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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 5 FEED AND NUTRITION SECURITY OUTPUTS, OUTCOMES AND IMPACTS**

##### **5.3 Outcomes**

1. **Cost savings:** When animals are more efficient at converting feed into body mass, it reduces the amount of feed required per unit of output. This leads to cost savings for farmers and producers by lowering feed expenses, which can significantly impact their profitability.
2. **Improved profitability:** Increased feed productivity can directly contribute to higher profitability in the livestock industry. By reducing production costs and maximising output, farmers can enhance their financial performance and achieve better returns on their investments.
3. **Enhanced resource efficiency:** Efficient feed utilisation means fewer resources are required to produce the same amount of animal products. This includes land, water, energy, and feed ingredients. By optimising resource efficiency, increased feed productivity promotes sustainability and reduces the environmental footprint of livestock production.
4. **Enhanced competitiveness:** Improved feed productivity enhances the competitiveness of the livestock industry. By optimising production efficiency, farmers can offer high-quality products at competitive prices, both in domestic and international markets. This can lead to increased market share and business opportunities.
5. **Animal welfare benefits:** When animals receive better nutrition through increased feed productivity, it positively impacts their health and welfare (Appendix 6). Adequate and balanced diets promote optimal growth, reduce the risk of diseases, and contribute to overall well-being and quality of life for the animals.
6. **Reduced environmental impact:** Higher feed productivity can lead to reduced environmental impact associated with livestock production. By minimising resource inputs and waste generation, such as manure and greenhouse gas emissions, it supports more sustainable and eco-friendly farming practices.
7. **Improved resilience to climate change:** Climate change can impact the availability and quality of natural forage, affecting livestock productivity. By diversifying feed sources and implementing climate-smart feeding practices, such as conservation agriculture and agroforestry, livestock farmers can enhance the resilience of their operations to climate change.
8. **Reduced overgrazing and land degradation:** Insufficient livestock feed can lead to overgrazing as animals search for food, putting pressure on the available grazing lands. This can result in land degradation, soil erosion, and loss of biodiversity (pasture condition scoring [PCS]) (Appendix 7). Sufficient feed availability can help reduce the burden on grazing lands and promote sustainable land management practices