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## Sustainable Agricultural Livelihood Restoration, Rehabilitation and Resilience in Kenya

### Guidelines on Sustainable Ruminant Feeds and Nutrition Security for Kenya

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#### CHAPTER 4 STRATEGIC INTERVENTIONS TO ADDRESS RUMINANT FEED AND NUTRITION INSECURITY

##### 4.5.1 Strategic Livestock feed management through phases of the drought cycle

This is a summary of the feed interventions at different phases of the drought cycle. These interventions aim to mitigate the impact of drought on livestock by ensuring sufficient feed supply, strategic planning, and emergency assistance during relief stages, and promoting recovery and reconstruction in the aftermath of drought. Selection of appropriate interventions and feed options depends on factors such as the availability of local resources, the specific livestock species and production levels, as well as the management practices, production systems, and locality.

##### PHASE1. Mitigation - Normal phase

**Description:** Weather conditions are good, adequate rainfall and available forage, natural grazing and existing feed sources meet nutritional needs

##### Interventions

- i. Opportunity to increase area under pasture and fodder production for biomass yield and quality
- ii. Contingency feed planning and budgeting with well-defined triggers for response
- iii. Feed bulking, preservation and conservation, hay, silage haylage and reserved Standing hay
- iv. Feed Infrastructure development logistical planning, hay stores, feed centers and water at farm level and along stock routes in ASALS
- v. Producers and stakeholder capacity building on feed security
- vi. Diversified options for feed production, including irrigation and adopted varieties for drought
- vii. Best technologies in feed preparation and processing
- viii. Grazing management and planning with grazing management committees to develop Wet and dry season grazing plans



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#### PHASE 2 - Preparedness – Alert/alarm phase

**Description:** Early warning (KMD, NDMA, and other agencies) Signs of feed scarcity and reduced forage availability

#### Interventions

- i. Assess available forage resources and estimate carrying capacity.
- ii. Develop contingency plans for feed supplementation.
- iii. Conduct soil and pasture assessments.
- iv. Implement rotational or planned grazing management practices
- v. Educate livestock owners about drought management strategies
- vi. Enhance livestock offtakes and destocking programmes
- vii. Trigger community dialogues for resource sharing and conflict management
- viii. Strategic stocking of feeds in feed centres and supplementary feed supplies
- ix. Commercial feed bulking, subsidised feed business Credit availability for investment and marketing for stable feed industry
- x. Improved feed utilisation also explore crop residues feeding and utilisation
- xi. Fortification of stable, straws and hays and enhanced feed block manufacturing
- xii. Trigger grazing management plans, planned grazing and paddocking within demarcated range blocks

#### PHASE 3 – Relief emergence phase

**Description:** Impacts of the drought are more pronounced, forage resources are critically limited, and rangeland conditions severely degraded. Interventions during this stage focus on survival and minimising the impact on livestock this characterised by livestock market losses, Livestock body deterioration and deaths.

#### Interventions

- i. Implement supplementary feeding programs including conserved Hay and silage feeding
- ii. Conduct feed analysis for strategic feeding as per animal requirement for Maintenance – strategic feeding
- iii. Explore alternative feed sources Industrial wastes and crop residue utilisation
- iv. Adjust stocking rates and implement destocking strategies.
- v. Prioritise feed resources based on animal condition and productivity.
- vi. Provide emergency feed assistance; emergency livestock feeding – Survival mash, UMMB, Range cubes , demystified blocks
- vii. Collaborate with local feed suppliers and farmers for linkages



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- viii. Offer technical support and guidance to livestock owners
- ix. Herd segregation, migration, moving animals to feeding camps and enhance animal health interventions

#### **PHASE 4: Reconstruction or recovery phase**

**Description:** Conditions gradually returning to normal after impact of drought

#### **Interventions**

- i. Assess rangeland condition and implement rehabilitation measures.
- ii. Develop long-term feed management plans.
- iii. Promote sustainable grazing practices.
- iv. Support restocking and herd rebuilding efforts.
- v. Continue education and training programs for livestock owners.
- vi. Enhanced feed production using innovations, technologies, and improved farm practices
- vii. Capacity building of livestock feed value chain actors
- viii. Develop enabling policies
- ix. Planned deliberate restocking of various livestock species
- x. Explore alternative pasture sources and livestock feed TIMPs adoption
- xi. Continuing education and training programs for livestock owners on sustainable feed and grazing management practices.