## Agriculture Laws and Policy Responsiveness to Climate Change



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#### Introduction

Climate Change is the most serious global issue of our time and the single greatest challenge facing environmental regulators.

UNFCCC defines **climate change** as a "change of climate that is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and that is in addition to natural climate variability observed over comparable time periods".



#### Introduction

Responses to climate change can either be in the form of **Adaptation or Mitigation**. These two responses are greatly associated with policy and legislative arrangements, appropriate technology transfer and financing/investments.

Adaptation refers to an adjustment in natural or human systems in response to actual or expected climatic stimuli or their effects that moderate, harm or exploit beneficial opportunities.

Climate change mitigation encompasses the actions being taken, and those that have been proposed, to limit the magnitude and/or rate of long-term global warming induced climate change. Climate change mitigation generally involves reductions in human (anthropogenic) emissions of green house gases (GHGs) and also by increasing the capacity of carbon sinks e.g., through reforestation.



These two responses goes hand in hand with policy and legislative arrangements, appropriate technology transfer and financing/investments.



#### **Relationship between Agriculture and climate change**

Agriculture is ranked as the largest source of GHG gasses contributing up to 30% of emissions in Kenya. The livestock sector generates 90% of agriculture's GHG emissions.

Rain fed Agriculture is very vulnerable to increasing temperatures, droughts and floods, which reduce productivity.

The National Climate Change Response Strategy (NCCRS) highlights various measures for adaptation and mitigation to the impacts of climate change on agriculture.



## **Relationship between Agriculture and climate change**





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### **Agriculture Policies and Laws in Kenya**

- Strategy for Revitalizing Agriculture (SRA), 2004-2015
- Agricultural Sector Development Strategy (ASDS), 2010-2020
- The National Food and Nutrition Security policy
- The Agriculture, Fisheries and Food Authority Act No. 13 of 2013,
- The Kenya Agricultural and Livestock Research Act No. 17 of 2013 and
- The Crops Act No 16 of 2013



#### **Agriculture Policies and Responsiveness to climate change**

#### **Responsiveness:**

- The laws and policies recognizes that the natural environment is the basis of all production and that continued degradation of the environment and natural resources constitutes a major challenge to economic development.
- They also recognize that to increase productivity in the medium altitude and moderate-rainfall areas it will require better selection of crops, adoption of improved technologies, and better crop husbandry. It states that these areas require better planning, careful selection of farm enterprises and greater investment in infrastructure.
- Promotes improved pastoralism practices like drought resistant breeds and smaller more productive herds .
- Promotes diversification of livelihoods.



#### **Agriculture Policies and Responsiveness to climate change**

#### **Responsiveness continued:**

- Promotes on-farm forestry and conservation of natural environment including the introduction of commercial tree species in ASALs.
- Strengthens and promotes research and capacity building.
- Improving land use and crop production.
- Value addition for increased benefits to farmers.
- Promotes improving agribusiness and market access.
- Ensures dynamic equilibrium of agricultural land through sustainable land-use practices and environmental conservation including Integrated Development and Management of Rangelands.
- Promotes the rehabilitation and protection water catchments.



#### **Responsiveness continued:**

- Rainwater harvesting and storage for Agriculture.
- Strategizes in investing in targeted ASAL development programmes to increase the area under cultivation.
- Enhances conservation and management of resources.
- Promotes the Implementation of the national climate change response strategy.
- Developing and implementing appropriate mechanisms for protecting, conserving and sustainably managing forest resources.
- Strengthening forest and wildlife research, extension and training.
- Lays emphasis on strategies aimed at enabling local communities to effectively adapt to climate change and reduce impact on food and nutrition security.



#### **Responsiveness continued:**

- Institutionalizes drought management, creating institutions such as Drought Management Authority and Drought Contingency Fund that will ensure rapid response to climate change related calamities such as drought in ASAL areas.
- Adopts a risk management approach which is anticipatory and preventive and not reactive.
- Systematizes the use of drought preparedness, prevention and mitigation measures to cushion the negative impacts of droughts on development dynamics.
- Directs resources on preparedness for drought and floods through a variety of capacity building programs that can enhance awareness and capabilities at all levels.
- Promotes the sinking of boreholes in the ASALs to support irrigation schemes.
- Promote rainwater harvesting to ensure water is available for irrigation and livestock use, more so in the ASALs.



#### **Agriculture Policies and Responsiveness to climate change**

#### Non Responsiveness:

- Lack of targets relating to environmental impacts of agriculture.
- Intensifying and expanding irrigation. It does not factor in the impacts of traditional irrigation to the environment and that climate change will aggravate the issue of water availability.
- Promotes the increased use of fertilizers and mechanization which will result in increased production of GHGs.



### **Conclusions.**

- There is need to navigate towards a 'safe operating space' that provides adequate food and nutrition for everyone without crossing critical environmental thresholds.
- The current and emerging climate-related hazards need to be researched and managed to minimize their negative impacts and to take advantage of the opportunities they present.
- There is urgent need to address the potential inconsistencies in the adaptation and mitigation strategies to climate change by shifting from a sectoral perspective to a holistic and integrated approach.
- The integration of indigenous and scientific knowledge can enhance a community's resilience to the impacts of climate change.
- To a larger extent the Kenyan Agricultural laws and policies are responsive to climate change. The question remains is the implementation/enforcement adequate?



#### **References.**

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# **Thank You**

