African Centre for Technology Studies

ANNUAL REPORT 2009

Expanded Outreach and Network Building
As we come to the end of 2009, it is gratifying to look into the New Year with renewed hope and expectation for the African Centre for Technology Studies (ACTS).

Several activities in 2009 again placed ACTS firmly amongst those organisations which are pushing the development agenda for Africa and indeed the world. This has been evidenced by the successful completion of a major assessment of global agriculture: the International Assessment of Agricultural Knowledge, Science and Technology for Development (IAASTD) of which the follow-up phase has been an ongoing dissemination of findings.

ACTS also entered a new phase with the launch of a new Strategic Plan 2009-2013. This document will guide our activities for the coming four years.

In 2009, several events took place at the programme, project and institutional levels at ACTS. There was a heightened focus on outreach, with workshops, seminars and training courses taking place all over the world and in Africa in particular where ACTS either organized, participated in or presented papers. IAASTD produced five reports that were launched at UNEP headquarters in Nairobi. This was followed by several outreach meetings in several cities across the world. In the Energy and Water Security Programme, ACTS researchers on Community-based Adaptation to Climate in Africa (CBAA) attended a nine-day conference in Bangladesh to share the latest developments in adaptation planning and practices. The conference afforded an opportunity to get first hand knowledge on how various actors in Bangladesh are working together to manage the various challenges posed by flooding, cyclones, water logging, salinity in the soils and drought. ACTS was also involved in meetings on climate change in preparation for the UNFCC meeting in Copenhagen, Denmark. ACTS was ably represented at this meeting.

Meanwhile the Science and Technology Policy Training Institute (STPI) conducted three-days of Research-Into-Use (RIU) training in February, a Climate Change Adaptation Training of Trainers Workshop for NGOs in the Eastern and Southern Africa Region and training for Innovation in Agriculture, Health and Energy in Kenya. This training was in collaboration with the KCA University and the Open University (UK). In the capacity building arena, ACTS was able to send two researchers for further education. One went to study for a Masters and the other for a doctorate degree in the UK.

Overall, 2009 was a year of heightened activity and outreach. Highlights are provided in the following pages. As we proceed with our Strategy 2009—2013 we envision the future as one in which the capacity of African countries and institutions to harness science and technology will be strengthened yet further for sustainable development.

Professor Judi W. Wakhungu
Executive Director
Introduction

The African Centre for Technology Studies (ACTS) maintains a presence in the world of science and technology and should rightly claim a niche in the research sector through its activities. 2009, the year in review, was an active one for ACTS from the very beginning.

The ACTS Governing Council (GC) held its Annual Meeting early in 2009 to review past performance and plan for the year ahead. The launch of the new Strategic Plan 2009-2013 gave the meeting added significance. There was also a change of guard in the chairmanship of the board. The previous chair, Prof. Ratemo Michieka relinquished the position when his term expired and Prof. Mohamed H. Abdel Aal took over as chairperson.

Prof. Aal, who was previously the executive director of the Faculty of Agriculture Research Park (FARP) at the Cairo University has now moved to Damascus in the Syrian Arab Republic to take up a position as the Head of the Agricultural Extension Division at the Arab League of States, The Arab Centre for the Studies of Arid Zones and Dry Lands (ACSAD).

Prof. G.B.A. Okelo was elected vice-chair, replacing Mr. Ivar Baste, who had been posted to Geneva as interim director of the Secretariat of the United Nations Environment Management Group (UNEMG).

Dr. Michael Stahl replaced Prof. Aal as Chair of the Programmes Committee. Margaret W. Maimba, another member of the GC, is now the Chief Science Secretary and Head of the Environmental and Earth Sciences Schedule.

The programmes and projects divisions of the Centre carried out several activities early in 2009. A new research tool, a Geographic Information System (GIS) was introduced into the research activities of ACTS Climate Change projects. The GIS helps researchers in climate change relate to different geographic locations, peoples and climate situations so as to become more productive and responsive in their work.

The Climate Change Adaptation in Africa (CBAA) team attended the International Development Research Centre (IDRC)/CCAA Capacity building workshop on gender mainstreaming in climate change adaptation workshop from January 26-30, 2009 in Kampala, Uganda. The aim of the course was to build the capacity of CCAA practitioners and researchers in applying gender analysis skills; to create awareness and sensitization on gender issues in CCAA; to share knowledge and experience on how to mainstream gender in climate change adaptation projects.

The Science and Technology Policy Institute (STPI) carried out several training courses.
The Health Innovation Systems and Health Systems Forum were held from February 9 and ran for three days. Participants were drawn from the Ministry of Health and other public health and sanitation agencies. The forum was meant to present an opportunity for participants to discuss real life issues affecting those working to develop new health products and those attempting to ensure access and delivery of new and existing products to the needy. That same week, on February 11, 2009, the ACTS communications team, in collaboration with the STEPS Centre and Future Agricultures Consortium held a joint seminar. This seminar explored the latest thinking, methods and tools for research communication. Apart from discussing the importance of research communication, the workshop, dubbed: “Making an Impact” give highlights to researchers on how to communicate more affectively with policy makers and other key audiences. Engaging the media was another subject discussed as well as new innovative communications tools now available.

Who are we?
The African Centre for Technology Studies – ACTS - is noted for being the first African independent think-tank on the application of science and technology to development. The founders of ACTS envisioned an organisation that would steer Africa from the depths of poverty and dependence on the West to ideas-based development, focusing mainly on development and influencing policies that would help Africa to assert itself in the various fora that discussed emerging new technologies and issues to do with biotechnology, biosafety, climate change and the environment. At the time of its formation, the global economic and geopolitical systems were becoming increasingly complex and were marked by unpredictability—particularly as a result of rapid technological change and the beginning of the end to the political cold war.

ACTS was founded in 1988 as a non-governmental organisation based in Nairobi, Kenya. The Centre changed its status in 1997 to an international intergovernmental policy research and outreach institution. According to Article 3 of the Charter of ACTS, the objectives of setting up the Centre were to undertake capacity building, to conduct research, to provide advisory services, and to disseminate information on the policy aspects of the application of science and technology for sustainable development. Other notable objectives were to undertake capacity building, to conduct policy research, to provide advisory services and to disseminate information on ways of implementing recommendations of the World Commission on Environment and Development (WCED) and Agenda 21, and existing international instruments on environmental governance with specific emphasis on the needs of the African and other developing countries.
The founding objectives also included but were not limited to the following objectives:

• To develop information systems and other analytical tools for the development and management of policy.
• To promote capacity building in the developing countries in the field of policy analysis related to sustainable development.
• To promote, encourage, inspire and undertake technical cooperation activities between and within nations.
• To monitor international trends in science and technology, undertake technology assessment and forecasting and analyze the impacts of new technologies for purposes of providing policy options to African and other developing country governments.
• To conduct, promote, enhance, inspire, study and conduct the building of the institutional framework requisite for the management, assessment, sustainable utilization and conservation of natural resources.
• To organise, support or otherwise participate in conferences, seminars, commissions, symposia, workshops, lectures, consultations, show exhibitions, reviews and appraisals in all aspects of research.
• To foster the exchange of information and networking between the Centre and other governmental and private institutions and individuals that have similar or related interests at the local, national, regional and international levels, with particular emphasis on policy matters.

Since its formation ACTS has worked with like-minded institutions and partners in Africa and the world. These include academic and research institutions, national governments, UN bodies, regional and international processes and NGOs. Several governments have signed the ACTS charter: Kenya, Malawi, Malta, Uganda and Ghana. The World Agroforestry Centre (ICRAF) and the Third World Academy of Sciences are founding organizations of ACTS.

Midway after its inception, ACTS set up structures of governance that reflected its international character and mandate. A framework of governance was put into place that included a General Assembly, a Governing Council, Committees of the Council, the Secretariat, a College of Scholars, programmes, projects and divisions or departments. The Governing Council has eventually developed to become the main organ of administration for the Centre.

The secretariat administers the day-to-day functions of the Centre and co-ordinates all the activities and programmes at the Centre. The secretariat consists of the office of the executive director and other offices such as the executive committee, with advice from the Governing Council, may deem appropriate and necessary.

Throughout the Centre’s existence, it has been important to have flexibility to adapt and respond to emerging scientific, technological and environmental developments crucial to Africa’s development. With such flexibility, the Centre has been able over the years to develop certain niches of competence while establishing numerous collaborative partnerships and wide networks of individuals and organizations of important stakeholders and contributors working for policies to protect the environment while also improving the standards of living conditions in Sub-Saharan Africa.
Vision, Mission and Core Issues

The vision of the centre is **knowledge for better livelihoods** and its mission is **to strengthen the capacity and policies of African countries and institutions to harness science and technology for sustainable development**. The research activities of the Centre rotate around the core issues of agriculture and food security, **biodiversity and natural resources management and water and food security**.

Programmes

Agriculture and Food Security

The Programme focuses on the functioning linkages among research, extension, education and communication in the promotion of agricultural production; policy and legal measures for harnessing agricultural biotechnology for food security; assessing the science content of agricultural policies and development strategies; and improving the state of knowledge on land degradation, land resources tenure and use, agricultural water use and associated best practices.

**IAASTD**

The objective of the International Assessment of Agricultural Knowledge, Science and Technology for Development (IAASTD) was to gauge the impacts of past, present and future agricultural knowledge, science and technology on the reduction of hunger and poverty, on the improvement of rural livelihoods and human health, and on equitable, socially and environmentally and economically sustainable development.

Five reports were produced and 2009 was a period for dissemination and outreach.
Activities

- The International Assessment on Agricultural Knowledge, Science and Technology for Development (IAASTD) reports were launched at an event at UNEP headquarters in Nairobi during the UNEP Global Council meeting on February 20, 2009. The IAASTD Report consists of seven volumes including five sub-global assessments: Central and West Asia and North Africa (CWANA), East and South Asia and the Pacific (ESAP), Latin America and the Caribbean (LAC), North America and Europe (NAE) and Sub-Saharan Africa (SSA); each of these sub-global assessments addresses the unique challenges in each region.

- In May 2009, ACTS attended and exhibited IAASTD publications in Kampala during “The First African Organic Conference”. The theme of the conference was fast-tracking sustainable development in Africa through harnessing organic agriculture and biotechnology. Participants were drawn from all over Africa and the following Ugandan institutions received IAASTD publications: Gulu University, the National Agricultural Research Organization (NARO), National Agricultural Laboratories, the National Research Institute, the National Fisheries Resources Research Institute, the National Semi-arid Research Resources Institute, the National Livestock Resources Research Institute, the Uganda Industrial Research Institute, the Uganda National Farmers’ Federation, the Uganda Martyrs University and the National Organic Agricultural Movement in Uganda.

- An outreach meeting for IAASTD was held at the UN Conference Centre in Addis Ababa, Ethiopia on May 29, 2009. The meeting was attended by the Minister for Agriculture, the Hon. Aberra Deressa and discussion centred on the implementation of the IAASTD assessment.

- There was an outreach meeting organized in collaboration with The Economic Commission for West African States (ECOWAS) in Accra, Ghana. This enabled broader participation from francophone countries.

- An international conference on “Food Security: Achieving Long-term Solutions” was held on November 2 and 3, 2009, at Chatham House in London. The Executive Director presented a paper on “The Politics of Research and Design” and also chaired the session on “Growing Food” and was a panelist in the session “Creating Policy Frameworks for Long-term Solutions”.

- The Executive Director attended a WorldFish Board meeting in Cairo from November 15-20, 2009. The meeting included a two-day meeting plus a field trip on November 19 to the WorldFish research centre in Abbassa.
## Global Activities of IAASTD

### Travel and Workshops

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Environmental Change and Maize Innovation Pathways in Kenya Project

This project is being undertaken in collaboration with the STEPS Centre (Social, Technological and Environmental Pathways to Sustainability) of Sussex University, U.K; the Tegemeo Institute of Agricultural Policy and Development; Egerton University and the Centre for African Bio-Entrepreneurship (CABE), Kenya. The project takes maize in Kenya as a lens through which to explore different responses to environmental change. As the primary staple crop and a fundamental part of many people’s lives, maize is culturally and politically important and already the focus of major research and development efforts. Developments in maize will provide a starting point from which to trace different types of innovation proposed by various actors.

The study aims to explore the upstream drivers shaping the direction of innovation pathways around maize in Kenya, in response to environmental change. How this configuration has evolved over time and how likely it is to evolve in the future and to analyze how small scale farmers and vulnerable groups are responding to climate change through interventions like crop management practices and livelihood diversification. It also aims to look at how local innovation and coping mechanisms interact (or not) with formal R&D programmes and mainstream debates.

Activities

“Write Shop”

The STEPS team convened a Write Shop from February 5-6, 2009, to analyse the findings of the field visits and compile this into a technical report and policy briefs. The team also brainstormed on the structure, content and the key audiences for each chapter in the report.

Field work:

• The team carried out a follow-up field visit to Sakai from February 23-25, 2009 to interview members of the community. The community was randomly sampled in order to find out more on the seed bulking and micro-credit activities that were being carried out by the community as climate change adaptation strategies. These strategies were introduced by the project “Integrating Vulnerability and Adaptation to Climate Change into Sustainable Development Policy Planning and Implementation in Eastern and Southern Africa” (ACCESSA). The ACCESSA project provided funds to carry out income-generating activities such as seedling production and planting vegetables for sale.

• The team also conducted interviews with maize breeders at KARI Katumani. They were able to meet Dr. Ngethi, a maize breeder and Dr. Kizito Kwena, both working on climate change adaptation projects. They also met with the Sakai assistant chief and paid a courtesy call at the Arid Lands Resource Management Project (ALRMP II) offices at Makueni. From November 12—21, 2009 partners in this project including ACTS, STEPS, CABE and the Tegemeo Institute conducted Multi-Criteria Mapping (MCM) interviews with key stakeholders at the national and community level. Outputs of the interviews were synthesised and will feed into a national policy process workshop that will be held in Nairobi in late January, 2010.

Enset Agro-Processing:

Pilot Scale Production of Starch for Industrial and Food Application

The project is testing starch contents and qualities in Enset plants in various climatic zones in Kenya, with the aim of testing their suitability for industrial and domestic consumption. The
project is being implemented in four Eastern Africa countries: Ethiopia, Kenya, Tanzania and Uganda, with funding from The East African Regional Programme and Research Network for Biotechnology, Biosafety and Biotechnology Policy Development (BIO-EARN).

**Activities**

Mapping Enset locations in Kenya was carried out successfully. A map of Enset distribution in Kenya has since been produced. Samples from Kitale, Embu, Meru, Bomet, Kericho, Chyulu and Karura have been collected. Laboratory testing of the samples is on-going at the Jomo Kenyatta University of Agriculture and Technology (JKUAT).

**Lifelong Learning for Farmers (L3F) and Environment Project-Commonwealth of Learning (COL)**

This project seeks to initiate and coordinate the Lifelong Learning for Farmers activities at the Masinde Muliro University of Science and Technology (MMUST), the Ugunja Community Resource Centre (UCRC), the Sustainable Agricultural Centre for Research and Development Africa (SACRED) and the Kenya AIDS Intervention Prevention Project Group (KAIPPG) in Western Kenya. The project will strengthen the horizontal transfer of knowledge through facilitating farmer to farmer learning to achieve a multiplier effect. Another goal is to sensitize the commercial banks and marketing agencies to ensure active collaboration by providing credit support and capacity building for the L3F farmers.

**Energy and Water Security**

**Climate Change and Adaptation in Africa (CBAA)**

This project is being conducted in partnership with colleagues in Eastern and Southern Africa, Europe and South Asia. It is an action research project that seeks to test tools for community adaptation, knowledge generation and capacity building. This three-year project is being implemented with selected vulnerable communities in Kenya, Malawi, Sudan, South Africa, Tanzania, Uganda, Zambia and Zimbabwe.

Through collaboration with relevant stakeholders (particularly meteorological services), communities have been selected using the Local Options for Communities to Adapt and Technologies to Enhance Capacity (LOCATE) methodology formerly known as SouthSouthNorth (SSNAPP) which specifically targets groups most vulnerable to climate change. In project design, special consideration has been given to women, who are particularly vulnerable to climate change impacts.

Participatory and consultative approaches have and will continue to be adopted and a learning-by-doing approach applied to reduce vulnerability to climate change at the community level through the application of adaptation knowledge, experience and technologies generated by this project.

The project will identify ways of communicating climate information to poor and vulnerable communities, and from communities to other stakeholders. Capacity building and support will be given to Non Governmental Organisations (NGOs) and communities through training to facilitate integration of climate change into their plans and activities. Intermediary NGOs have been identified and are working with, and supporting the implementation of community level activities geared towards climate change adaptation. The project has generated initial information on community based climate change adaptation and disseminated these to inform other stakeholders including researchers, NGOs, national and international policy and decision makers etc.
Through the project, awareness on climate change to and among NGOs, local communities and researchers will be empowered to integrate, carry out, and generate information on climate change adaptation. Greater support for adaptation has been elicited from stakeholders.

The entry point of LOCATE is in the context specificity and is used in designing community based adaptation to climate change. It uses key concepts and elements of the Sustainable Livelihoods Framework. The methodology emphasizes the relationship between different income streams of different communities and impacts of climate change while assessing vulnerability and adaptation needs. The four phases suggested in the framework endorse the generic steps suggested in the Third Assessment Report of the Intergovernmental Panel on Climate Change (IPCC)

Activities

- The CBAA team attended the Department for International Development (DFID) and IDRC Climate Change Adaptation in Africa (CCAA) capacity building workshop on gender mainstreaming from January 26-30, 2009 in Kampala, Uganda. The aim of the course was to build the capacity of Climate Change Adaptation in Africa practitioners and researchers to apply gender analysis skills.

- A nine-day conference was held in Bangladesh in February 2009. The primary aim of the conference was to share the latest developments in adaptation planning and practices. The conference provided firsthand knowledge on how various actors in Bangladesh are working together through communities to manage the various challenges that included severe flooding, cyclones, water-logging, salinity and drought.

- The CBAA research team went through 2-week long training on how to use participatory video for monitoring and evaluating climate change. A project partner, the International Institute for Environment and Development (IIED), facilitated the training. Over 100 community members were trained.
• The Executive Director attended the fourth EUEI Partnership Dialogue Facility (PDF) Governing Board meeting in Brussels in February 2009. She presented a paper on the Policy Innovation Systems for Clean Energy Security (PISCES) project.

• An ACTS researcher represented the Executive Director at the Science, Ethics and Technological Responsibility in Developing and Emerging Countries workshop at the Silver Springs Hotel, Nairobi on February 5, 2009. The workshop’s objective was to develop a Kenyan national manifesto on science, ethics and the socialisation of research.

• Two ACTS researchers attended and participated in the Development and Climate days during the Conference of Parties (COP 15) side event at the United Nations Framework Convention on Climate Change (UNFCCC), in December, 2009 in Copenhagen, Denmark.

**Outputs**

• Developing a CBAA project website and updating it
• Organising consultative stakeholder workshops
• Organising and co-hosting the first African Conference on Community Based Adaptation to be held in February 2010
• Participating in relevant national and international meetings
• Project monitoring and evaluation.
ACTS at UNFCCC, Barcelona, Spain

The resumed ninth session of the Ad Hoc Working Group on Further Commitments for Annex I Parties under the Kyoto Protocol (AWG-KP) and resumed Seventh Session of the Ad Hoc Working Group on Long-term Cooperative Action under the Convention (AWG-LCA) were held in Barcelona, Spain from November 2-6, 2009. The talks were at the Barcelona Convention Centre.

ACTS was represented by Andrew Adwera who followed the proceedings and discussions regarding innovative finance mechanisms, capacity building and enhanced action on adaptation within the main plenary and contributed to enriching debates on these building blocks. ACTS also participated in a side event organised by Practical Action UK that focused on governance and the institutional arrangements desired for community based adaptation, and options for alternative and innovative financing for developing countries. The ACTS representative also shared some of the early lessons from the CBAA project at ACTS, including the participatory video approach as a way of monitoring climate change impacts and learning how communities are building coping mechanisms. This is also being applied in the 8 CBAA countries (see project webpage for details: www.cbafrica.org).

The meeting provided another opportunity for ACTS to share and influence processes with its practical project and programme implementations in Africa. This provided an added advantage of evidence on how community based approaches are taking place in Africa and how governments, donors and other agencies can borrow lessons on how best to finance, monitor and mainstream community based adaptation to climate change.

ACTS was also represented at the UNFCCC in Copenhagen, Denmark and continues to contribute in a meaningful way to the Climate Change Adaptation debate.

See link for further details on the Barcelona Climate talks:
http://unfccc.int/meetings/intersessional/barcelona_09/items/5024.php

Integrated Climate Risk Assessment Training Workshop

An ACTS Research Assistant represented ACTS at the Integrated Climate Risk Assessment Training workshop organized by the International Development Research Centre’s (IDRC) Climate Change Adaptation In Africa Programme (CCAA) for research partners. The workshop took place from November 1-6, 2009 at the Windsor Golf Hotel, Nairobi, Kenya.

The objective of the workshop was to provide participants with additional information that would enhance their understanding of climate change, science, assessment of climate change vulnerability in various sectors and ability to evaluate effective adaptation strategies.

National Stakeholders Pre-COP workshop

Charles Tonui represented ACTS at a pre-COP National Stakeholders’ workshop at the Silver Springs Hotel, Nairobi on December 2, 2009. At the workshop, a report: “The Economic Cost of Climate Change in Africa” was launched. The meeting discussed issues related to the participation at the COP of CLACC fellows, the CBAA and ACTS.
The European Capacity Building Initiative (ECBI) was set up in 2005 to overcome some of the limitations of the United Nations climate change negotiations relating to the differing experiences of the negotiating delegations. The ECBI is divided into three integrated programmes, dealing with three complementary types of capacity and trust building activities that address the different aspects of negotiating capacity (analytic and procedural) and the different user groups (researchers/scientists and negotiators). ACTS role is to organise meetings for Eastern and Southern Africa negotiators from ministries of finance and environment. The ECBI aims to promote a more level playing field between government delegations to the international climate change negotiations and facilitate mutual understanding and trust between European and developing countries.

Activities
In 2009 the ECBI regional workshop was held in Addis Ababa, Ethiopia with participants from Ethiopia, the Comoros, Kenya, Uganda, Mozambique, Zimbabwe, Malawi, Botswana, South Africa, and the UK. ACTS participated in knowledge sharing and outreach activities at the meeting. The ECBI Regional Workshop for Eastern and Southern Africa in Addis Ababa was attended by participants from Ethiopia, Botswana, the Comoros, Kenya, Lesotho, Malawi, South Africa, Uganda, Zimbabwe and Mozambique.

More information on ECBI is at: http://www.eurocapacity.org/homepage.shtml

Suggested immediate steps
- A paper with an overview of UNFCCC relevant debates for Africa will be available and this will be shared in advance with senior negotiators, ministers and Civil Society Organisations (CSOs) to aid preparations before the Copenhagen agreement.
- Working towards uniting participants through an email group to exchange ideas and build each others’ capacity. There was a suggestion to include 3 or 4 experts to guide discussions.
- Synthesising and tabling what is expected out of Copenhagen by participants was emphasised.
- The need to establish a common platform with scheduled meetings to discuss specific pointers.
- The need to prioritize issues.
- The need to come up, urgently, with a simplified overview on all the key issues and best options that can easily be followed.
- More focus on text
- The ECBI was requested to put out the red flags on finance and texts from the United Nations Collaborative Programme on Reducing Emissions from Deforestation and Forest Degradation in Developing Countries, (the UN-REDD Programme) texts.
Capacity Strengthening in the Least Developed Countries for Adaptation to Climate Change (CLACC)

The Capacity Strengthening in the Least Developed Countries for Adaptation to Climate Change (CLACC) is a global support programme working in the Least Developed Countries (LDCs), to strengthen their efforts to adapt to the impacts of climate change. CLACC aims at strengthening civil society to enable them to participate effectively in climate change initiatives, including government-led processes such as the National Adaptation Programmes of Action (NAPA). CLACC aims at strengthening the capacity of civil society in the LDCs to adapt to climate change and to foster adaptive capacity amongst the most vulnerable groups. Another aim is to establish an information and knowledge system to help countries deal with the adverse impacts of climate change and to integrate adaptation to climate change into the work of key non-government institutions, and to mainstream the NAPA process within these institutions.

Activities
Writing and production of newsletter

Integrating Vulnerability and Adaptation to Climate Change into Sustainable Development Policy Planning and Implementation in Eastern and Southern Africa (ACCESA)

The project aims to reduce the vulnerability of communities to the impacts of climate change, thereby improving their well-being and protecting their livelihoods. It also aims to provide global environment benefits by contributing to the mitigation of land degradation and greenhouse gas emissions. To achieve these objectives it promotes the mainstreaming or integration of vulnerability and adaptation to climate change into sustainable development plans and planning processes through the three country pilot projects.
Activities

- Concept development and a thorough review of literature on climate change, generally and particularly, that focuses on human security.
- Commission and conduct case studies on the impact of climate change on human security in selected countries of the region.
- Consultative sessions with policy makers, other stakeholders and local communities to identify and promote specific ways and means of integrating measures to address climate change in current and future conflict/security resolutions.
- Prepare, publish and widely disseminate policy guidelines, reports, proceedings and/or a volume of books based on the project’s research to improve understanding of conflicts and insecurities arising from climate related disasters.
- In collaboration with the African Union (AU) or Intergovernmental Authority on Development (IGAD), organise a regional conference on alternative conflict management approaches with an emphasis on the role of climate change information.
- Conduct training courses for stakeholders on climate change and human security in selected countries.
- Outreach activities at national, regional and global levels (with active engagement and participation in the UNFCCC negotiation process). The activities are linked to the CBAA and CLACC projects.

Climate Change Activities

- The Development and Climate day at UNFCC on June 6, 2009 brought together negotiators, science experts, civil society, community organisations and other interested parties. ACTS and other partners participated at the Development and Climate Day and addressed critical points towards reaching a fair deal in Copenhagen. Some of the thematic areas and discussion points were:
  
  I. Highlighting recent science results and their implications for climate–resilient development.
  II. Advancement of the debate of the future support for national adaptation strategies in developing countries and their roles in the Copenhagen agreement.
  III. Discussion of promotion on development of alliances between governments and civil society.

- ACTS was represented in the negotiations which centered on climate change and the perspectives of Southern civil society organisations towards a fair deal in Copenhagen for the vulnerable countries and communities. ACTS continues to actively participate in the UNFCCC global process and sharing knowledge and experiences in the upcoming Development and Climate Days.

Commonwealth of Learning

The Commonwealth of Learning (COL) entered into an agreement with ACTS on April 3, 2009 to serve as the lead partner to coordinate and facilitate the activities of COL with the partner institutions. The agreement is set to build the capacity of partner states in lifelong learning for sustainable livelihoods (L3F) through the use of Open and Distance Learning (ODL).
According to the agreement ACTS

I. Coordinated the activities of the Masinde Muliro University of Science and Technology (MMUST); the Ugunja Community Resource Centre (UCRC); the Sustainable Agricultural Centre for Research and Development Africa (SACRED); and the Kenya AIDS Intervention Prevention Project Group (KAIPPG), (as defined in their respective activity log frames Results Based Management (RBMs).

II. Assisted these institutions to build capacity and developed contractual relationships with MMUST, UCRC, SACRED & KAIPPG;

III. Facilitated the flow of funds as outlined in the RBMs for the required outputs;

IV. Identified the parameters as per the attached RBM, monitored the activities and reported to COL every month;

V. Organised the training programmes with MMUST on ODL for development;

VI. Provided a framework for environmental sustainability vis-à-vis climate change and water resource management in all the identified livelihood options;

VII. Facilitated the linkages of banks and markets with primary stakeholders in UCRC, SACRED and KAIPPG and held discussions with Equity Bank to market and to strengthen their involvement in L3F;

VIII. Monitored and reviewed the activities of MMUST, UCRC, SACRED & KAIPPG; and

IX. Prepared an Evaluation report based on outcome indicators and lessons learned and delivered it to COL;

X. Consolidated the experiences of all the partners and developed a two-year activity plan for L3F with the partner institutions.

COL contributed resources (seed funds) as agreed on in the contribution agreement; and liaised between ACTS, MMUST, UCRC, SACRED, KAIPPG, African Virtual University (AVU) and Equity Bank.

Activities

The Hay Festival, StoryMoja (Kenya) and the Hay Festival (UK) in 2009 organized a festival in Nairobi.

The Hay festival brought together the best Kenyan and international storytellers, writers, environmentalists and readers to celebrate the sharing of stories and ideas. The StoryMoja Hay Festival, Nairobi is a collaboration between three partners building on the success already achieved by StoryMoja and Kwani in Kenya and the Hay Festival’s success elsewhere in the world over the last 21 years. The Nairobi festival was a three-day celebration that provided opportunities for the meeting of minds and sharing of ideas between storytellers and the public. The Festival acted as a platform for readers, writers, listeners and thinkers and provided exposure to some of the world’s leading names in literature as well as some up-and-coming authors. It also provided space for the culmination of active participation in the ‘Kenya Get Reading Campaign’ workshops for students, which StoryMoja have cultivated alongside universities and schools over the last two years. The StoryMoja Hay Festival Nairobi offered an opportunity to bring much-needed focus on the importance of literacy in improving people’s day-to-day lives, helping improve social cohesion and informed decision-making in an atmosphere of relaxed enjoyment. ACTS staff participated in this event and publications from the Centre were distributed.

• Andrew Adwera stood in for the Executive Director in a climate change meeting organised by Christian Aid on May 16-18, 2009.
• Elvin Nyukuri attended the Monitoring and Evaluation Meeting in Nairobi. The meeting was organized by the IDRC from May 16-18, 2009.

**WeADAPT Google**

This is a project which endeavors to explore the potential of using Google Earth for displaying climate risk information relevant to decision makers. WeADAPT, spearheaded by the Stockholm Environment Institute (SEI), is a network of organisations working on climate change adaptation. The project seeks to collaboratively develop and pool expertise on climate change adaptation and to develop and distribute new and innovative tools, methods and datasets. The project will engage Google Earth interface as a technical platform for promoting and supporting information sharing and planning for adaptation. This will be conducted by exploring avenues for the deployment of a Google Earth Adaptation Layer, which will include an institutional and project scoping component, along with interactive guidance, utilities and output from the Climate Change Explorer via the Google Earth interface and evaluate the options available in using Google Earth as a technical platform for promoting and supporting information sharing and planning for adaptation.

**Activities**

- A Climate change adaptation projects database and an Adaptation layer have been created.
- Field data collection on climate change adaptation projects, experiences and studies in various climatic zones was carried out and the information fed into the database.

**The Sussex Manifesto Symposium, Sussex University, UK**

The Sussex Manifesto Symposium was held at Sussex University, UK from September 20-23, 2009. This covered a range of issues related to “Innovation, Sustainability, Development: A New Manifesto”, from perspectives on its historical context in relation to the original Sussex Manifesto to opportunities presented by current global transformations. The discussions were audio- and video-recorded and posted, with summaries (including implications for the new manifesto), on the new project website: [http://anewmanifesto.org/](http://anewmanifesto.org/). Andrew Adwera, an ACTS Research Fellow, represented the Centre at the meeting. Other discussions at roundtables were held around the world. ACTS hosted the Kenyan symposium on December 4, 2009 at the World Agroforestry Centre Conference Hall, Nairobi. The ACTS event was posted on the new site. ACTS staff attended and participated in the discussions.

**The Bangkok Climate Change Negotiation**

ACTS was represented at the UNFCCC meeting in Bangkok from October 18-20, 2009. ACTS actively participates and contributes to the negotiation text on Adaptation and Finance. In March and June 2009, meetings were held in Bonn, Germany to discuss the same issue.

**The African Ministerial Conference on the Environment (AMCEN)**

The Second African Civil Society Consultative Workshop on Climate Equity was held in Addis Ababa, Ethiopia. The workshop brought leading civil society actors together to build a shared strategy and to define common actions around climate justice and equity issues for a fair, equitable and ecologically just outcome at the UNFCCC meeting in Copenhagen.

In recognition of the significant role other stakeholders, particularly governments play in the ongoing international dialogue on the post-2012 climate change treaty, the Pan African
Climate Justice Alliance (PACJA) participated in the Technical Sessions of African Ministerial Conference on the Environment, that coordinated the work of the African Union to consolidate a unified and amplified continental voice ahead of UNFCCC-COP15.

Integrated Water Resources Management (IWRM) for Pastoralists in African Drylands: Meeting the Climate Change-Security Challenge

The drylands of the world are among the most vulnerable to climate change. At the same time, the resilience of human and natural systems in dryland areas has been remarkable, especially in the Eastern and horn of Africa. Climate change is an additional stress to this region that is already experiencing other pressures. A timely signaling of the impacts of climate change on security by the United Nations Security Council (UNSC) is a good gesture. The pastoralists in the drylands have been classified as a marginalised group, living in fragile ecosystems with multiple stresses. Understanding the effects of climate change and defining successful adaptation strategies are still in their infancy. Development of sector and location-specific technologies and methodologies are needed. The project aims to identify and analyse institutional barriers and opportunities for implementing IWRM among pastoralists in the Eastern and Horn of Africa drylands, and attempts to offer solutions to the barriers in a way that takes maximum advantage of the possibility for corollary contributions to peace-building and climate change adaptation.

Specifically the project will seek to:

I. Strengthen policies supportive of IWRM in the pastoral areas
II. Examine existing IWRM initiatives in the region and how they can be applied in the pastoral drylands
III. Expand the body of knowledge and information on the status of IWRM initiatives
IV. Widen the understanding of local strategies for managing water conflicts, including innovative uses of institutional implements and drought management technologies
V. Enlarge the participation of local actors in the formation of supportive policy environments
VI. Increase local capacities to adopt institutional and technological innovations in IWRM

Activities

- A literature review of national water policies for the various East and Horn of Africa countries to establish their nature and adequacy in promoting IWRM.
- Identification and selection of project case studies.
- Field studies in each of the selected pastoral areas to identify and inquire into specific policies, by-laws and institutions that either promote or undermine the management of the water catchment areas by associated communities.
- Field studies to review and identify the common water spots used by the pastoral communities and conflicts over the competitive use of the resource.
- Consultative sessions with different water project communities, policy makers, stakeholders and pastoral communities on the IWRM, climate change adaptation and peace.
- Policy guidelines on IWRM along with progressive tools such as water demand management and Payments for Environmental Services (PAES) will be prepared and published.
Policy Innovations Systems for Clean Energy Security (PISCES)

ACTS, together with four other organizations embarked on an initiative to contribute to innovation and provide policy-relevant knowledge in the energy sector. So was born the Policy Innovation Systems for Clean Energy Security (PISCES). PISCES is funded by the UK’s Department for International Development (DfID). It is managed from ACTS with four other members forming a consortium. The other members are the University of Dar es Salaam (UDSM) in Tanzania, the University of Edinburgh (UoE) in the UK, the Swaminathan Research Foundation (MSSRF), in India and Practical Action UK, Practical Action East Africa and South East Asia, forming the fifth member of the group.

Activities

- PISCES staff attended the project’s annual meeting at the University of Edinburgh (UoE), UK, from June 17-26, 2009.
- PISCES in collaboration with the Ministry of Energy convened a workshop in Kisumu on June 3, 2009 to discuss and finalise the National Bioethanol Strategy. The workshop was attended by different stakeholders; sugar cane farmers, sugar and food industries, ministries of energy and agriculture, research and academic institutions and the media.
- Dr. Bernard Muok and Shadrack Kirui represented the organisation at the National Biofuel Committee meetings. Dr. Muok-ACTS’ Project Manager- was nominated to chair the Policy Working Group sub-committee to draft Kenya’s Biofuel Policy. The sub-committee was able to meet up to three times to discuss the way forward in drafting the policy. Various policies from different countries were previewed. The last meeting was held at the Lenana Mount Hotel from July 6 to 7, 2009. This was a meeting for the committee members to report back on policy previews.
- The Executive Director attended the EU Energy Initiative (EUEI), Partnership Dialogue Facility (PDF) meeting in Brussels.
- Dr. Muok and Ms. Joan Kariuki attended the Roundtable on Sustainable Biofuels East Africa stakeholder outreach meeting.
- The 6th International Biofuels Conference was organised by Winrock in New Delhi, India from March 4 to 5, 2009 and attended by Dr. Nambi from India.
- A Communication for Research Workshop was held in Nairobi Kenya, at the ICRAF Campus in February 2009.
- The Joint Implementation Group of PISCES meeting was held in Naivasha, Kenya from February 19 and 20, 2009.
- The Bioenergy Committee Meeting was held at the Ministry of Energy on February 23.
- The Bio-diesel Policy sub-committee meeting was held at the ACTS offices on May 11.
- The Stakeholder’s workshop for finalizing the Bio-ethanol strategy was held in Kisumu on June 3, 2009.
- The Quarterly Policy Working Group (PWG) meeting chaired by the Sri Lankan Sustainable Energy Authority was held on February 16 and 17.
- A two-day Biomass Policy Workshop was held from May 14 to 15 with a wider stakeholder group that produced a Policy Brief and a roadmap for Bioenergy in Sri Lanka.
- The World Bio-energy Association, International Forum, held in Beijing from June 11 to 12, 2009. The meeting was co-sponsored by World Bioenergy Association (WBA) and Dragon Power Clean Technology.
ACTS convened a meeting at its boardroom on September 8, 2009 to chart the way forward for the Kenya National Biofuels Policy. This meeting was a Write Shop for those drafting the policy. The PISCES Project Manager at ACTS, Dr. Muok chaired the meeting.

The annual Joint Implementation Group meeting of PISCES was held in Colombo, Sri Lanka from the October 20 to 22. Participants from the five partner countries were in attendance. An international seminar on PISCES Clean Energy Security was held in Negombo on October 21 and was attended by energy agencies and institutions in Sri Lanka. It was organised by the Sri-Lanka Sustainable Energy Authority, Practical Action Consulting and PISCES. On October 22, a Community Based Renewable Energy Applications field visit was organized to Rasnayakapura for the JIG members by Practical Action, Centre for Rural Development, University of Peradeniya, University of Moratuwa, the University of Ruhuna/National Engineering Research and Development Centre. ACTS was represented by Dr. Bernard Muok, Shadrack Kirui and Millie Mwango.

The PISCES project was in Burkina Faso for a regional workshop from March 23-27, 2009, on the potential role of local fruit tree and other food tree species for nutrition, poverty alleviation and biodiversity conservation in Sub-Saharan Africa. This is a regional network of African researchers with experience in drylands natural resource management. The project manager is the representative of the Eastern Africa region. Together with his team, he is in the process of compiling a book on drylands tree species used for food and nutrition. He is also the lead author on two species booklets: *Tamarindus indica* and *Adansonia digitata*.

The National Biofuel Committee met to discuss the National Biofuel Strategy on April 23, 2009. It was agreed that ACTS through PISCES should lead the policy sub-committee in developing the terms of reference necessary for developing the National Biofuel Policy.

ACTS and Practical Action personnel visited the Gaia Ethanol Stove project in Ethiopia in March to identify potential collaborators in the PISCES project. They met with producers, transporters, sellers and users of ethanol. They also met with producers and sellers of the stoves and key government representatives.

ACTS and Practical Action also conducted field interviews in various parts of Kenya. This was to gather stories and experiences from various bioenergy agencies. The main focus of the interviews was policy implications in the production, marketing and consumption processes. The focus was on biodiesel, biogas, charcoal and other bioresidues. Areas visited were, licensed charcoal producers in Kitengela and Biogas producing farmers in Murang’a.

At the June 2009 CAG meeting in the UK, PAC EA, ACTS and UDSM agreed that they would continue with the South-South information sharing process on the respective PISCES policy development processes in Kenya and Tanzania. UDSM were planning the first PISCES Tanzania Biofuels Stakeholder workshop in late September. It was agreed that two researchers would attend. The Chief Renewable Energy officer of the Department of Renewable Energy contributed positively by providing her inputs and comments on the Kenya Policy presentation made by Tameezan wa Gathui from Practical Action.

A Biofuel Stakeholders Workshop was held in Dar es Salaam, Tanzania from September 23-25, 2009. The meeting was organized by UDSM and PISCES. The workshop was opened by
the Minister for Energy and Minerals and the participants included researchers, universities, government ministries, entrepreneurs, inventors, research students and farmers. The general agreement by the stakeholders was that a national biofuel policy is needed. The main objective of the visit was to share the Kenya Biofuels Policy making processes and to learn more about the history and ongoing development of the bioenergy sector in Tanzania.

- A meeting organized by the Brazilian Government was held at the World Agroforestry Centre, Nairobi to engage biofuel researchers, producers and policy contributors in Kenya.

The Second Brazil Ethanol Week Workshop
The ACTS project manager attended the second Brazil Ethanol Week workshop in Ribierao Preto, Sao Paulo, Brazil from November 16-19, 2009. The meeting was organized by Agriculture, Livestock and Food supply Secretariat of production and AgriEnergy. The theme of the workshop was sharing the Brazilian experience on bioethanol. A total of 60 participants drawn from 25 countries covering Africa, Asia and the Caribbean were in attendance.

Practical Action Consulting in Eastern Africa (PAC-EA) through the PISCES Project held a participatory market mapping workshop on promoting sustainable charcoal production and marketing in Kenya at the Gracia Guest House, on Dennis Pritt Road, Nairobi, from November 24-25, 2009. An ACTS researcher attended the workshop. researcher at ACTS represented the Centre.

Capacity Enhancement and Mobilization Action for Energy in Africa (CEMA)
The Capacity Enhancement and Mobilization Action for Energy in Africa (CEMA) is a collaborative effort between the EUEI and the United Nations Environment Programme (UNEP). CEMA implemented by UNEP-DTIE (France) and UNEP Risa Centre (Denmark), together with partner centres throughout Africa, is a four-year activity designed to support the Africa-EU Energy Partnership. CEMA aims to enhance the dialogue between African and EU stakeholders, particularly at sub-regional level, through targeted policy engagement, special studies, information dissemination and target capacity building.
ACTS entered into a contract with CEMA as a regional Contact Point for East Africa (the member states of East African Community (EAC) and regional authorities related to energy and other countries in the sub-region.) ACTS key role in the first phase of the project is to map out key energy institutions, experts, stakeholders and key informants in African governments, energy ministries and regional organizations, within Eastern Africa regarding the need for skills and capacity building, and analytical studies specifically related to enhancing the African European Energy Partnership (AEEP) dialogue process and energy in East Africa. The objectives of the project are strengthened capacity of African regional and national institutions, mobilising and utilising existing expertise, in areas that underpin sound and appropriate energy policies and interventions, in particular participation in dialogue with development partners including EC and EU Member States. The other objective is improved capacity of key African energy stakeholders to mobilize financing for energy investments, including the financing opportunities associated with the AEEP.

**Activities**

- Management coordination and stakeholder engagement that will include consultation with key energy experts, stakeholders and key informants in African governments, energy ministries and regional organizations.
- Technical inputs in the development of synthesis and analytical reports with the help of hired experts and the creation of a database of energy projects, programmes and policies dialogue.
- ACTS will assist in the development of the AEEP Road Map, requiring collection of information and consultation with key stakeholders in the sub-region.

**Expected Outputs**

- Action programme:
- Needs assessment
- Capabilities, capacities, limitations and constraints of national and regional energy-sector institutions, specifically related to energy security and energy access
- How to address these needs over the project period.
- Synthesis and Analytical Reports on central issues related to the Immediate Objective and the expected AEEP Outcomes.
- Database of Projects Programmes and Policies in Africa, focusing on improved access to and security of energy services to private, public and commercial consumers.
- Targeted Workshops and Seminars for key issues related to the AEEP Outcomes incorporating policy dialogues.
- Specific Capacity Building and Enhancement, working in partnership with African institutions and stakeholders on key activities.
- Follow-up actions related to Capacity Building and Enhancement action and implementation plans, funding schemes and project proposals.

**Meetings**

The project manager attended a regional workshop on “Access to Modern Energy Services in Urban and Peri-urban Areas: Policies, Practices and Knowledge Sharing” at the Novotel Hotel in Dakar (Senegal) from November 3-5, 2009. The workshop was organised by The Environment Development Action in the Third World (Enda-TM) with the support of the United Nations Environment Programme (UNEP).
The workshop focused on the practices, policies knowledge-sharing platforms relevant to the challenge of providing access to modern energy, especially in urban and peri-urban areas. The workshop was based on two current UNEP-facilitated programmes:

I. The Global Network on Energy for Sustainable Development (GNESD) which has recently completed a series of cases studies on modern energy access in peri-urban zones of Africa, Asia and Latin America
II. The EUEI-UNEP Capacity Enhancement and Mobilisation Action for Energy in Africa (CEMA) in the framework of the AEEP.

In the context of these two programmes, the workshop aimed to discuss issues and challenges of the peri-urban zones in their energy planning;

Solar Learning: Facilitating South-South-North Transfer of Social and Technological Innovations on Solar Energy

The project is in collaboration between the University of Oslo, Norway, The Energy and Resources Institute (TERI) India, and the African Centre for Technology Studies (ACTS), Kenya. The project is currently at concept stage and seeks support for a workshop within the research project: “Village scale solar systems for development: Transfer of social and technological innovations between India and Kenya” (aka Solar Transitions).

The project aims to contribute to the understanding of success factors and lessons learned in the process of implementation and use of solar power plants in local communities in the South, as well as how such experiences can be transferred and adapted to other communities and countries. This proposal, Solar Learning, is submitted by three of the partners in the Solar Transitions project, representing Kenya, India and Norway.

As part of action research, Solar Learning seeks funding for a workshop in India where researchers and representatives of governments, organisations and local communities in Kenya will be given insights into the diversity of activities that have been carried out within implementation and use of solar energy systems in the Sunderban Islands in West Bengal in India. This will contribute to a process of South-South transfer of lessons between India and Kenya and facilitate the implementation of a solar energy project in the latter.

The Solar Learning workshop will also provide important learning not only for Kenyan but also for Indian, Norwegian and other researchers and practitioners within the implementation and social organisation of solar energy supply.

The proposed workshop is part of an ongoing research project, “Village scale solar systems for development: Transfer of social and technological innovations between India and Kenya”, or Solar Transitions, to last from April 2009 to April 2013.

Activities

Concept development and proposal writing for Solar Transitions and Solar Learning.

The Executive Director attended the first project meeting in the Solar Transitions research project that was held at the University of Oslo, Norway from September 20-24, 2009.

The Solar Transitions project is an international research project led from the University of Oslo and funded by the Research Council of Norway. The aim of the research project is to contribute knowledge on how to implement and use solar energy in developing countries in ways that are viable and contribute to social and economic development in local communities.
Transboundary Water Resources Management Training (TWRM)

The objective of the training programme is to develop capacity of relevant professionals and their organisations to support a sustainable development process in the Lake Victoria Region, and to stimulate improved network between professionals in the Lake Victoria Basin. The third year of the training programme was conducted in Sweden from February 16 to 20, 2009. Presentations of key aspects of transboundary water management were covered: hydropolitics, a decision support tool for water allocation at the transboundary level, strategic communication, stakeholder analysis, and international water law and environment flow requirements.

ACTS is implementing this project in collaboration with other partners. In 2009, twenty-nine water professionals from East Africa were taken through a training programme that developed participants’ negotiation and communication skills through a role play simulating the setting-up of a river basin commission. The project management team liaised with relevant ministries to identify areas of need and participants for training in 2009/2010.

The training programme is financed by Sida and implemented by Ramboll Natura and the Stockholm International Water Institute (SIWI) of Sweden together with ACTS.

Activities

- Twenty-nine water professionals from the Eastern Africa Countries were taken through the training programme;
- Participants’ negotiation and communication skills were developed through a role play simulating the setting-up of a river basin commission;
- Project management team liaised with relevant ministries to identify areas of need and participants for training in 2009/2010.
- Finalising module 4 of the 2008/2009 group;
- Following up finalisation of individual projects and ensuring that findings are shared at home.
- Preparing for the fourth phase of the project;
- Budget preparation;
- Identifying participants, reviewing and short listing.

- ACTS together with Ramboll Natura and the Stockholm International Institute held a two-week training on Transboundary Water Resources Management, in Eastern Africa. It is recognised that sustainable use of shared water resources can only be realised through cooperation and benefit-sharing, therefore, it is important for stakeholders in the shared water sector to understand the interrelations of activities and their implication to the Lake Victoria basin. The objective of this training programme was to develop the capacity of professionals involved in shared water resources and their organisations to support a sustainable development process in the Lake Victoria Region, and to stimulate improved network between professionals in the Lake Victoria Basin.

- The second phase of 2009/10 included a field visit to Kagera basin in Rwanda. Prior to this training, a series of introductory workshops were held at participant’s institutions to introduce the training programme to participants, their colleagues and their supervisors for the benefit of the institution.
Outputs
The major output of this training programme will be high-level officers trained in transboundary water issues, particularly international water law, benefit sharing, hydropolitics, transboundary water negotiation skills, among many other skills. The training programme contributed to the Centre’s Strategic Plan outputs. The project is funded by Sida through Ramboll Natura. The core intellectual and technical input was provided by ACTS’ in-house research staff and associates.

Some activities that were influenced by this work were the publication and launch of the book: *Challenges and Prospects for a New Nile Water Agreement*. The book addresses the current Nile Waters problem. It points out the core problem on the issue of inequitable allocation of rights and obligations over the beneficial utilisation of the waters of the Nile by all riparian states.

Eventually, the training programme will contribute to the development of better policies and institutional frameworks on water services. It will also lead to improved understanding and awareness among relevant stakeholders in transboundary water use and management.

Capacity and Strengths
ACTS has successfully partnered with Ramboll Natura in organizing various training workshops and field visits under this project. ACTS has also identified and engaged key resource people in the training sessions. The training has facilitated the sharing of experiences in water management among countries sharing the Lake Victoria Basin.

Biodiversity and Natural Resources Management

Environmental Health, Housing Rights and Informal Settlements: Experiences from Kigali and Nairobi

The populations of most African cities have been growing since the 1960s at some of the fastest rates in the world. Africa is now the world’s fastest urbanising region and by 2050, 55 per cent of Africans will be living in urban areas (from 38 per cent in 2000). Urbanization occurs due to a variety of different ‘push’ and ‘pull’ factors, and the interaction between urban and rural areas is often subtle and complex.

Over 90 per cent of new urban development in Africa is informal. Housing is generally defined as ‘informal’ because it has been constructed without the formal approval of the authorities. Typically, informal housing does not meet legal standards for construction (for example, regarding building materials, or the distance between housing units), and/or is constructed on land which is not legally owned by the inhabitants. There is generally a great diversity of legal issues and practical concerns, and extra-legal settlement systems have long since expanded beyond the point at which they can be regarded as a single category or process. Squatter settlements now represent a small proportion of all extra-legal urban housing for low-income groups. More recent practices, such as illegal commercial sub-divisions, may involve building permanent structures on land designated for housing development, and for which the occupants possess a form of title, but for which no building permit has been obtained.

Informal settlements are not purely the domain of the poor: a number of low-cost housing units in some informal settlements may be owned by wealthy landlords. In Nairobi, for example, landlords make considerable profits from their rental units in informal settlements,
recouping capital investments in as little as two years. Some homes in informal areas may be purchased by middle-income groups, who are able to upgrade the quality and value of the buildings.

While the construction of informal dwellings is by definition ‘illegal’, it has continued unabated in the developing world and the boundary between formal and informal is rarely clear. Rather, the informal and formal city meet at a series of interfaces, as when regulatory frameworks are adjusted and readjusted in response to the widening boundaries of informalities, or when government agents arbitrarily enforce some rules but not others. In many cases, some activities are formally extra-legal, but are considered legitimate by the actors concerned.

Science and Technology Policy Institute (STPI)

ACTS’ Science and Technology Policy Institute (STPI) is a training institution that focuses on providing training programmes on two broad areas; science and technology literacy, and related policy issues. The Institute has developed in two phases. Phase one mainly involved planning activities like building capacity for the institute, recruitment of staff, curriculum development, initial marketing of the Institute and establishing links with universities. A pilot programme consisting of two short courses with about twenty Kenyan students for each was run in September and October 2005. In the second phase beginning 2006, ACTS worked towards commercializing the Institute. In this phase, participants were sourced from all ACTS’ member states. The future plan was to bring on board other African countries based on the results of the second phase implementation.

In year three (2007), the institute revised its curriculum as necessary, based both on participatory evaluations of previous courses, changes in technology and international environmental governance frameworks. In years 2008 and 2009, the Training Institute has been built up more strategically and systemically to enhance and complement the programme work
carried out at the centre. The Institute’s activities have been integrated with regular research work to ensure better overall coherence, synergy and quality assurance of all capacity-building carried out in order to impact ACTS as an organisation. The Institute is currently revising the business plan for 2009 - 2013. The design of the training programmes is akin to the Short Course or Executive Programmes format, with a post-graduate curriculum accredited by internationally acclaimed Universities, coordinated and hosted by ACTS.

The courses are targeted at technical and management staff in NGOs’ government ministries. Research is accredited by a number of overseas universities. The objective this is to provide academic credibility and to enable universities themselves to play a more direct role. On the international front, the current candidate bodies are Penn State University (US), Harvard University (US), and Strathclyde University (UK). This initiative is critical and timely and comes at a time when the role of science and technology (S&T) in economic development is increasingly being recognized not just in the developed world, but in developing countries as well. More than ever, development institutions, not least the World Bank, are increasingly accepting and demonstrating strong correlations between the percentages of GDP spent in research and development and GDP per capita. Furthermore, S&T is increasingly becoming part of the agenda of both the international community and policy makers in developing countries. These strengthen prospects for the viability of the STPI and for ACTS to realize its vision of “Knowledge for better livelihoods.” The strategic expectation here is that through the Institute, ACTS is better placed to influence change and complement other strategies adopted by the African governments to realize the Millennium Development Goals (MDGs).

The secretariat has undertaken further market research and participated in other relevant programmes. It found that though there are many capacity building courses across the Sub-Saharan (SSA) Region, most of these are designed as fairly narrow activities dealing with provision of specific skills. As it is, there are no programmes dealing systematically with policy analysis capacity. Thus, ACTS decided to establish the Institute to meet the same need but in a more cost effective manner.

Activities
The Institute organized a three-day RIU training workshop at ICRAF on March30.2009 in collaboration with PISCES. Each PISCES partner was asked to present a brief overview of current research progress and what the resultant policy agenda will be. The workshop also introduced the notion of “outcome mapping” as a tool to assist monitoring and evaluation.

The objective of the study was to provide the PISCES Research Consortium with an overview of current bioenergy trends and land-use and bioenergy land tenure in the study countries. Activities undertaken by ACTS included:

i. A review of projections and land use modelling from IIASA and any others;
ii. A review of regulatory positions on land tenure;
iii. A review and comparison of current models for biofuel production;
iv. A review of different land ownership and agricultural models including out grower, farmer owner, usufruct and leasehold;
v. Highlight successful experiences.

Training Courses
Climate Change Adaptation Training of Trainers Workshop for NGOs in East and Southern Africa Region
ACTS with the Environmental Regional Organisation of Zimbabwe (ZERO), under its STPI and in collaboration with CLACC project, mounted a training workshop for trainers in climate change
adaptability from May 8 to 22, 2009 in Nairobi. The TOT workshop’s aim was to provide a learning platform for national and international CSO’s working in the environment, development and humanitarian sectors in the Eastern and Southern African region to strengthen their in-house capacity to understand and incorporate climate change concerns into their strategies and programmes.

Training for Innovation in Agriculture, Health and Energy in Kenya in collaboration with KCA University and the Open University (UK)

The ACTS Institute in collaboration with the KCA University and the Open University (UK) is currently running a six-month, postgraduate distance learning course on ‘Technology Policy and Innovation Research’ financed by a grant from the British Council under its Education Partnerships in Africa (EPA) Programme in a special project to support employability and career development. The project focuses on occupations in agriculture, health and energy and will enhance the innovation skills of those wishing to work in, or currently working in, relevant occupations.

Workshops and Events attended by the Executive Director

- The EUEI Partnership Dialogue Facility (PDF) Governing Board Fourth Annual Meeting in Brussels on February 11, 2009. She gave a presentation on the DFID-Funded PISCES Project.
- The first project meeting in the Solar Transitions research project that was held at the University of Oslo, Norway from September 20 to 24, 2009.
- From February 4 to 5, 2009, Andrew Adwera represented the Executive Director in the ‘Science, Ethics and Technological Responsibility in Developing and Emerging Countries’ workshop at the Silver Springs Hotel. This was meant to develop a Kenyan national manifesto on science, ethics and socialisation of research.
- A Lemelson Foundation (LF) meeting from March 17 to 20, 2009. She is a member of the International Advisory Committee (IAC).
- As a Board Member of the WBA, she attended a meeting in Beijing, China on May 8 to 11, 2009 followed by the International Forum of WBA Bioenergy on June 12 and presented a paper on “Bioenergy in Africa: A Case Study of the Policy Innovations for Systems for Clean Energy Security (PISCES) Project” . The Forum was sponsored by DP CleanTech Company Limited and National Bio Energy Company Limited with support from WBA. The aim of the conference was to promote and strengthen the communication and cooperation between the Chinese bioenergy industry and overseas countries.
- The Executive Director held a joint meeting with Norad and Sida officials in Oslo on May 11, 2009 to follow up on the meeting held in May 2008 in Stockholm. She distributed the draft Annual Report 2008, ACTS Strategic Plan 2009-2013, Program of Work 2008, Draft Narrative and Financial Report, and Audited Financial Statement for 2008. The second phase of the ARM was held on Wednesday July 1, 2009.
- A PISCES meeting in Edinburgh from June 16 to 17, 2009. The Consortium Advisory Group (CAG) for the PISCES project was held on 18th June, 2009.
- The World Bioenergy Clean Vehicles and Fuels International Conference that took place on September 16 to 19, 2009 in Stockholm, Sweden. The ED gave a presentation on “Reflections on Kenya’s experience with Gasohol”.
- The first project meeting in the Solar Transitions research project from September 20 to 24, 2009 at the University of Oslo, Norway.
- A meeting with the STEPS Advisory Committee, at the Freeman Centre Building, University of Sussex on September 25, 2009.
• Stockholm Environment Institute 20th Anniversary celebrations at the Stockholm University on October 8, 2009.
• A major international conference from November 2 to 3, 2009, at Chatham House in London. The theme of this meeting was Food Security: Achieving long-term solutions.
• The Executive Director was nominated a member of the WorldFish Board of Trustees. The WorldFish Centre is an organization that uses its science and development areas to reduce poverty and hunger by improving fisheries and aquaculture. She attended a board meeting in Cairo from November 15 to 20, 2009. This included a two-day meeting plus a field trip on November 19 to the WorldFish’s research centre in Abbassa.
• From November 30 to December 1, 2009, the Executive Director participated at the “Women for Science Workshop”, at the Hilton Hotel, Nairobi. Some of the main issues that were covered during the workshop were: The highlights of the InteAcademy Council (ICA) Report on Women for Science and recommendations therein, participation of women in science in Africa, recommendations and overcoming main challenges, the role and perspective of Policy makers on Women for Science, case studies of best practices from Africa and elsewhere and the role of Academies, journalists and stakeholders in publicizing the Women for Science Report.
• World Bioenergy Association Board General Assembly and Steering Committee meeting in Copenhagen, Denmark in mid-December, 2009 and participated at a side event at the COP15.
• The Executive Director attended a UNIDO/AFR panelists’ Round Table meeting in Vienna, Austria on December 8, 2009.

Human Resources Report
During the year, human resource management was enhanced by development and improvement of a number of policies and systems. The Staff Performance Management System was improved and the new system will be operationalized from January 2010. The Staff Development Policy was also developed and implemented during the year. ACTS maintains a regular staff of about 17 at any one given time. The Centre periodically hosts interns, consultants and temporary staff in the various programmes and projects.

Gloria Nyawira Muhoro served as an intern at ACTS from May 15, 2009. She left to pursue her studies at Moi University where she is pursuing an undergraduate B.Sc degree in Biochemistry. She worked on developing a concept note for testing the Gaia ethanol clean cook stove in Kenya, collecting Enset samples for starch analysis and completing the Enset distribution/suitability map and developing Biofuel policy.

Jane Lumumba served as an intern from July 5, 2009 to August 15, 2009. Ms Lumumba conducted research and organized logistics for Environmental Health, Housing Rights and Informal Settlements: Experiences from Kigali and Nairobi project. She also conducted a literature review and Developed semi-structured interview checklists and other fieldwork tools for the Nairobi case-study.

Charles Tonui, who joined the Centre as an intern in 2009, was confirmed as a Research/Project Assistant in November.

Mattia Vianello came to ACTS in June 2009. He worked as a Visiting Fellow from the University of Edinburgh, UK. Mattia did his research in Bioenergy under the PISCES project.

Elvin Nyukuri, Serah Nderitu, Dorothy Moraa and Brian Otiende left the Centre in 2009. Nyukuri and Nderitu left to pursue further studies.

Simon Ihumba was appointed Office Assistant in November, 2009.
## Summary of Income and Expenditure Statement

<table>
<thead>
<tr>
<th>INCOME/EXPENDITURE ITEMS</th>
<th>Amount (US$)</th>
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<tr>
<td><strong>Income</strong></td>
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<td>Grants</td>
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<td>Consultancy</td>
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<tr>
<td>Others (interest income etc.)</td>
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<tr>
<td><strong>Total Expenditure</strong></td>
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<tr>
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<td>Travel &amp; Workshops</td>
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<td>Communication</td>
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<td>Field work &amp; Other Research Expenses</td>
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<td>Monitoring &amp; Evaluation</td>
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<td><strong>Administrative Expenditure</strong></td>
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<td>Rent</td>
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<td>Office Expenses</td>
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<td>Travel &amp; Meetings</td>
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<tr>
<td>Audits, Evaluations &amp; Related</td>
<td>10,000</td>
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<tr>
<td>Purchase of Equipment</td>
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<tr>
<td><strong>Surplus / (Deficit)</strong></td>
<td>366,920</td>
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</tbody>
</table>
The 12th Session of ACTS Governing Council
The 12th Session of ACTS Governing Council and 8th ACTS donors’ meeting was held from January 21 to 23, 2009 in Nairobi. The Council received the report on the Programme implementation for 2008, approved the Programme of Work for 2009 and the Strategic Plan 2009-2013 which was launched on January 22, 2009.

Governing Council Members

Prof. Mohamed H. Abdel Aal
Head of Agricultural Extension Division
The Arab League of States, The Arab Centre for the Studies of Arid Zones and Drylands, (ACSAD), Syrian Arab Republic, Damascus
Chair, Member Nominations and Programme Committees

Mr. Bruce R. Scott
Director of Partnerships and Communication
International Livestock Research Institute (ILRI)
Chair of Executive Committee

Mr. Tanveer Arif / Peter Simi
(Project Officer) Executive Director, Environmental Liaison Centre International (ELCI)
Member, Programme and Executive Committees

International Centre for Research in
Agro Forestry
Chair Programme Committee &
Member Executive Committee

United Nations Environment Programme

Prof. Alfred A. Oteng-Yeboah
Deputy Director General (Environment & Health Sector)
Council for Scientific and Industrial Research (SCIR) Accra, Ghana
Member, Programme Committee

Prof. Judi W. Wakhungu
Executive Director, ACTS
Ex-officio

Mr. Alick. K. Manda
Head of the National Research Council of Malawi, First floor, Lingadzi House, City Centre
Member, Nominations Committee

Prof. G.B.A. Okelo
Fellow, Third World Academy of Sciences (TWAS)
C/o Nairobi Hospital, Lab. Building, 2nd Floor
Vice-Chair & Member, Executive and Programme Committees
Prof. Ratemo W. Michieka
Director, Centre for Practical Action

*Member, Executive Committee*

Mrs. Margaret W. Maimba
Chief Science Secretary, Head, Environmental and Earth Sciences Schedule

*Executive Committee*

Dr. Michael Ståhl, Director
International Foundation for Science (IFS) Karlavägen

*Chair, Programme Committee*

Ambassador Pius Yasebasi Ng’wandu
Chairman, Yase Consult, Dar es Salaam, Tanzania

*Member, Programme Committee*

**Activities**

Mohamed Abdel Aal is now the Head of Agricultural Extension Division at the Arab League of States, The Arab Center for the Studies of Arid Zones and Drylands (ACSAD), Syrian Arab Republic, Damascus.

Margaret W. Maimba is now the Chief Science Secretary, Head, Environmental and Earth Sciences Schedule. The 55th Session of the Executive Committee was held on December 1, 2009 at the ACTS Secretariat.
ACTS Staff 2009

Judi W. Wakhungu
Executive Director

Norman Clark
Director of Research & Technical Advisor to ED

Bernard Muok
Project Manager

Ronald Ajengo
Finance/Administration Manager

Susan Murunga
Personal Assistant to ED

Fridah Nkirote
Project Accountant

Elvin Nyukuri
Research Fellow

Andrew Adweria
Research Fellow

Joan Kariuki
Research Assistant

Tom Ogaga
Procurement Officer

Harrison Maganga
Communications & Public Relations Officer

Shadrack Kirui
Research Assistant

Mary Muthoni
Publications Officer

Serah Nderitu
Research Assistant

Everlyne Chebet
Assistant Accountant / Administration Assistant

Millie Mwango
Communications Assistant

Charles Tonui
Research/ Project Assistant

Johnson Njenga
Driver/Office Assistant

Simon Ihumba
Office Assistant
Resource Persons

Dr. James Smith  
Centre for African Studies, Edinburgh University

Dr. Owen McIntyre  
National University of Ireland

Dr. Bruce Lankford  
University of East Anglia

Benjamin Gendron  
University of East Anglia

Dr. Anthony Turton  
Strategic Research Leadership: Water Resource Competency Area Pretoria

Mr. John Rao Nyaoro  
Directorate Ministry of Water Kenya

Sylvand Kamugisha  
Pangani Project IUCN Tanzania

Dana Globler  
Blue Science South Africa

Antonia Belcher  
Aquatic Scientist, Environmental Monitoring Consulting South Africa

Mr. Jason Oyugi  
Global Water Partnership

Dr. Rose Mukankomeje  
REMA Rwanda

Cecilia Martinsen  
SIWI

Christine Navaro

Nabide Isah Kiti  
AKAGERA Project

Mr. Bjorn Hansson  
Ramboll Natura, Sweden

Benito Mueller  
(ECBI) UK

Saleemul Huq  
(ECBI) UK

Hohit S. Gebreegziabher  
(ECBI) UK

Liberal Suburikoko  
(ECBI) Rwanda

David Lesolle  
(ECBI) Botswana

Emily Massawa  
(ECBI) Kenya

Lulu Hayanga  
Consultant-PISCES

Hannah Reid  
IIED, UK

David Dodman  
IIED, UK

Simon Anderson  
IIED, UK

Chris Huggins  
Independent Consultant

Paul Goldsmith  
Methodist University

Osman Balgis  
Methodist University

Rober Mudida  
UON

Jones Agwata  
UoN

Emily Polack  
IDS, UK

Terry Cannon  
IIED, UK

Ben Smith  
SEI-UK

Isabelle Lemaire  
IIED-UK
Abebe Tadege Atadege
ICPAC, Kenya

Dr. Francis Kimani
Ministry of Health, Kenya

Mr. Parmindar S. Lotay
PharmAccess Africa Limited, Kenya

Prof. Christian Borgemeister
ICIPE, Kenya

Prof. Judith Sutz
Universidad de la Republica, Uruguay

Dr. Rebecca Hanlin
Open University, UK

Dr. Padmashree Gehl Sampath
Open University, UK

Dr. Harold Bisase
Private Sector Medical Practitioners Association, Uganda

Dr. Asefe Ayele
ILRI, Kenya

Prof. Shem Wandiga
Centre for Science and Technology Innovations, Kenya

Mary Hendrickson
National Press Club

Kawther Latiri
World Conservation Congress

Kevin Akoyi
CDS High Level SA Ministerial

Alia Gana
CDS IPM-FEB

Shelley Feldman
National Press Club

Carol Markwei-SSA
UNEP-GC

Rodger Leakey
UNEP-GC

Molly Anderson
CSD IPM-FEB

Marcia Ishii-Eiteleman
CSD IPM-FEB

Elizabeth Robinson
SSA Planning Meeting

Maria Cristina Plencovish
UNESCO

Shelley Fieldman
Writing Team

Davo Vodouhe
CDS IPM-FEB

Romeo Quijano
LAC

Inge Armecht
ESAP

Molly Anderson
Food Systems and Public Health

Ivette Perfecto
Int. Assoc. Landscape Ecology

Janice Jiggins
UNESCO

Erika Rosenthal
CSD-LAC
## Collaborating Institutions

<table>
<thead>
<tr>
<th>Institution</th>
<th>Country</th>
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<tr>
<td>Action Group for Renewable Energies and Sustainable Development (GED)</td>
<td>Mozambique</td>
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<tr>
<td>Africa Virtual University (AVU)</td>
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</tr>
<tr>
<td>AMADE-PELCODE, (CLACC) Mali</td>
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<tr>
<td>AMBERO-IP with Deutsche Gesellschaft fuer Technische Zusammenarbeit (GTZ)</td>
<td>Mozambique</td>
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<tr>
<td>Bangladesh Centre for Advanced Studies (BCAS), (CLACC)</td>
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<tr>
<td>Bangladesh CARITAS</td>
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<td>Centre for Innovations and Technology Transfer (CITT), Kigali Institute</td>
<td>Rwanda</td>
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<td>Centre for International Climate and Environmental Research (CICERO)</td>
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<td>Commonwealth of Learning (COL)-Funder (seed funds)</td>
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<td>Coordination Unit for the Rehabilitation of the Environment (CURE)</td>
<td>Malawi</td>
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<td>Development Network for Indigenous Voluntary Association (DENIVA)</td>
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<td>Energy and Environmental Concerns for Zambia (EECZ)</td>
<td>Uganda</td>
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<td>Environmental Development Action in the Third World (ENDA)</td>
<td>Senegal</td>
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<td>Environmental Protection and Management Services (EPMS)</td>
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<td>Equity Bank</td>
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<td>German Watch</td>
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<tr>
<td>INNOGEN Centre – Resource persons</td>
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<tr>
<td>Institute of Development Studies, Sussex, UK</td>
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<tr>
<td>International Institute for Environment and Development (IIED)</td>
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<td>International Institute for Sustainable Development</td>
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<td>Kenya AIDS Intervention Prevention Project Group (KAIPPG)</td>
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<td>Local Initiatives for Biodiversity, Research and Development (LI-BIRD)</td>
<td>Nepal</td>
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<tr>
<td>London School of Hygiene and Tropical Medicine (LSHTM)</td>
<td>UK: <a href="http://www.lshtm.ac.uk">www.lshtm.ac.uk</a></td>
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<td>M.S.Swaminathan Research Foundation (MSSRF)</td>
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<td>Makerere University – Resource persons</td>
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<td>Masinde Muliro University of Science &amp; Technology (MMUST) Millennium</td>
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<td>Institute – Resource persons</td>
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<tr>
<td>Organisation des Femmes pour la Gestion de l’Energie, de l’Environnement</td>
<td>Benin</td>
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<tr>
<td>et la promotion du Developpement Integre (OFEDI)</td>
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<td>Plan International, Kenya</td>
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<tr>
<td>Potsdam Institute for Climate Research (PIK)</td>
<td>Germany</td>
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<tr>
<td>Practical Action Consulting South Asia</td>
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<tr>
<td>Rangpur Dinajpur Rural Service (RDRS), Bangladesh: <a href="http://www.rdrsbangla.net">www.rdrsbangla.net</a></td>
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<tr>
<td>Royal Society for the Protection of Nature (RSPN)</td>
<td>Bhutan: <a href="http://www.rspn-bhutan.org">www.rspn-bhutan.org</a></td>
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<td>SACRED Africa</td>
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<tr>
<td>Stockholm Environment Institute- Oxford, (CLACC) UK</td>
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<tr>
<td>Sudanese Environment Conservation Society (SECS), (CLACC) Sudan</td>
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Sustainable Agricultural Centre for Research and Development Africa
TENMIYA, (CLACC) Mauritania
Ugunja Community Resource Centre (UCRC),
UHAI Lakes Forum – (CBO-CBAA Project)
UNFCC, CLACC
United Nations Environment Programme-Global Environment Facility -- UNEP-GEF
University of Dar es Salam (UDSM)
University of Edinburgh
Zimbabwe Regional Environmental Organization (ZERO), (CLACC) Zimbabwe: www.zeroregional.com
ACTS Publications in 2009

1. “Global Report”, a publication of the International Assessment of Agricultural Knowledge, Science and Technology, 2009
2. “Summary for Decision Makers”, a publication of the International Assessment of Agricultural Knowledge, Science and Technology, 2009
3. “Sub-Saharan Africa” report, a publication of the International Assessment of Agricultural Knowledge, Science and Technology, 2009
4. “Executive Summary for Decision Makers” a publication of the International Assessment of Agricultural Knowledge, Science and Technology, 2009
5. “Synthesis Report” a publication of the International Assessment of Agricultural Knowledge, Science and Technology, in press
6. “Global Summary for Decision Makers” a publication of the International Assessment of Agricultural Knowledge, Science and Technology, in press
7. Climate Change at ACTS Newsletter, 2009
16. Civil Society Climate Change Networks in the Least Developed Countries, December 2009. (CLACC Brochure)
<table>
<thead>
<tr>
<th>Acronyms</th>
<th>Full Form</th>
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<tr>
<td>ACTS</td>
<td>African Centre for Technology Studies</td>
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<tr>
<td>ACCESSA</td>
<td>Integrating Vulnerability and Adaptation to Climate Change into Sustainable Development Policy Planning and Implementation in Eastern and Southern Africa</td>
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<td>ACSAD</td>
<td>The Arab Center for the Studies of Arid Zones and Drylands</td>
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<tr>
<td>AEEP</td>
<td>African European Energy Partnership</td>
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<tr>
<td>AMCEN</td>
<td>African Ministerial Conference on the Environment</td>
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<td>AKST</td>
<td>Agricultural Knowledge, Science and Technologies</td>
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<tr>
<td>ALRMP</td>
<td>Arid Lands Resource Management Project</td>
</tr>
<tr>
<td>ALRMP II</td>
<td>Arid Lands Resource Management Project</td>
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<td>AIARD</td>
<td>Association for International Agriculture and Rural Development</td>
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<td>ARM</td>
<td>Annual Review Meeting</td>
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<td>AU</td>
<td>African Union</td>
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<td>AVU</td>
<td>African Virtual University</td>
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<td>AWG-LCA</td>
<td>Ad Hoc Working Group on Long-term Cooperative Action under the Convention</td>
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<td>BIO-EARN</td>
<td>The East African Regional Programme and Research Network for Biotechnology, Biosafety and Biotechnology Policy Development</td>
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<td>BP</td>
<td>Business Plan</td>
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<td>CABE</td>
<td>Centre for African Bio-Entrepreneurship (CABE)</td>
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<td>CAG</td>
<td>Consortium Advisory Group</td>
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<td>CBAA</td>
<td>Community Based Adaptation in Africa</td>
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<td>CCAA</td>
<td>Climate Change Adaptation in Africa</td>
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<td>CLACC</td>
<td>Capacity Strengthening in Least Developed Countries for Adaptation to Climate Change</td>
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<td>COL</td>
<td>Commonwealth of Learning</td>
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<td>COP</td>
<td>Conference of Parties</td>
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<td>CSO</td>
<td>Civil Society Organizations</td>
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<td>DFID</td>
<td>International Development</td>
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<td>EC</td>
<td>European Community</td>
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<td>Enda-TM</td>
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<td>EPA</td>
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<td>EU</td>
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<td>EUEI</td>
<td>European Union Energy Initiative</td>
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<td>FARP</td>
<td>Faculty of Agriculture Research Park</td>
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<td>GIS</td>
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<td>GNESD</td>
<td>Global Network on Energy for Sustainable Development</td>
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<td>IAASTD</td>
<td>International Assessment of Agricultural Science and Technology for Development</td>
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<td>International Advisory Committee</td>
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<td>IAICA</td>
<td>Inter-American Institute for Cooperation on Agriculture</td>
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<td>ICA</td>
<td>InteAcademy Council</td>
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<td>ICARDA</td>
<td>International Centre for Agricultural Research in the Dry Areas</td>
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<td>ICRAF</td>
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<td>IDR</td>
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<td>IDRC</td>
<td>International Development Research Centre</td>
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<td>IGAD</td>
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<td>IIASA</td>
<td>International Institute for Applied Systems Analysis</td>
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<td>IIED</td>
<td>International Institute for Environment and Development</td>
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<tr>
<td>IWRM</td>
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</tr>
<tr>
<td>JKUAT</td>
<td>Jomo Kenyatta University of Agriculture and Technology</td>
</tr>
<tr>
<td>Acronym</td>
<td>Description</td>
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<td>KAIPPG</td>
<td>Kenya AIDS Intervention Prevention Project Group</td>
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<td>KARI</td>
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<td>LDCs</td>
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<td>Swaminathan Research Foundation</td>
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<td>Practical Action Consulting in Eastern Africa</td>
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<td>Pan African Climate Justice Alliance</td>
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<td>PDF</td>
<td>Partnership Dialogue Facility</td>
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<td>Environmental Regional Organisation of Zimbabwe</td>
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ACTS’ Vision
Knowledge for better livelihoods

ACTS’ Mission
To strengthen the capacity of African countries and institutions to harness science and technology for sustainable development