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### **The Importance Of Adaptation Studies And Adaptation Policies In Responding To Climate Variability And Climate Change In East Africa**

Global climate change is a reality to be reckoned with even in the tropical latitudes of the East African countries of Kenya Uganda and Tanzania. Although regional aspects of climate change are still poorly understood, IPCC assessments point to increased occurrence of extreme events such as droughts, floods and cyclones, as well as accompanying soil loss, landslides and similar destructive forces. The IPCC scientific assessment results for these regions also indicate expected regional increases of temperature with attendant impacts, and these are likely to be accompanied by already discernible shrinking mountain glaciers, and attendant water shortage to be experienced in the near future. In East Africa the already observed impacts of climate variability and climate change have also included increased frequency of flooding, droughts and cyclones. Impacts are also being observed on agriculture (food security), forestry, coastal zone and marine ecosystems, human settlements, human health, energy and industry. The UNFCCC emphasised the importance of adaptation strategies especially for developing countries such as those in East Africa. Many such countries cannot afford the stresses and strains associated with climate change. Nevertheless there are low cost options to be found in adaptation strategies. Farming communities for instance can adapt to reduced crop yields during droughts. The global risks associated with climate change include the risks of water shortage, malaria, hunger, and the risks of coastal flooding. Each of these risks is ever present in the region, and in the absence of funds for mitigation allocated by regional governments or available from other sources, close to 100 million inhabitants in the region have no choice but to adapt appropriately to handle the inevitable climate change risks. What needs to be done is well understood at the UNFCCC level. There the global community has undertaken to deal with climate change risks, but while nations are still arguing about the appropriateness of the Kyoto Protocol, adaptation is the only course available to many developing countries such as those in East Africa which have no funds to pay for mitigation activities. What is required in each of the three countries is to build national capacity for adaptation while at the same time pressing for increased mitigation compliance from Annex 1 countries. As climate change begins to take effect increase in disasters linked to the multiplication of extreme events become more evident. Disasters such as floods and droughts divert scarce development resources to disaster response expenditures. The East African region is vulnerable to climate related disasters linked to local climate variability also related to the El Nino phenomena. Adaptation capacity

building should be targeted at increasing the resilience of the local population to risks arising from climate related disasters. The aim would be to improve rural and urban capacities to respond to long term climate change, and to move towards sustainable development in the spirit of the Kyoto Protocol. The way forward for the region would be the encouragement of national adaptation action plans for the vulnerable localities in the region. The ultimate aim would be to reduce vulnerability to undesirable impacts of climate change. Special efforts would be directed at collecting data on vulnerability of specific populations, and traditional available adaptation strategies used by the vulnerable populations.