Impact Case Study

Integrating SEADS and LEGS: A Holistic Approach to Strengthening Crop – Livestock Livelihoods in Somaliland

Somaliland is prone to recurrent droughts, which cyclically undermine livelihoods, food security and livestock productivity. These shocks disproportionately affect vulnerable communities whose survival depends on a combination of crop production and livestock assets. During drought periods, declining agricultural production, limited water availability and reduced access to animal feed place additional pressure on livestock-dependent households and working animals. For donkey-owning households, these conditions can result in inadequate access to feed and water, deterioration in donkey body condition and welfare, and reduced capacity of donkeys to perform essential household and livelihood functions. Working animals, particularly donkeys, play a critical role in sustaining household economies through the transport of water, goods and agricultural inputs.

Vétérinaires Sans Frontières Germany (VSF Germany), with funding from Brooke East Africa (BEA) and The Donkey Sanctuary (TDS), therefore implemented a livelihoods intervention targeting equine-dependent communities, with a specific focus on improving donkey welfare while strengthening household resilience to drought-related livelihood pressures. Initial assessments identified high concentrations of donkey users in Taysa, Wajaale, Gabiley, Toon and Gumburaha districts, where livelihoods are closely tied to both agriculture and working animals. The intervention sought to support household access to agricultural production and income while indirectly improving the capacity of donkey-owning households to maintain adequate care and welfare for their working animals. A total of 247 households owning 918 donkeys were targeted through integrated support, including the distribution of 1,703 kg of yellow maize seed and 481 tractor hours.

This intervention was deliberately designed to integrate the Standards for Supporting Crop-related Livelihoods in Emergencies (SEADS) and the Livestock Emergency Guidelines and Standards (LEGS), recognizing the interdependence between crop and livestock systems. The approach ensured that benefits extended to both human consumption (grain production) and livestock feeding (maize leaves as fodder), thereby strengthening overall household resilience.

Assessment and Design (SEADS Integration)

The intervention was grounded in SEADS principles and minimum standards for crop-related crisis response. In line with SEADS Principle 3: Commit to preparedness and early action, the project aimed to support communities in preparing for the dry season through timely fodder production. This was particularly important as farmers often prioritize other livestock species over donkeys during periods of scarcity.

A participatory approach (SEADS Principle 2) was employed throughout the assessment process. VSF Germany engaged Village Development Committees (VDCs), local farmers and the Regional Veterinary Coordinator to identify appropriate interventions. Through consultations and field visits, yellow maize was selected as the most suitable crop for fodder production considering climate conditions and resilience to drought.

Beneficiary selection criteria were shared with the Village Development Committee (VDC), including ownership or use of a donkey as a source of livelihood, previous farming experience, access to land and water resources, and demonstrated need for support. The VDC identified potential beneficiaries based on these criteria. Subsequently, government officials and VSF Germany project staff jointly verified the selected beneficiaries to confirm their eligibility and ensure that the intervention targeted

households with the capacity to engage in farming and fodder production to strengthen their livelihoods and improve donkey welfare.

In alignment with SEADS Minimum Standard 1 (Assessment Timing and Team Competency), a multidisciplinary team was assembled, including a veterinarian and a local agricultural expert specializing in crop systems and seeds. This ensured technical rigor in assessing seed quality, local agricultural practices and suitability of interventions.

Under Minimum Standard 2 (Participatory Assessment Approach), field assessments confirmed that targeted farmers had:

- Access to arable land of sufficient quality
- Availability of tools, equipment, and infrastructure
- Adequate skills and experience in crop production
- Functional local value chains, including seed suppliers, extension agents and transporters

Gabiley region, known for indigenous maize production, was identified as a reliable source of high-quality seeds. The assessment further confirmed that seed systems were functional, enabling a Direct Seed Distribution (DSD) approach as the most appropriate response.

Response Implementation (SEADS–LEGS Integration)

Based on assessment findings, the intervention combined seed distribution and mechanized land preparation. Farmers received yellow maize seeds alongside tractor support to ensure timely planting.

In accordance with SEADS guidance, the response was implemented ahead of the planting season. Seed distribution and tractor services were delivered in early August, prior to the onset of rains in late August and September, ensuring farmers were fully prepared for planting. This timely intervention enhanced crop establishment and productivity.

While formal data and figures are not yet available, anecdotal evidence from a LEGS perspective indicates that the intervention directly contributed to livestock survival and welfare by addressing feed shortages during drought periods. Although the primary focus was on donkeys, the maize crop produced served a dual purpose: grain for human consumption, improving household food security and income; and leaves and crop residues for livestock feed, benefiting donkeys.

Importantly, field feedback indicated that other livestock species, especially cattle, sheep and goats, also benefited from the fodder, often sharing the same feed resources with donkeys. This highlights the integrated nature of farming systems in Somaliland, where crop residues are a critical feed source across species.

By aligning SEADS (crop production) and LEGS (livestock support), the intervention strengthened both livelihood resilience and animal welfare.

Outcomes and Impact

Based on anecdotal information, the integrated intervention produced several key outcomes:

- Improved food security: households benefited from maize grain for consumption and potential market sale.
- Enhanced livestock welfare: The availability of fodder improved the body condition and work capacity of donkeys.
- Increased resilience: farmers were better prepared for dry seasons through locally produced feed resources.
- Strengthened seed systems: the use of indigenous seeds supported local markets and sustainability.
- Cross-species benefits: cattle and other livestock also accessed fodder, amplifying the intervention's impact.

The dual-purpose nature of maize production showed highly effective in addressing both human and animal needs simultaneously.

One of the beneficiaries who is called Jama Ali said "*When we grow maize, it can help feed our families and provide fodder for our donkeys. Support with seed and land preparation gives us a way to prepare for the dry season and care for the animals that help us earn a living*."

A government official from Ministry of Livestock and Rural Development also said ""*A good response does not separate household food security from animal welfare. It recognises that crops, livestock and livelihoods are connected and plans for them together.*"

Lessons Learned

1. Integration of SEADS and LEGS enhances impact: combining crop and livestock interventions creates synergies that improve both food security and animal welfare. Standalone approaches are less effective in mixed farming systems.
2. Dual-purpose crops are highly valuable: selecting crops like maize that provide both grain and fodder maximizes resource efficiency and benefits across livelihood systems.
3. Timeliness is critical: delivering inputs before the planting season (August before September rains) significantly improves outcomes and aligns with both SEADS and LEGS best practices.
4. Participatory approaches improve relevance and ownership: engaging communities and local institutions ensures interventions are context-specific, accepted and sustainable.
5. Donkey-focused interventions must consider broader livestock dynamics: although the project targeted donkeys, other species (especially cattle) shared the fodder. Future programming should explicitly account for multi-species needs.
6. Local seed systems should be prioritized: sourcing indigenous seeds from local markets (e.g., Gabiley) enhances sustainability, reduces costs and strengthens local economies.

Conclusion

This intervention demonstrates the effectiveness of integrating SEADS and LEGS frameworks in addressing the interconnected challenges of drought, food insecurity and livestock welfare in Somaliland. By supporting both crop production and livestock feeding systems, VSF Germany successfully delivered a holistic, timely and context-appropriate response that strengthened resilience among vulnerable communities.

The approach highlights the importance of moving beyond sectoral silos and adopting integrated livelihood strategies that recognize the close relationship between humans, crops and animals particularly in drought-prone environments like Somaliland.

Maize leave harvested for livestock fodder © Abdirahman

By: Abdirahman Mohamed Ali

LEGS case studies demonstrate good practice in livestock emergency response. They cover the six LEGS Technical Intervention areas, the eight LEGS Principles as well as the broader contexts covered in the third edition of the LEGS handbook. **Process case studies** illustrate the application of LEGS guidance and **impact case studies** reflect on the outcomes of LEGS interventions.

► You can access all of the LEGS case studies at livestock-emergency.net/resources/case-studies

► For more information see the Livestock Emergency Guidelines and Standards Handbook at livestock-emergency.net