versus 30 percent in other households. The activity also worked with Rangeland Councils to improve the condition of over 42,000 hectares of rangeland through practices such as clearing invasive species, establishing dry season grazing reserve areas, and rehabilitating water points.<sup>41</sup>

## Additional References and Tools

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***For further assistance related to these Activity Design Guidance documents, please contact [ffguidance@usaid.gov](mailto:ffguidance@usaid.gov).***