Institute for Climate Change and Adaptation

**Introduction**

Climate studies and modelling experiments indicate that the anthropogenically-driven rise in global temperatures and land-use changes may adversely affect existing climatic, hydrological and environmental conditions. Multiple stresses make most of the African continent highly vulnerable to environmental changes, and climate change is likely to increase this vulnerability. African Regions (North Africa, West Africa, Central Africa, East Africa, Southern Africa and the Western Indian Ocean Islands) are most vulnerable to specific impacts of climate change that include desertification, sea level rise, reduced freshwater availability, changes in the frequencies and intensities of cyclones, coastal erosion, deforestation, loss of forest quality, woodland degradation, coral bleaching, the spread of malaria and other diseases, and impacts on food security. These impacts are expected to continue even if the increase in the concentration of Greenhouse gases was to be halted today due to the long half-life of some important gases like carbon dioxide. Hence Africa needs to have strategies for adaptation and mitigation. However, the African governments have agreed to place prime importance to adaptation.

Adaptation to climate change cannot be addressed through a single economic sector as it has impacts across the board on all aspects of social and economic development. In addition, development without consideration of the risk and impact of climate change can sometimes increase the vulnerability (maladaptation). For example, even though forests in floodplains are known to be several times more valuable as flood defences than for logging, indiscriminate deforestation is still practiced in many countries as a source of short-term income (OECD 2009b).

In order to understand adaptation, we need to understand the concepts of adaptive capacity and vulnerability. Most researchers and policy makers have very good understanding of these concepts. Some of them have actually devised methods to screen their projects for the risks posed by climate change. Would we say the same for those in the vulnerable communities? No, this is because the tools the researchers use are “complicated” and thus their applications within actual project settings remain limited. There is a need to devise methods or fora to explain these methods to those who are actually going to apply them (those within the vulnerable areas) but better yet, they should be involved in the projects. This further comes down to the fact there is need to make substantial and long-term investments in the provision of climate change information as well as establishing good communication mechanisms between scientific community and practitioners. The big question lies in whether the decision-makers can manage this information. To remedy this, Information, Communication and Technology can be used in the relevant sectors.

The Institute for Climate Change and Adaptation (ICCA) at the University of Nairobi serves to offer unique transdisciplinary programmes that will:

1. Build the human capacity needed to address climate change and adaptation that meet African societies unique needs by offering University-based curricula for conventional degrees and short training courses for a wide range of professionals from all sectors of society
2. Encourage action-oriented research activities, including research into climate change adaptation technologies, that will help to improve the climate adaptation capacity of the African peoples
3. Provide a framework for national and regional policy assessments and advice to governments and other public and private sector actors, and

Include the grassroots and various communities within the African region in its programmes execution and implementation of research findings.

**Mandate**

The Mandate of the Institute for Climate Change and Adaptation is Teaching and Learning, Research and Innovation, Consultancy and Community Service. The objectives and functions of the Institute are identical in detail to that of the University of Nairobi as given in its Charter 2013.

* 1. **Objectives**

The main objectives at The Institute for Climate Change and Adaptation at the University of Nairobi are to provide and/or conduct:

1. Formal training on climate change and adaptation at postgraduate level (Masters and Doctorate) initially, and eventually at the undergraduate level.
2. Professional Short courses for various climate change and adaptation actors and stakeholders in the public and private sectors including NGOs;
3. Climate change and adaptation research and knowledge exchange;
4. Action-oriented community outreach programmes for implementation of practical climate change and adaptation options; and
5. Policy advice on climate change and adaptation.

**Faculty**

The faculty implements the Institute mandate under thematic areas that the students align their studies to, these are:-

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| **Faculty Member** | **Designation** |
| C:\Users\Purity\Downloads\Olago_Photo_5May2019 001.jpg | Prof Daniel OlagoDirectorInstitute for Climate Change&Coordinator WaterEnvironment and EcosystemsInstitute for Climate ChangeAnd Adaptation |
| Dr. Dulo.jpg | Dr. (Eng)Simeon Dulo  Coordinator  Sustainable Technologies |
| Image | Dr George Outa  Coordinator Policy and  Communication |
| Dr. Ouma.jpg | DrGilbert Ouma  Coordinator  Climate Risk Management  and Food Security |
|  | Dr. Maggie Opondo  Coordinator  Human Dimensions and Health |

## Vision

To be the institution of choice for innovative climate change and adaptation research and training

## Mission

Build human capacity necessary to address the unique climate change and adaptation needs of vulnerable communities through teaching, action-oriented research, development of innovative technologies and community participation. Provide expert advice for national and regional policy formulation and implementation.

## Core Values

ICCA shall be guided by the following core values:

1. Safeguarding the environment for posterity.
2. Freedom of thought and expression in academic inquiry and other activities.
3. Visionary, Innovative and creative work and leadership.
4. Good corporate governance exemplified by efficiency, effectiveness, inclusiveness, transparency and accountability.
5. Effective teamwork, mentorship and collaboration
6. Upholding professionalism, ethical standards and meritocracy.
7. Providing unique and quality customer service.
8. Nurturing responsible corporate citizenship, strong social and environmental responsibility.
9. Embracing Information and Communication Technology in all our activities