

Ministry of Agriculture and Livestock Development Sate Department for Crop Development P.O Box 30028, Nairobi



Emergency Locust Response Program Ko





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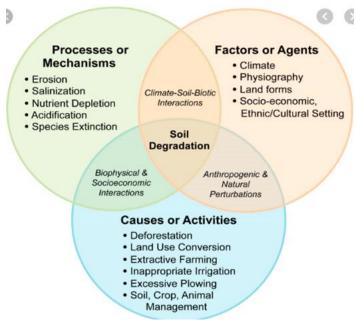
## Sustainable Agricultural Livelihood Restoration, Rehabilitation and Resilience in Kenya

### **Training Manual**

#### 2.2.1 SUB-MODULE 1: LAND DEGRADATION AND SUSTAINABLE AGRICULTURE

#### Introduction

**Degraded land** is defined as land characterized by persistent decline or loss in biodiversity and ecosystem functions and services that cannot fully recover unaided within decadal time scales. Restoring degraded land can include many different types of practices that ultimately restore ecosystem functions. Some examples include implementing soil and water conservation practices, planting the right tree in the right place, increasing above and below ground biodiversity, conservation of natural vegetation, among many others. The Global Land Outlook highlights that land restoration has multiple benefits, including "reversing past land and ecosystem degradation while creating opportunities that improve livelihoods and prepare us for future challenges. Degradation of semi-natural and natural lands has received heightened attention as a global policy problem. Recent advances in supporting farmer innovation to restore land have been illustrated in a five-step guide for applying the options by context approach to land restoration at the World Agroforestry Centre (ICRAF).



**Figure 2.3.** Soil degradation

### Soil Degradation and Sustainable Agriculture

Soil degradation is the temporary or permanent lowering of the productive capacity of soil due to overgrazing, deforestation, inappropriate agricultural practices, over exploitation of fuel wood leading to desertification and other man-induced activities. All processes of soil



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degradation are grouped into six classes:

- Water erosion
- Wind erosion
- Soil fertility decline
- Salinization
- Waterlogging
- Lowering of the water table.



**Gulley Erosion** 



Water logging



Soil moisture stress



Bare soil/loss of biodiversity