

ADAPTABILITY OF KENYAN AGRICULTURE TO CLIMATE VARIABILITY AND CHANGE

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A DISSERTATION SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR DEGREE OF BACHELOR OF
ARTS IN GEOGRAPHY AND ENVIRONMENTAL STUDIES IN THE DEPARTMENT OF GEOGRAPHY AND
ENVIRONMENTAL STUDIES, UNIVERSITY OF NAIROBI SEPTEMBER 2013

ABSTRACT

Agriculture in Kenya is of great significance since it is the leading sector in terms of contribution to the Kenyan economy yet vulnerable to climate variations and change. This study examined how adaptable Agriculture in Kenya could be/is to climate variability and change. The study objectives were to determine the most suitable level at which adaptation strategies should be implemented; agricultural vulnerability to climate change; the main institutional actors involved in climate change adaptation and their policy implementation and; the level of public awareness of climate change, especially climate change adaptation. The study hypothesized that Kenyan Agriculture is not sensitive to variations in temperature and rainfall and therefore no need to Adapt to climate change.

The study relied on secondary data of which information was sought on annual rainfall and temperature over a period of thirty two years. The rainfall and temperature data were sourced from the Metrological Department especially for the agro meteorological stations. The agricultural output data were sourced from KNBS and Ministry of agriculture for the regions represented by the metrological stations for the period of 1980 to 2012. The data was analysed using descriptive and relational statistics methods and tools.

The result of the analysis shows that in the face of extreme weather events occasioned by climate change, and apparently because of its vulnerability to these conditions, agriculture, has become more vulnerable to uncertainties at onset of farming season. This perhaps was attributable to the variations in temperature and rainfall as well as other factors such as pest and diseases hence inherent insufficient agricultural yield. Kenyan Communities possess different levels vulnerabilities and adaptive capacity since they tend to be impacted differently by the changes and variability's thereby existing different adaptation needs, adaptation should consist of uncoordinated action at household, companies, institutional and organization levels together with collective actions at the local, national and international levels. There are several institutions involved in agriculture adaptation to climate change including governmental, donor, and private institutions, international and local NGOs yet Awareness to climate change is still not up to date in Kenya but steps are being made to improve communication. The findings give emphasis to the need for farmers' education, awareness creation, poverty alleviation and increased access to more efficient inputs as potent tools for climate change adaptation in the area.

