Capacity Building for Climate Change Adaptation

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www.start.org
START is the framework for research-driven capacity building dedicated to addressing the challenges of global environmental change in the developing world.

•START’s mission:
  ➢ To develop regional networks of collaborating scientists and institutions;
  ➢ To enhance individual and institutional scientific capacity; and
  ➢ To secure resources to augment existing capabilities and actions.
## START’s Approach to Capacity Building

<p>| | |</p>
<table>
<thead>
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<tbody>
<tr>
<td><strong>Capacity Building</strong></td>
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<tr>
<td><strong>1.</strong> Should be country driven and issue based</td>
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<td><strong>2.</strong> Should occur within a framework of integrated interdisciplinary problem solving</td>
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<td><strong>3.</strong> Is much more than training; requires institutional strengthening and human resource development</td>
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<td><strong>4.</strong> Should encourage potential for interaction and dialogues among diverse stakeholder groups</td>
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GEC CAPACITY BUILDING:
Human Resources and Institutions

- Capacity to enable demand-driven science
- Capacity to communicate knowledge
- Knowledge Generation
- Knowledge Dissemination
- Capacity to develop/use tools, methods, models

Informed Action
<table>
<thead>
<tr>
<th>Actions</th>
<th>Supporting Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge Generation</td>
<td>Support for research on drivers of environmental change; climate risk assessments; adaptive responses</td>
</tr>
<tr>
<td>Knowledge dissemination</td>
<td>Education and training initiatives; publications; internet and media resources</td>
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<tr>
<td>Informing action</td>
<td>Science-policy dialogues; practitioner workshops; contribution to IPCC, National Communications, etc.</td>
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</table>
Capacity Building for Decision-Making

Support policy-making processes to become more responsive to climate risk management, adaptation and mitigation planning

- Direct engagement with policy makers: *science-policy dialogues*
- Training individuals with a potential to inform decision-making: *scientists, policy-makers, resource managers, practitioners and planners*
- Training the next generation of decision-makers: *graduate students and higher education institutions, training programs*
- Publications, internet and media resources: *relevant and accessible information to inform societal decision-making through*
# START’s Initiatives

<table>
<thead>
<tr>
<th>Activity</th>
<th>Project/program</th>
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</thead>
<tbody>
<tr>
<td><strong>A. Grants for GEC research</strong></td>
<td>African Climate Change Fellowship Program (ACCFP); Grants for GEC research in Africa</td>
</tr>
<tr>
<td>(<a href="http://start.org/programs/africangec">http://start.org/programs/africangec</a>; <a href="http://start.org/programs/accfp">http://start.org/programs/accfp</a>)</td>
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<tr>
<td><strong>B. Climate risk communication</strong></td>
<td>Integrating Climate Change Mitigation and Adaptation in Development Planning (CCMAP)</td>
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<td>(<a href="http://start.org/programs/ccmap">http://start.org/programs/ccmap</a>)</td>
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<tr>
<td><strong>C. Biodiversity and climate change</strong></td>
<td>Capacity building on biodiversity conservation and climate change in the Albertine Rift region</td>
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<tr>
<td>(<a href="http://start.org/programs/biodiversity">http://start.org/programs/biodiversity</a>)</td>
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## A. START’s Grants for science-policy research

<table>
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<tr>
<th>Activity</th>
<th>Stakeholder groups</th>
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<tbody>
<tr>
<td><strong>GEC Grants for Global Change Research</strong> (for improving understanding of the sensitivity and adaptability of natural / managed ecosystems and human systems to climate and related global changes; communication of research)</td>
<td>Scientists, graduate students, NGOs (and outreach to community groups)</td>
</tr>
<tr>
<td><strong>African Climate Change Fellowship Program (ACCFP)</strong> (experiential learning, research and training opportunities - doctoral, post-doctoral, teaching and policy fellowships; plus training in research application research and communication / outreach)</td>
<td>Graduate and post-graduate students, NGOs, university educators</td>
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### B. Climate Risk Communication

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<tr>
<td><strong>Science-policy dialogues</strong>&lt;br&gt; (discuss implications of climate risks and options for adaptation/mitigation; create targeted issue briefs)</td>
<td>IPCC authors, national scientists, parliamentarians, ministers, NGOs and CSOs, media, agricultural commodity groups</td>
</tr>
<tr>
<td><strong>Training workshops</strong>&lt;br&gt; (methodologies and tools for integrated assessments of CC V&amp;A and adaptation)</td>
<td>Scientists and some policy-makers</td>
</tr>
<tr>
<td><strong>Regional knowledge assessments</strong>&lt;br&gt; (identify knowledge sources and gaps at regional and finer scales for AR 5)</td>
<td>Scientists, Government and non-government organizations, civil society groups, planners and practitioners, etc.</td>
</tr>
<tr>
<td><strong>Regional knowledge sharing strategies</strong>&lt;br&gt; (disseminate findings from above activities and enable communication outputs)</td>
<td>Policy-makers, decision-making communities and media</td>
</tr>
</tbody>
</table>
C. Biodiversity Conservation and Climate Change
Burundi, Congo, Rwanda, Tanzania and Uganda

Partner: Institute of Resource Assessment, University of Dar es Salaam

Funding support: The MacArthur Foundation

• For: practitioners, researchers, graduate students, educators and policy community

• Phase 1 (2007-2008); Phase 2 (underway)

• Components:
  - Baseline assessment of institutional needs (Phase 1)
  - Advanced Education and Training Courses (Phase 1 and 2)
  - Externships (Phases 1 and 2)
  - Science-Policy dialogue (Phase 2)
  - Communication, outreach and networking (Phases 1 and 2)

• Emphasis on sustaining ecosystem goods and services and livelihoods
## Potential for Influencing Decision-Making

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<thead>
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<th>Activity</th>
<th>Venues for informing decision-making</th>
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<tr>
<td><strong>Science-policy dialogue</strong></td>
<td>Discuss regional implications of climate risks for ecosystem goods and services; share experience from education and training effort; develop recommendations for action.</td>
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<tr>
<td><strong>Curriculum</strong></td>
<td>Training program; web-platform; updated NARAM program at UDar (regional reach);</td>
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<tr>
<td><strong>Communication and outreach</strong></td>
<td>NWP, CBD, DIVERSITAS, COP-15, Peer reviewed and grey literature, synthesis documents, web-platform, etc.</td>
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<tr>
<td><strong>Contribution to global platforms</strong></td>
<td>ELAN, IPBES, GEO-BON, AEO,</td>
</tr>
<tr>
<td><strong>Networking with other regional/global efforts</strong></td>
<td>Program faculty (NUR, Makerere, etc.) WCS, RNCEAR, SANBI, CORDEX, program advisory committee, etc.</td>
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Alumni Engagement

• Government institutions/ministries: e.g. Tanzania Wildlife Research Institute (TAWIRI); Ministry of Agriculture, Tanzania; Geographic Institute of Burundi; Department of Forestry (Burundi); Ministries of Environment and Agriculture in Uganda; Uganda Wildlife Authority; Rwanda Development Board (Tourism)

• Protected area ecologists and managers: Tanzania National Parks

• Non-government institutions: Jane Goodall Institute; WWF – Rwenzori; Greenwatch; Tayna Center for Conservation Biology, Congo; CARPE/IUCN PACO; OCEAN: Center for Research in Natural Sciences, DRCU; U. Dar es Salaam; National University of Rwanda.

• Higher education: Master’s and PhD programs (potential experts)

• Other training programs: UNITAR’s climate diplomacy program; SEI-UNISDR-UNU writeshop; ACCFP; UC Davis

• Educators at universities: In all Albertine Rift countries
Broad Challenges to informed Decision-Making

• Weak knowledge sharing and communication in forms relevant to decision-making
• Engaging policy-makers personally and gaining commitment can be problematic
• Cross linkages and communication between political offices is limited
• Lack /scarcity of enabling factors: legal, political, institutional financial, etc.
Take Home Messages

• How to inform action most effectively?
• How to best engage decision-makers? (Science-policy dialogues, other *iterative* and *reinforcing* communication actions,...)
• How to build greater synergies between disparate programs/groups in the AR? How to improve communication and collaboration?
• How can we best inform international platforms such as GEO-BON, IPBES
• How can we best disseminate the outputs of AR assessment efforts (e.g. web and print media, innovative outreach methods).
CAPACITY BUILDING FOR CLIMATE CHANGE IN THE ALBERTINE RIFT

Chipo Plaxedes Mubaya

Jyoti Kulkarni

PARTNERS:
global change SysTem for Analysis Research and Training (START)
Institute of Resource Assessment (IRA)

GENEROUS FINANCIAL SUPPORT:
John D. and Catherine T. MacArthur Foundation
PROGRAM OBJECTIVES

Build capacity to inform/educate conservation professionals about strategies for conserving biodiversity and protecting ecosystems under changing climatic conditions

- Develop a critical mass of trained professionals for collaborative efforts in region

- Strengthen local institutions and inform sustainable policy making processes
PROGRAM ACTIVITIES

Assess needs

Develop and implement education and training program

Sustain the effort!
<table>
<thead>
<tr>
<th>COMPONENTS</th>
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<tr>
<td><strong>Education and Training Program</strong> PLUS</td>
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<tr>
<td><strong>Online distance learning modules</strong></td>
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<tr>
<td><strong>Regional science-policy dialogue</strong></td>
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Target groups

• National parks
• Forest research institutes,
• NGOs,
• Agriculture,
• Master’s students,
• Universities and colleges
• Faculty- universities and TMA
Distribution of selected candidates

- Tanzania: 27%
- Uganda: 20%
- Rwanda: 20%
- Burundi: 13%
- DRC: 20%
Education and training programme

• Course modules
• Field visit
• Externships
• Training of trainers
Course modules

• Basic understanding of climate change science

• Climate change impacts on biodiversity and ecosystems and implication for conservation and sustaining eco-services

• Strategies for assessing vulnerability and adaptation
Field visit

- Three conservation areas in Morogoro region

- Udzungwa Mountain National Park, Uluguru Mountains and Mikumi National Park
<table>
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<tr>
<th>Team</th>
<th>Title</th>
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<tbody>
<tr>
<td>Tanzania</td>
<td>Impacts on Biodiversity &amp; Livelihood-Katavi ecosystem</td>
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<tr>
<td>Uganda</td>
<td>Community and Park Management Adaptability to Impacts- Queen Elizabeth National Park</td>
</tr>
<tr>
<td>Rwanda</td>
<td>Impact on Mountain Gorillas Ranging Movements - Volcanoes National Park</td>
</tr>
<tr>
<td>Burundi</td>
<td>Impact on Water Resources - Kibira National Park</td>
</tr>
<tr>
<td>DRC</td>
<td>Impact -on Biodiversity and Livelihood -Central Virunga National Park</td>
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Training of Trainers

- General teaching methodologies
- Develop curriculum
- E-learning concepts
- Use of online distance learning resources as teaching tools
Distance learning platform

- Develop platform
- Include e-learning modules and a host of knowledge resources
- Ensure continuity in learning process
- Freely accessible
Challenges

• Gender considerations

• Accommodating the demand

• Transform externships into larger assessments

• Engaging Francophone participants more effectively