

SUSTAINABLE MANAGEMENT OF RANGELANDS IN TANZANIA

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Characteristics of the rangelands

- **Approx. 50% of Tanzania's land area;**
- **Arid or semi-arid, 400 to 800mm of rain p.a.;**
- **Contain inland drainage wetlands;**
- **Support substantial proportion of human and livestock population;**
- **Predominantly occupied by Maasai tribesmen;**
- **Traditional occupation is nomadic pastoralism;**
- **Commonly referred to as Maasailand or Maasai Steppes.**

Questions being answered

- **What does climate change mean for women and men?**
- **Are there differences?**
- **How can gender and climate justice be ensured?**
- **How is vulnerability to climate change gender dependent?**
- **What can be done to mitigate these changes and disparities?**

Causes of climate change

- **Rinderpest scourge at the turn of the 20th Century;**
- **Large scale bush clearing to control tsetse flies;**
- **Restricted burning and overgrazing;**
- **Introduction of Villagization Programme;**
- **Imposition of new settlement and land use pattern.**

Indicators of Climate Change

- **Temperature rise by approx. 0.2 degrees;**
- **Declining annual total rainfall since 1970;**
- **Expanding dryland areas;**
- **Retreat of inland drainage lakes;**
- **Increasing salinity in fresh water wells;**
- **Intrusion of salt water from Indian Ocean;**
- **Subsidence of coastal islands;**
- **Decline in snow cover on Mt Kilimanjaro.**

Impacts of climate change

- **Abandon traditional resource management systems;**
- **Decline in rangeland condition;**
- **Destruction of water sources;**
- **Reduced livestock units per household.**

Mitigation and adaptation

- **Change in lifestyle to agropastoralism;**
- **Expansion of cropping at expense of grazing;**
- **Improvement of crop yields by expanding cropland;**
- **Switch from traditional protein diet to cereal consumption;**
- **Movement of livestock to search pasture and water;**
- **Migration of men to urban areas.**

Gender implications

- **Mainly men move around with livestock;**
- **Men perpetually have access to livestock products;**
- **Women and children stay in the villages;**
- **Women and children have limited access to livestock products;**
- **Women travel long distances in search of fuelwood;**
- **Changes in Maasai family cohesiveness;**
- **Women travel long distances to search water.**

What to Do: Introduction of group ranches

- **Group ranches were first introduced in early 1970s;**
- **Were incompatible with traditional institutional structures;**
- **Were overtaken by the Villagization Programme in 1975;**
- **Need to protect remaining (traditional) grazing lands;**

- **Instill soil conservation and integration crop and animal production;**
- **Need for strategic approach involving key stakeholders (women) to articulate key issues.**

What to Do: Introduction of rotational grazing.

- **Maasai have evolved sustainable livestock husbandry;**
- **Overstocking produces aridity and reduces disease incidences;**
- **Prefer seasonal losses from starvation to continual and greater losses from diseases;**
- **Truly pastoral villages be allocated areas for rotational grazing;**
- **Ensure well-planned watering points and veterinary services;**
- **This will ensure equal and sustainable access to livestock products to both gender.**

Conclusions and Recommendations

- **Tanzanian rangelands are marginal for rain-fed agriculture;**
- **Villagization encouraged cropping at the expense of grazing;**
- **Extensive cropping destroyed grazing and water sources;**
- **New land use pattern led to long range livestock grazing;**
- **New grazing pattern created disparity between gender;**
- **Group ranches or rotational grazing recommended as solution.**