

Implications of Climate Change on Sustainable Environmental and Natural Resources Management in Kenya

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Abstract

The natural environment consists of the atmosphere, the lithosphere, biosphere and hydrosphere interacting with one another and forming a system powered by solar radiation. Human livelihood and growth of the economy depends on natural resources. Sustainable management of environmental and natural resources are important for the achievement of sustainable development goals in a country. Climate change indicators such as changes in precipitation and temperature have an impact on the quality and availability of natural resources. This review aims to assess the implication of climate change on sustainable environmental and natural resources management in Kenya. A seven-step model was used to examine various literature and five identified themes were (i) causes of climate change (ii) evidences of climate change (iii) impacts of climate on natural resources management (iv) climate change adaptation and mitigation (iv) Environmental sustainability. The study revealed that despite different government and climate stakeholders' efforts; climate change continues to jeopardize the sustainable environment and natural resources management. Perhaps, due to low public awareness, institutional and policies failures, poor governance, inadequate technologies, inadequate experts, inadequate scientific data, overdependency on fossil and wood fuels energy and rapid population growth. It is recommended that the nation should invest more in renewable energy; there is a need for effective implementation of sustainable development, Climate Act of 2016 and Multi-International Environmental Agreements (MEAs). The government should put more priority on climate change mitigation programmes. These should be accompanied by public participation and involvement in climate change adaption and mitigation programmes.

Keywords: Climate change, sustainable development, policy, natural resource and environment