



CAPACITY BUILDING FOR
BIODIVERSITY
CONSERVATION IN
THE ALBERTINE RIFT



The Albertine Rift capacity building program was developed to engage conservation professionals from the region in an advanced education and training activity that enabled them to make substantive contributions to addressing the challenge of climate change and biodiversity conservation.



The Albertine Rift region is an important biodiversity hotspot in Eastern Africa that houses an enormous variety of flora and fauna in its several unique ecosystems and habitats and serves as a source of vital ecosystem services for local communities. This region is increasingly under threat from a changing climate and other local drivers such as human induced landscape changes.

Current conservation strategies, designed for a more static climate, may not adequately address new and additional risks from climate change. Natural resource management techniques that can help increase the resilience of ecosystems are likely to become increasingly important. Managing for greater resilience requires programs of targeted capacity building of local individuals and institutions to enable a continuous process of learning for the assessment of climate change risks and the development of context specific adaptive responses.

The Program

Twenty early- to mid-career conservation practitioners and graduate students successfully completed an advanced education and training program in climate change and biodiversity conservation comprising Master's level courses and field based externship projects. The Albertine Rift country participants came from:

Congo

Burundi

Rwanda

Tanzania

Uganda

Courses were implemented at the University of Dar es Salaam, Tanzania. Participants developed research plans for their **externship projects** during course sessions; externships were subsequently executed at various locations in the Albertine Rift region.

The second phase of this effort, expected to begin in 2010, will offer an expanded program comprising a second round of the education and training effort at the University of Dar es Salaam along with a **training-of-trainers component** for instructors from other Albertine Rift institutions and **online distance learning modules** to broaden the program's reach to a greater number of individuals and institutions. A **regional science-policy dialogue** to inform and engage decision makers is also planned.

Program Outcomes



Masters level curriculum for two courses: "**Climate Change Risks to Ecosystems and Biodiversity**"; "**Conserving Biodiversity in a Changing Climate**"



Curriculum has been formally integrated into the University of Dar es Salaam's Masters in Natural Resource Assessment and Management program.



Baseline Assessment identifying existing capacity and knowledge about climate change risks to biodiversity in the Albertine Rift and highlighting key research and training needs



Network of Individuals and Institutions that can collaborate across borders on adapting biodiversity conservation to climate change risks in the region

Meet the 2009 Participants...*

1 - 5



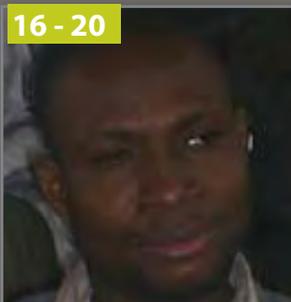
6 - 10



11 - 15



16 - 20



*** List includes
each Participant's
Name, Affiliation
& Externship
Research Project
Title**

1 Opio Alfonse, Gulu University

Decomposition rate of fish pond organic fertilizers in changing climate in Uganda

2 Lawrence Aribo, Meteorology

Department, Uganda

Climate variability and waterbird diversity at Lutembe wetland Uganda

3 Nyirambangutse Brigitte, National University Of Rwanda

Evaluating the impact of climatic parameters on Ericaceous species of Nyungwe National Park, Rwanda

4 Liliane Hatungimana, Geographic Institute Of Burundi

Effect of climate change and variability on socio-economic activities in Burundi: Implications for biodiversity conservation

5 Runyambo Irakiza, Conservation Association Of Rwanda

Recent changes in vegetation structure of the Ngezi Swamp in the face of climate change: Case of Volcanoes Biosphere Reserve and National Park, Rwanda

6 Proscovia Khanzila, Greenwatch

Assessment of the existing legal framework in relation to biodiversity conservation in a changing climate in Uganda

7 Desire Khasrikani, Tayna Centre For Conservation Biology

Altitudinal distribution of small mammals in relation to climate change: The case of Muridae family in Kabwe Kandongwe station

8 Nelson Kisaka, Makerere University

Climate change impacts and environmental risk assessment in Rwenzori mountains ecosystem in Uganda

9 Emilian Kihwele, Tanzania National Parks (TANAPA) - Lake Manyara National Park

Assessment of the impacts of climate variability on biodiversity conservation and livelihoods in the Lake Manyara Sub basin, Tanzania

10 Nicholas Joseph Kisambuka, Tanzania National Parks (TANAPA), Katavi

Climate variability and extremes: Implications in the management of biodiversity in the Katavi-Rukwa Ecosystem, Tanzania

11 Richard Kialungira, General Commission Of Atomic Energy

Climate change impacts on aquatic biodiversity conservation in an urban ecosystem: Case study of the Ithchyo biodiversity of pool malebo in Congo River, Democratic Republic of Congo

12 Anna Titus Laroya, Tanzania Wildlife Research Institute

Effect of climate change and non-climatic variability on butterflies of Njiro Forest, Tanzania

13 Jean Jacques Bagalwa Mashimango, Centre For Research In Natural Science

Impact of climate change on the Biogeochemistry of Lake Kivu, Western Basin (Kalehe), Democratic Republic of Congo

14 David Sivalingana Matsisi, Tayna Gorilla Reserve

Impact of climate change on the parasitology of Gorilla graueri in Tayna Gorilla Reserve, Democratic Republic of Congo

15 Jokha Takdir Mtoro, Jozani National Park-Zanzibar

Observation on water characteristics and aquatic biota at Pangani River delta

16 Rita Mugenyi, National Environment Management Authority

Structural changes of Neuboutina macrocalyx tree in a changing microclimate around Mubwindi Swamp, Bwindi Impenetrable National Park, Uganda

17 Julitha Raphael Munishi, Tanzania Wildlife Research Institute

Effect of climate change on stinging bee's behaviour (*Apis mellifera*) and honey production: A case of Arumeru District, Tanzania

18 Irene Nadunga, Uganda Coalition For Crisis Prevention

A Baseline study on the vegetation cover of the Mabira Forest Reserve Uganda, in the existing climatic conditions

19 Sood Athuman Ndimuligo, Jane Goodall Institute-Kigoma

The impact of climate change on the phenology of chimpanzee (*Pan troglodytes*) tree food species in Gombe National Park, Western Tanzania

20 Masharabu Tatien, University Of Burundi

Climate change and the Ruvubu National Park, Burundi

Program Partners



MacArthur
Foundation

The Albertine Rift capacity building program was jointly implemented by the International START Secretariat, Washington, DC and the Institute of Resource Assessment (IRA), University of Dar es Salaam, with generous financial support from the MacArthur Foundation. For additional information about the program, please visit: <http://start.org/programs/biodiversity>

Specific questions about the program may be directed to Jyoti Kulkarni at the International START Secretariat (jkulkarni@start.org) or Pius Yanda at the Institute of Resource Assessment (yanda@ira.udsm.ac.tz).

The Program Final Report is available at: <http://start.org/publications/biodiversity.html>

START (the global change SysTEM for Analysis, Research, and Training)

START (the global change SysTEM for Analysis, Research, and Training) develops scientific capacity and generates knowledge to support decisions that build resilience to global environmental change and enable sustainable development. START's network consists of research centers, scientists and institutions throughout Africa, Asia, and the Pacific, and includes collaborations with scientists and institutions from Asia, the Caribbean, Europe, Latin America, and North America. START is sponsored by IGBP, IHDP, and WCRP and is part of the Earth System Science Partnership. For more information about START, please visit: <http://start.org>.

Institute of Resource Assessment (IRA)

The Institute of Resource Assessment (IRA) is based at the University of Dar es Salaam in Dar es Salaam, Tanzania. The mission of IRA is to enhance sustainable capacity in human, financial and physical resources in order to excel in quality research, teaching and service provision to the community in natural resources management and further its image as a center of excellence in knowledge creation and skills development at the postgraduate level. The Pan-African START Secretariat (PASS) is located at IRA-University of Dar es Salaam. PASS, guided by the Pan-African Committee for START, coordinates START's activities in Africa. For more information about IRA and PASS, please visit: <http://ira.udsm.ac.tz> and <http://pass-africa.org>.

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Printed on Recycled Paper