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# USAID/UGANDA EDUCATION AND RESEARCH TO IMPROVE CLIMATE CHANGE ADAPTATION ACTIVITY FY 2015 QUARTERLY REPORT TWO JANUARY I, 2015 – MARCH 31, 2015

**April 28, 2015**

This publication was produced for review by the United States Agency for International Development. It was prepared by FHI 360.

## **USAID/UGANDA EDUCATION AND RESEARCH TO IMPROVE CLIMATE CHANGE ADAPTATION**

This Activity – (Cooperative Agreement No: AID-617-A-14-00001) – is funded and managed by USAID/Uganda. Services and support are provided by FHI 360 (the prime recipient) in partnership with aWhere Inc. Collaborating entities include Makerere University, Ugandan and U.S. government agencies, international organizations, development organizations, academic institutions, NGOs, community-based organizations, and private enterprises.

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Submission Date: April 28, 2015

### **DISCLAIMER**

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<b>Acronyms</b>	
AOR	Agreement Officer's Representative
AR5	Assessment Report Number Five
CAADP	Comprehensive African Agriculture Development Plan
CAEC	Continuing Agriculture Education Center
CAES	College of Agricultural and Environmental Sciences
CCA	Climate Change Adaptation
CCD	Climate Change Department
CCU	Climate Change Unit
CEES	College of Education and External Studies, Makerere University
CHAI	Climate Change Adaptation & ICTs
CIMMYT	International Maize and Wheat Improvement Center
CLA	Collaboration, Learning, Adapting
CoCIS	Makerere University College of Computing and Information Sciences
COP	Chief of Party
DCC	Department of Climate Change
DENIVA	Development Network of Indigenous Voluntary Associations
DGGCS	Department of Geography, Geo-informatics and Climatic Sciences
DSIP	Agricultural Sector Development Strategy & Investment Plan
EAC	East African Community
EEA	USAID/Uganda Feed the Future Enabling Environment for Agriculture Activity
ECOTRUST	Environmental Conservation Trust of Uganda
FTF	USAID/Uganda Feed the Future activities
GIS	Geographic Information System
GoU	Government of Uganda
ICPAC	International Climate Predictions and Application Center
ICRAF	World Agroforestry Centre
ICT	Information Communication Technology
IITA	International Institute for Tropical Agriculture
IPCC	Intergovernmental Panel on Climate Change
LIP	Location Intelligence Platform
LOA	Life of Activity
M & E	Monitoring and Evaluation
MAAIF	Ministry of Agriculture, Animal Industry and Fisheries
MAK	Makerere University
MoFPED	Ministry of Finance Planning and Economic Development
MOOC	Massive, Open, Online Course
MOU	Memorandum of Understanding
MUCCRI	Makerere University Centre for Climate Change Research and Innovations
MUST	Mbarara University of Science and Technology
MWE	Ministry of Water and Environment
NAADS	National Agricultural Advisory Services
NAPA	National Adaptation Programmes of Action

NARO	National Agricultural Research Organization
NCAR	National Center for Atmospheric Research
NDP	National Development Plan
NEMA	National Environment Management Authority
NGO	Non-governmental Organization
NORAD	Norwegian Agency for Development Co-Operation
NPA	National Planning Authority
OPM	Office of the Prime Minister
RDBM	Relational Database Management
REDD+	Reducing Emissions from Deforestation and Forest Degradation
RFP	Request for Proposals
SCALE	System-wide Collaborative Action for Livelihoods and the Environment
SFECS	School of Forestry, Environmental and Geographical Sciences
SNA	Social Network Analysis
SOW	Scope of Work
STTA	Short term Technical Assistance
TOC	Theory of Change
ToT	Training-of-Trainers
UNAP	Uganda Nutrition Action Plan
UN	United Nations
UNDP	United Nations Development Programme
UNFCCC	United Nations Framework Convention on Climate Change
USAID	U.S. Agency for International Development
USG	U.S. Government
WSR	Whole-System-in-the-Room
WWF	World Wildlife Fund

## I. INTRODUCTION

Through this document, FHI 360 formally presents to USAID/Uganda the second quarterly report of FY15. The primary activities and accomplishments conducted during the reporting period from January 1, 2015 to March 31, 2015 are outlined in this record.

### A. Summary Highlights

Highlights of activities and achievements during the quarter include the following:

- Development Studies core course: *Development, Energy, and Environment* now has climate change content that will become permanent in the course content – from faculty mentoring with the Activity staff
- A three day Climate Change Boot Camp was undertaken with college students from around Uganda. Presenters and activity leaders included faculty from various colleges, departments, and projects within Makerere University (MAK) and from the United Nations Framework Convention on Climate Change (UNFCCC) Regional Office in Kampala
- Graduate and Undergraduate students supported to undertake climate adaptation research efforts
- The cross-cutting course entitled *Atmospheric Processes, Weather and Climate*, developed with technical support from the Activity, was approved by the School of Forestry, Environmental and Geographical Sciences (SFEGS) where the course will be hosted

### B. Activity Description

The overall goal of the *USAID/Uganda Education and Research to Improve Climate Change Adaptation Activity* (the Activity) is to help establish the Makerere University (MAK) Centre for Climate Change Research and Innovations (MUCCRI) as a recognized national and regional hub of academic, professional development and research excellence in climate science, climate adaptation, and related disciplines. The Activity will strategically deploy human, financial and technology resources with the target continually focused on building Ugandan capacity and proficiency to address climate adaptation and related issues. More specifically, the Activity will mobilize leading academics, scientists, and researchers to work side-by-side and in partnership with Ugandan colleagues to build upon the foundational efforts made by the College of Agricultural and Environmental Sciences (CAES) and others to date in developing and establishing MUCCRI. In so doing, MUCCRI will become a fully functional, operational, and sustainable center within MAK/CAES. The Centre will have the requisite staff, knowhow, capacity, and resources to be a sought-after location to focus and support climate and climate adaptation education and research for the benefit of the University and the Nation.

*USAID/Uganda Education and Research to Improve Climate Change Adaptation Activity* has the following results:

*Result 1: Institutional structure of MUCCRI is established and supports MUCCRI objectives:* The first step in this result area is to support the official establishment of MUCCRI at MAK. To support MUCCRI establishment, this Activity is undertaking a number of actions. It is coordinating each work plan with the CAES strategic plan. An informational campaign is being waged to increase knowledge and understanding about the science, potential impacts,

and responses from/to climate change and climate adaptation through a variety of methods – some still to be implemented. The methods include: formal and informal presentations at college/school/departmental meetings, in classrooms, and in seminars. Postings on websites, announcements in campus media, and adding modules on climate change to established courses, and other options. The Activity will work to reach both the campus community and outside of the campus through traditional media outlets. An e-learning and networking hub (Adapt2CC) is being established that will act as a linkage between and among students, staff and other interested parties to share information on climate change adaptation work throughout the region. Once MUCCRI is approved the Activity will provide timely support for establishing and functioning of both the MUCCRI Steering and Science Committees. Official approval and these committees will become the backbone of the MUCCRI institutional structure that will allow future development and the building of a resilient and long lasting Centre.

*Result 2: MUCCRI provides cutting edge short and long term training to students, staff, and external stakeholders*

*Result 2a: Undergraduate and graduate coursework on climate change improved:* The Activity supports the establishment of a suite of formal academic offerings for undergraduate through post-graduate students. Those offerings will include: a college-wide undergraduate climate change course; specialized graduate-level trainings based on the latest research findings and innovations gleaned from around the world but adapted to the Ugandan context; and a new Master of Science (MSc) program on climate change science. It will also include: collaborative teaching and learning arrangements with other parts of the university, notably with the School of Women and Gender Studies, Department of Journalism and Communication, School of Education, and School of Social Sciences. There will also be non-degree related activities such as: the establishment of an e-learning platform and networking hub with access to numerous identified online programs and an informal lecture series to introduce climate change issues to the broader university.

*Result 2b: Short term training to external stakeholders provided:* Over the life of this Activity (LOA), an array of short term training options and vehicles to increase climate change and adaptation knowledge for key stakeholder groups will be created. These groups are external to but linked to the university, and include select public sector institutions, civil society groups, and the private sector. Where appropriate and through agreements, trainings will be jointly designed and led by Activity staff and other partners in conjunction with academic staff and students from CAES and other MAK schools and departments as a way to create a “climate smart” institution. Training types will include: in-service training modules, webinars, policy briefs, informational packets, and presentations for various key stakeholders.

*Result 3: MUCCRI is generating high quality climate change and climate change adaptation research:* The Activity will strengthen the relationship between CAES, the International Institute for Tropical Agriculture (IITA), and the National Agricultural Research Organization (NARO) to conduct joint research and field trials that reflect actual demands and needs of Ugandan smallholder farmers. The students chosen to conduct the research and field trials will be jointly managed and jointly financially supported. In addition, the Activity will introduce the aWhere *Location Intelligence Platform (LIP)*. This new platform enables integration of complex environmental, agricultural and public health data into local, actionable insight. aWhere will provide technical inputs, staff, and tailored support to the Activity and link joint MUCCRI-NARO research and field trials. The aWhere platform will

also provide actionable information and weather data to support agricultural and climate research, as well as serve as an instructional and learning tool for students.

*Result 4: MUCCRI is communicating with external stakeholders and disseminating climate change adaptation information:* The Activity will play a facilitative role fostering collaboration with other institutions such as the National Agricultural Advisory Services (NAADS) and others to convert the student research findings to simple, understandable, cost-effective and accurate guidance. Guidance resulting from Activity supported research and other relevant information and research results will be disseminated through the most appropriate channels specifically to farmers. Dissemination efforts include: through the system of extension officers at the district and sub-county levels, relied upon/popular radio programs listened to by farmers, use, and application of information communication technology (ICT), and through community agents (trusted community individuals). Dissemination efforts will also include regular editorials and articles on adaptation, student research findings, and resilience issues in key Ugandan newspapers and other media outlets.

*C.Year Two, Quarter Two Activity Highlights Table*

<b>Actions</b>	<b>Specific Actions Implemented</b>	<b>Description</b>	<b>Progress/Achievements</b>	<b>Remarks</b>	<b>Realized Output/Outcome</b>
<b>RESULT 1: Institutional structure of MUCCRI is established and supports MUCCRI Objectives</b>					
Support official recognition of MUCCRI by the University	Follow-up with CAES/MUCCRI on approval process by MAK senate	Discussions have been held with CAES/MUCCRI to keep track of the progress on the approval process of MUCCRI proposal that was submitted to the university senate by CAES/MUCCRI	No change from the progress reported in the last quarter. The MUCCRI proposal is still with the MAK Directorate of Research and Graduate Studies for review to provide recommendations to senate	The stall in the review and approval process was due to the temporary halt on the approval of any new programs at the University	FHI 360/MUCCRI/CAES harmonized positions on how to follow the approval process
MUCCRI/Activity informational campaign	Distributed MUCCRI /Activity and climate change information	Throughout the quarter, information to demonstrate the significance of MUCCRI/Activity work was shared in both informal and formal meetings. The information shared included one-pagers for MUCCRI and the Activity. Activity compiled information on climate change was also distributed to MUCCRI visitors and during meetings	Widening scope of people that are aware of MUCCRI/Activity	Growing need for online information on MUCCRI	Growing interest in the role of MUCCRI/Activity evidenced by increasing invitations to participate with other climate change related actors
	Completed the design and print of MUCCRI car stickers	The MUCCRI interim steering committee identified car stickers as one of the ways they wanted to communicate about the existence of the Centre. Together with the steering committee the sticker has been designed and printed	100 stickers have been printed for distribution	More visibility options are being developed	

Networking with partner organizations	Participated in partnership and network building actions	The Activity/MUCCRI worked with climate change partners through meetings and other joint actions. The engagements included joint trainings, information dissemination network building among others	Over 10 partner organizations engaged for climate change network building, including new ones such as WWF with focus on CC partnership opportunities on climate smart conservation	Opportunities for leveraging MUCCRI/Activity resources are emerging	A growing network of partnerships for climate change adaptation
Review and update CAES strategic plan	Follow-up with CAES/MUCCRI on the needs and preparations to have MUCCRI integrated in CAES strategic plan	The Activity continued to have discussions with CAES and MUCCRI interim management on how to integrate MUCCRI proposal into the mainstream functions of CAES	CAES is making arrangements to have college discussions to develop a short/medium-term MUCCRI business and operationalization plan	The CAES principal and the MUCCRI interim coordinator are very supportive and interested in the integration process	Inputs and entry points for the review and integration of MUCCRI in CAES strategic plan are continuously being generated

Set-up MUCCRI website with an information sharing platform	Testing and advancing the platform prototype to be fully functional	The Activity, continued to spearhead the development of a platform for information sharing in partnership with CCD supported by FHI 360's TechLab and a team of IT consultants	A server for the platform is in the final stages of procurement. In the interim, a temporary server for hosting the platform during the design phase has been provided by one of the projects at CAES	Process has been a little bit slower than expected due to delays in decisions and implementation actions by CCD	Different types and sources of information to be hosted on the platform have been identified. Information is being compiled and new resources identified on a regular basis
Activity	Specific Action Implemented	Description	Progress/Achievements	Remarks	Realized Output/Outcome
<b>RESULT 2: MUCCRI provides cutting edge short and long term training to students, staff and external stakeholders</b>					
<b>Result 2a: Undergraduate and graduate coursework on climate change improved</b>					
Support for MUCCRI/CAES cross-college climate change course approval process	Follow-up on technical input for cross-college approval	The cross-cutting course entitled <i>Atmospheric Processes, Weather and Climate</i> , developed with technical support from the Activity, was approved by the School of Forestry, Environmental and Geographical Sciences (SFECS). The course will be taught by all the 3 departments of SFECS	During this quarter SFECS submitted the course to CAES for consideration and approval at college level	The Activity team will keep in an active waiting mode to respond to technical requests from CAES through the college level consideration for approval	Course can now be taught at school level. Approval process has progressed from school to college level

Support the approval process for the MSc in climate sciences	Follow-up with MUCCRI/CAES for technical support to respond to inputs from the Board of Graduate Studies and Senate	Activity/MUCCRI is following-up on technical/ content recommendations by senate and board of graduate studies for the program. Together with MUCCRI, the Activity will further prepare and respond to technical requests from senate through the program approval process	The University has suspended approval of any new programs as the University is undergoing an overall review of all MAK programs before any new programs will be approved	The Activity is following the developments on the MAK instituted university-wide review process and suspension on program approvals until review completed and assessed	The MSc programme approval process is at MAK senate level waiting to be able to move forward after on-going university-wide review undertaken and assessed
<b>Activity</b>	<b>Specific Action Implemented</b>	<b>Description</b>	<b>Progress/Achievements</b>	<b>Remarks</b>	<b>Realized Output/Outcome</b>
Support the development of climate change content for input into MAK courses	Reviewed a compulsory course on Development, Energy, and Environment offered in the The School of Liberal and Performing Arts	Organized a meeting with the Dept. of Development Studies that hosts the course. The Activity was requested by the department to review the course and suggest climate change content to be considered. The review was done through consultations with one of the faculty from the department	Proposals on CC content for the course were made and submitted to the department	More avenues for inclusion of climate change content in the Development Studies programs, including research, are emerging	The suggested climate change content is now being introduced to all 2 <sup>nd</sup> year undergrad students of Development Studies
	An overview/ introductory presentation was made for the undergraduate students in Dept. of Geomatics and Land Management in the College of	Following expression of interest in climate change information by the department, a presentation on climate change science basics and climate change response options was made	The Geomatics Department is also interested in the possibility of adding climate specifics into its course offerings	Discussions will continue with Geomatics  The Dept. of Education continues to express interest but has not made a specific date for	

	Engineering, Design, Arts, and Technology			their review effort known	
Identify and access online course offerings	Identifying and reviewing online course options and related materials	During the quarter, the Activity continued to compile climate change related online courses and training materials/information to supplement MAK formal and informal trainings	Increased number of items on the listing of online climate change training and educational options/information. More courses and training options are being identified	The Activity has held one very preliminary discussion with members of the College of Education and External Studies (CEES) to discuss options and possibilities of whether and how to partner to offer the online courses for MAK credit. Many more discussions with CEES will be required to assess this MAK credit possibility for e-courses	An early list of potential online courses for uploading to the e-learning portal when it is ready have been identified and compiled. New options will be continuously identified

Plan and offer a monthly climate change seminar	Organised and held monthly climate change seminars for students and the general public	Two climate change seminar series events were held at MAK during this quarter. These included: Climate Change and Forestry; and Climate Change Adaptation and Policies in February and March respectively	The number of participants in the seminar series is increasing with time, including attendees from outside MAK		Growing interest in climate change learning and research by students through the series
	Plan for Year Three Seminar series	Through consultations, speakers for the various seminar slots have been identified, and others are still being identified and confirmed	List of potential speakers for the next semester (September to December) is being developed	One of the seminars may involve an online presentation by aWhere	
Follow-up training and use of the aWhere Location Intelligence Platform (LIP) as an instructional and research tool	Follow-up on students funded by the Activity on the use of aWhere knowledge and skills in their studies/research	A skype meeting was organized for aWhere trainers and students who were trained in Year One of the Activity. Feedback was generated for purposes of students' technical backstopping from aWhere Inc.	Students are directly communicating with aWhere for technical support in the use of aWhere functionalities	Access to internet and alignment of schedules especially during students' fieldwork has posed some challenges	Growing awareness and interest in use of aWhere by students
	Identification and assessment of the Activity training needs from aWhere	Through online meetings with aWhere and discussions with students, follow-up training needs have been identified	Next set of trainings has been identified and will be held in the next quarter	Undergraduate students will also be selected for participation in the forthcoming trainings	
<b>Activity</b>	<b>Specific Action Implemented</b>	<b>Description</b>	<b>Progress/Achievements</b>	<b>Remarks</b>	<b>Realized Output/Outcome</b>
<b>Result 2b: Short term training to external stakeholders</b>					
Design and develop short term training efforts	Training for University students	The first Climate Change Boot Camp for university students was held in January on the MAK campus. The Activity team, in partnership with faculty from	The Boot Camp attracted 71 participants who were equipped with knowledge and skills in climate change science and response	The Boot Camp is planned to be an annual event reaching out to all universities in	Lessons and partnership opportunities for future youth training and other engagements

		various departments of MAK and the UNFCCC Uganda office, conducted the training. The training involved expert presentations, field excursion activities, and awareness raising action planning	actions	Uganda	
	Climate change awareness/trainings for MUCCRI/Activity stakeholders	The Activity team responded to invitations for trainings for stakeholders aimed at evoking intentional integration of climate change in their programs and actions. The trainings involved awareness raising and participant centered feedback	Five stakeholder groups/organizations were trained/reached during this quarter: Boot Camp students; staff of Ag Inputs; one DENIVA region; Rotary Club of Bugalobi; PACCA/National Learning Alliance	The demand for stakeholder training is growing within and outside the University	Avenues for climate change adaptation collaboration are being identified through the trainings/awareness partnerships

	Develop training for information disseminators	MUCCRI/Activity plan to disseminate climate change information through established networks of stakeholders who are linked to various groups of information users. Potential disseminators are being offered training to equip them with climate change information that will enable them to effectively support the dissemination effort of MUCCRI	So far one interested organization (Ag Inputs) has requested and received a short climate change training course (counted above)		Additional potential training interests and audiences are being identified
<b>Activities</b>	<b>Specific Actions Implemented</b>	<b>Description</b>	<b>Progress/Achievements</b>	<b>Remarks</b>	<b>Realized Output/Outcome</b>
<b>RESULT 3: MUCCRI is generating high quality climate change and climate change adaptation research</b>					
Support student research in cooperation with IITA/NARO	Technical and financial support to students	The Activity and IITA/NARO continued to work with MUCCRI and MAK faculty to guide students, who are jointly funded, in concept/proposal development and field data collection. The Activity has also been involved in financial documentation for stipend and tuition fees payments	2 of the 3 PhD students have been provisionally admitted and are working on their final proposals for full admission at MAK. The third PhD student is expected to be provisionally admitted in the next quarter. The proposal for one of the 2 MSc students has been approved. The second student is still developing the concept into a proposal	The different pace of individual student progress is likely to be a challenge for coordinating joint student activities	MUCCRI research partnerships within and outside MAK are being established

	Coordination of the research efforts with partners	The Activity technical team invested time in ensuring that the research partnership roles are implemented in a coordinated way. A partners' meeting was held to review the progress on the planned research partnership activities including review of students' progress	All partners are actively involved with implementation of respective roles provided for in partnership agreement. Students are generally realizing positive progress	There is need to harmonize students' schedules across partners	Growing coordination for undertaking research among the partners
	Recruitment of MSc students for Year Two of the Activity	In Year One of the Activity, it was agreed with partners to recruit 2 more MSc students in Year Two. The processes of identifying specific research topics and advertising for applications is now starting	Consultations with research partners for specific research gaps emerging from the on-going PhD research are in progress	Advert will be out in the first week of April 2015. Students expected to be aboard in the first week of June	Preliminary thoughts on research topic options
	Financial and technical support to undergraduate multidisciplinary research efforts	The first team (3 students) of undergraduate students' research were supported to develop research proposals and data collection tools. One of the supervising faculty and the Activity technical team visited the students during fieldwork for lessons to guide them and other future students' research efforts	The students completed 2 weeks of data collection and have started data entry	The students were from three different departments: Forestry, Gender and Women's Studies, and Communication and Journalism	Technical and financial lessons for future undergraduate research support are being identified and documented
	Identify and recruit the second lot of undergraduate students for research scholarships	A call for undergraduate research applications was developed and posted in various departments of MAK. A presentation to potential applicants was organized to clarify what is expected from applicants. The first group of the	Consultations with the Activity from interested students are ongoing. Deadline for receiving applications is 10 <sup>th</sup> April 2015	The major concern from most potential applicants is on the requirement for multidisciplinary team formation	

		Activity-funded undergraduate students shared their experiences during the presentation			
<b>Activity</b>	<b>Specific Actions Implemented</b>	<b>Description</b>	<b>Progress/Achievements</b>	<b>Remarks</b>	<b>Realized Output/Outcome</b>
<b>RESULT 4: MUCCRI is communicating with external stakeholders and disseminating climate change adaptation information</b>					
Disseminating research results – developing a dissemination pathway	Pilot “translation” template is being tested	The dissemination pathway 3-step process is being developed. The research generators are step 1, a “translation template” for translating science into lay language is step 2 and has been developed, and the boots-on-the-ground participants are seen as step 3 and they have identified their interests, and specific information needs – and all that is included in the template and its revisions,	The “translation template” (step 2) has been tested by a scientist and also by the boots-on-the-ground pathway participants and revised accordingly. This quarter saw the hiring of a new environmental science graduate to begin working with MAK science faculty to fill out the first round of templates to begin to populate the soon-to-be ready dissemination step to the boots-on-the-ground participants for further distribution of new climate information		Step 3 dissemination pathway participants are self-identifying and looking for the new information to share. This pathway will be tested as soon as the Activity has some templates completed and a web-based site to house and distribute them. The boots-on-the-ground are actively looking for this new information to share with farmers and others

## II. ACTIVITY REPORT

### Result I: Institutional Structure of MUCCRI is Established and Supports MUCCRI Objectives

#### ***Support official recognition of MUCCRI by the University***

- Follow-up with CAES/MUCCRI on approval process by MAK senate

The Activity kept track of the progress on the approval process of MUCCRI proposal that was submitted to the university senate by CAES/MUCCRI. Through updates from interim MUCCRI coordinator the Activity has been updated that there is no change from the progress reported in the last quarter. The MUCCRI proposal is still with the MAK Directorate of Research and Graduate Studies for review to provide recommendations to the senate.

#### ***MUCCRI/Activity informational campaign***

- Distributed MUCCRI /Activity and climate change information

Throughout the quarter, information to demonstrate the significance of MUCCRI/Activity was shared in both informal and formal meetings. The information shared included one-pagers for MUCCRI and Activity. The Activity also continued to distribute flash drives with climate change information. The distribution of information on what MUCCRI/Activity are doing and are intended to do has continued to help in broadening the scope of people that are aware of MUCCRI/Activity.

- Completed the design and print of MUCCRI car stickers

The MUCCRI interim steering committee identified car stickers as one of the ways they wanted to communicate about the existence of the Centre. Together with the steering committee the sticker has been designed and printed. To date they have been distributed to the steering committee members. During next quarter, the Activity will begin wider distribution of the first batch of 100 stickers that have been printed. The Stickers will be distributed to MUCCRI visitors and during partner meetings. The Activity will continue to work with MUCCRI to assess and devise more options for raising the visibility for MUCCRI.

#### ***Networking with partner organizations***

- Participated in partnership and network building actions

The Activity has continued to leverage opportunities from other players involved in climate change related efforts in Uganda. Building on this leveraging potential, the Activity/MUCCRI worked with climate change partners through meetings and other actions. The engagements with partners/stakeholders included joint trainings, information dissemination network building among others. During the quarter, one of the partnership efforts, among others, was with the World Bank for planning and development of a climate change documentary entitled “Uganda in a changing climate”. The Activity’s contribution was focused on offering technical support on content for both the script and filming.

During the quarter, the Activity was involved with over 10 partner organizations engaged for climate change network building for action, including the World Wildlife Fund (WWF) with

focus on climate change partnership opportunities on climate smart conservation. Through these partnership engagements, the Activity has continued to deliberately identify and harness the potential and collective power of the various partner organizations and individuals with intention to help in positioning MUCCRI as a legitimate Centre on Climate Change response actions.

### ***Review and update CAES strategic plan***

- Follow-up with CAES/MUCCRI on the needs and preparations to have MUCCRI integrated into CAES strategic plan

In the process of awaiting approval of MUCCRI at university level, the Activity has continued to engage in discussions with CAES/MUCCRI interim management on how MUCCRI can/will be integrated into the mainstream functions of CAES. The discussions are aimed at generating inputs and entry points for the review and integration of MUCCRI in CAES strategic plan as soon as the Centre has been approved by MAK. The CAES Principal and the MUCCRI interim coordinator are very supportive and interested in the integration process. So far, CAES is making arrangements to have college level discussions to develop a short/medium term MUCCRI business and operationalization plan.

### ***Set-up MUCCRI website with an information sharing platform***

- Testing and advancing the platform prototype to be fully functional

The Activity, in partnership with the Climate Change Department (CCD) at the Ministry of Water and Environment, is developing the Adapt2CC platform. The platform is planned to have a web portal that integrates a range of functionalities, including a digital repository to be linked to a proposed knowledge management system of CCD and also to include an e-learning platform. The platform development is technically supported by FHI 360's TechLab and a team of IT consultants. The Activity has continued to coordinate the development process. To date, procurement of a server for the platform by CCD is reported to be in the final stages. However, the process has been a little bit slower than expected due to the decision making and implementation discussions at CCD. In an acknowledgment of these delays, the Activity is working on an interim plan B. The team has been working with CAES IT team and MAK Directorate of Communication Technologies (DICTS) to have an interim website developed that will later be assimilated into the above described multi-platform portal that will integrate all the features desired for MUCCRI. It is strongly believed that the strategy of partnering with CCD on the platform development will be important for the long-term sustainability of this website and recognition of MUCCRI. Therefore, we are proceeding in tandem with what we think is an important strategic opportunity for the long term with CCD but also to get some web presence up and running as quickly as possible. A temporary server for hosting the "plan B" platform during the design phase has been provided by one of the projects at CAES.

## **Result 2: MUCCRI Provides Cutting Edge Short- and Long-term Training to Students, Staff and External Stakeholders**

### **Result 2a): Undergraduate and Graduate course work on climate change improved**

#### ***Support MUCCRI/CAES cross-college climate change course approval process***

- Follow up discussions on technical input for cross-college course approval

The cross-cutting course entitled *Atmospheric Processes, Weather and Climate*, developed with technical support from the Activity, was approved by the School of Forestry, Environmental and Geographical Sciences (SFECS) where the course will be hosted. The course will be offered by all the three departments of SFECS, however, the content will be developed by the College so all the offerings of this course will be based on the same content. The Activity staff have offered technical support to the content development for this course. This course has also been submitted by the School to the College of Agricultural and Environmental Sciences (CAES) for consideration and approval at college level. Should that occur, then any department within the College could offer the same course.

#### ***Support the approval process for the MSc in climate sciences***

- Follow-up with MUCCRI/CAES for technical support to respond to inputs from the Board of Graduate Studies and Senate

While the Activity/MUCCRI is prepared to follow-up on technical content recommendations by the university senate and board of graduate studies for the program, the MSc programme approval process is unable to move forward until completion of the on-going university-wide review. The University has suspended approval of any new programmes as the review of all MAK programs has not been completed. There are no specific indications of when that review process will be ended. It currently appears as though the university is moving toward allowing some consideration of new programmes, but nothing has been formally announced.

#### ***Support the development of climate change content for input into MAK courses***

- Reviewed a compulsory course on Development, Energy, and Environment offered in the The School of Liberal and Performing Arts

Climate change information was discussed with the Department Chair and a faculty from the Dept. of Philosophy and Development Studies, within the The School of Liberal and Performing Arts in the College of Humanities and Social Sciences. The Activity was requested by the department to review one of the required courses on *Development, Energy, and Environment* and suggest climate change content to be considered for addition. The review was accomplished through consultations with the faculty from the department who teaches the course. The suggested climate change content was approved. The Activity is developing the teaching materials, some of which have been submitted to the responsible Development Studies faculty and some is still under development. The Activity technical team started making the first presentations together with the faculty as part of the mentoring process since the faculty will in future teach the climate change content in this course themselves. This Development Studies course is given to approximately 400 students each year and is a core or required course. The faculty who teach this course has already notified us that the climate information the Activity staff have/are prepared, presented, and shared will become a permanent addition to the course.

- Prepared an introductory lecture for department of Geomatics and Land Management

The department of Geomatics and Land Management also expressed interest in climate information. An overview/introductory presentation was also made for the undergraduate students in Dept. of Geomatics and Land Management in the College of Engineering, Design, Arts, and Technology. The Geomatics Department is also interested in the possibility of adding climate specifics, where appropriate, in various courses that are yet to be decided. Discussions will continue with Geomatics

### ***Identify and access online course offerings***

- Identifying and reviewing online course options and related materials

During the quarter, the Activity continued to compile climate change-related online courses and training materials/information to supplement MAK formal and informal climate-related training opportunities. These materials will be made available on the MUCCRI website. The Activity has held one very preliminary discussion with members of the College of Education and External Studies (CEES) to discuss options and possibilities of whether and how to partner to offer the on-line courses for MAK credit. Additional discussions with CEES will be required to assess and, if possible, put into place this as a MAK credit possibility for e-courses. An early list of potential online courses for uploading to the e-learning portal when it is ready have been identified and compiled. New opportunities will be continuously identified.

### ***Plan and offer a monthly climate change seminar***

- Organised and held monthly climate change seminars for students and the general public - monthly seminars offered in February and March

The Activity organised and held two climate change seminars for students and the general public. These included: Climate Change and Forestry; and Climate Change Adaptation and Policies in February and March respectively. The number of participants in the seminar series is increasing with time and drawing a broader audience including those from outside MAK who have participated in Activity trainings or other presentations and have asked to be added to the seminar series distribution list. These series are also gaining the interests of students in learning more about climate change and focusing research efforts around climate related issues. Many of the Boot Camp student participants are also becoming regular seminar series attendees.

- Plan for Year Three Seminar Series

The preliminary list of speakers is established. Achieving commitment for specific dates from specific individuals will be the goal of the next quarter. Speakers are being pursued for September (end of Year 2), October and November in Year Three. December starts the end of first semester exams time frame and we are testing to see if an early date in the exams month might work before we seek commitment for a speaker for December.





International Issues Session - Day 1 Training

Immersion into climate issues began even before the official program start on January 29. The movie, *An Inconvenient Truth*, was shown the evening before at the residence hall where many of the students stayed during the three-day effort. There were a number of comments on the student evaluations about how

much the evening movies (another evening movie

was *Chasing Ice*) added to the overall program impact. The entire first day was comprised of presentations and activities designed to increase student knowledge and understanding of climate change basics, gender perspectives, international efforts, and response options – both adaptation and mitigation. There are many misconceptions and myths about climate change so we try to be very clear and both tell what it IS but also what it is NOT.

Presenters and activity leaders included faculty from various colleges, departments, and projects within MAK including: College of Agriculture and Environmental Sciences, Department of Environmental Management, Women and Gender Studies, Department of Economics, College of Education and External Studies, ERICCA, MUCCRI, and a NORAD supported REDD+ program. The United Nations Framework Convention on Climate Change Regional Collaboration Centre (UNFCCC RCC) also contributed two speakers for an up-to-date international perspective. Every presentation was followed by an activity that helped to clarify and cement what was learned.



Water power station tour - on the roof – field trip location – Day 2

To support the understanding that climate knowledge can be applied in many aspects of our lives, a field trip was held on day two to two locations. Field trip locations were sought that would provide the best local examples of either mitigation or adaptation actions. Both field trip locations happened to be

mitigation sites. The students were welcomed at the Nalubaale power station - a water generation facility on the Nile River in Jinja. Escom Uganda Ltd., the operators of the power station, provided the students with interesting information (including when the facility was established, how much water flows through the power plant, and how power is distributed according to demand) and a full tour of the power facility. This power station is a major contributor to electricity in Uganda and does not give off greenhouse gases so it provided a terrific example of a mitigation action – one of the two possible responses to climate change. The rest of the day was spent at Mabira forest undertaking an assessment of the

local pressures on the forest that need to be considered if any REDD+ project is to be undertaken and successful.

*What do you want to do now with the new knowledge you have gained?* That was the focus for day three. Some of the students originally wanted to teach younger students however, after the training, many felt that all of society needs to understand the causes and potential responses to a changing climate, just as the students now understood the seriousness of the issue. Developing outreach efforts are on-going, with the student groups working on their areas of interest. Each student joined a work group divided into presentation topics: one group focused on developing information to share about climate basics, another on impacts and adaptations, a third on international issues and so on to cover all of the topics that were addressed. The student work groups discussed the audiences they wanted to focus their efforts to reach and the methods of outreach, for example, developing presentations that could be delivered via flip charts to communities or hands-on developed work plans and meeting schedules that will help them to accomplish their goals. Since the Boot Camp, the students have been meeting together and with the Activity staff to focus-in on “doable” activities, as some of the original dreams were quite large. Everyone left with new knowledge, a drive to pass on that new knowledge and a sense of commitment, hope, and empowerment that we each can contribute to reducing climate changes and its impacts.



Adaptation Group Work  
Day – Day 3



Closing Day Climate Boot Camp, certificates & group photo –  
Day 3

- Develop and offer trainings for various levels of Government

As the EEA activity has the specific charge to work with various levels of government in climate trainings, Activity staff have been discussing the idea of a joint central government climate change training program with EEA since middle/late Year One. While together we have identified a general approach and a division of labor to move forward, we have had no real response or indication of interest from the high level of government that we hoped to reach. Together we have met with a representative of the CCD and still have no specifically interested central government group. The importance of offering climate training to central

government players is well appreciated by both partners; however, a positive response to such an offer is required for us to achieve this goal. We will continue to explore this opportunity with EEA and CCD, as well as other potential interested parties.

- Other Informal/partner trainings

A total of five stakeholder groups/organizations were trained/reached during this quarter: in addition to those previously identified (Boot Camp students; staff of Ag Inputs) the Activity also reached - one DENIVA region; Rotary Club of Bugalobi; and PACCA/National Learning Alliance.

- Identify potential dissemination pathway implementation partners' interest in training opportunities

The Activity has offered a climate training or awareness raising to those groups interested in participating in the dissemination pathway. This quarter we have delivered a training to the Ag Inputs team and to one of the DENIVA regions as mentioned above.

### **Result 3: MUCCRI is Generating High Quality Climate Change and Climate Adaptation Research**

#### ***Support student research in cooperation with IITA/NARO***

- Technical and financial support to students

The Activity and IITA/NARO continued to work with MUCCRI and MAK faculty to guide the jointly funded students in concept/proposal development and field data collection. The support to students involved reading and making technical inputs into students' concepts and proposals in preparation for making presentations to various faculty committees. Students' research progress presentations were also organized for the research partners to track students' progress and ensure that they keep their research focused on the interests of the funding projects. The Activity also devoted time to manage the students reporting requirements and processes for compliance with financial support documentation required for approval of stipend payments and tuition fees. By the end of the quarter, all tuition fees and stipend payments had been made.

Two of the three PhD students have been provisionally admitted and are working on their final proposals for full admission at MAK. The third PhD student is expected to be provisionally admitted in the next quarter. The proposal for one of the two MSc students has been approved. The second MSc student is in the end stages of developing the concept into a final proposal. Students' progress is at different rates so this could become a challenge for coordinating joint student activities e.g., trainings and field data collection. So far, the research partnership has been well appreciated by all the partners.

CAES/MUCCRI research partnerships within and outside MAK are also growing. For example, it has been realized and agreed that more professors to supervise the current students should be identified from outside CAES, particularly from the College of Social Sciences and Humanities as the scope covered by the current research partnership is wider than can be covered by the expertise provided at CAES.

- Coordination of the research efforts with partners

The Activity technical team invested time in ensuring that the research partnership roles are implemented in a coordinated fashion. This has involved regular communications and updates on individual partners' actions and progress realized. A research partners' meeting was held in January to review the progress on the planned research partnership actions including review of students' progress. During the meeting all partners provided updated reports on the expected roles. The progress reports on partnership roles covered highlights on challenges/opportunities and any other emerging issues on expected partnership actions. Among other specifics, some items from the partners' reports include: it was observed that there were opportunities to broaden the outcomes of the research partnership including use of data and information from other research projects at partner institutions especially IITA. During the meeting it was agreed that there was need to have a follow-up meeting to harmonize activities among partners for purposes of improving coordination of partnership engagements.

- Recruitment of MSc students for Year Two of the Activity

In Year One of the Activity, it was agreed with partners to recruit two more MSc students in Year Two. The processes of identifying specific research topics and advertising for applications began through consultations with research partners to help identify specific research gaps emerging from the on-going Activity funded PhD research. The advertisement for additional students will be issued in the first week of April 2015 and the two new MSc students are expected to be on-board in the first week of June.

- Financial and technical support to undergraduate multidisciplinary research effort

The first team of undergraduate students (three – one each from Journalism, Gender, and Forestry) were supported to develop research proposals and data collection tools. They were sent to the field for two weeks of data collection to address the issue of “How well do the farmer field schools work in Kiboga District to help farmers adapt to climate change” from the three perspectives. The students were hosted, to help them reach farmers in the region, by the Hunger Project. One of the supervising faculty and the Activity technical team visited the students during fieldwork to support the students and to gather any lessons to guide them and other future students' research efforts. The students completed the data collection in February and have now started data entry. This pilot effort in undergraduate and multidisciplinary research will serve as a guide to establishing other undergraduate research efforts.

- Identify and recruit undergraduate students for Year 2 research scholarships

A call for undergraduate research applications was developed and posted in various departments of MAK and announced at the February lecture of the MUCCRI seminar series. A presentation to potential applicants was organized to clarify expectation of applicants for this opportunity, including the need to identify team members and supporting faculty. At this open session to describe and answer questions about the undergraduate research opportunity, the first group of the Activity-funded undergraduate students shared their experiences and described what it took and what they gained in doing this work together. Students interested in this opportunity are consulting with the Activity staff, with faculty and potential team members. A brief description of climate change was also sent to each student who participated in the open session to be sure they submitted projects that were climate change adaptation focused. The deadline for receiving applications is 10<sup>th</sup> April 2015. Establishing multidisciplinary teams seems to be the biggest challenge for students.

## **Result 4: MUCCRI is communicating with External Stakeholders and Disseminating Climate Change Adaptation Information**

### ***Disseminating research results-developing a dissemination pathway***

- Pilot “translation” template is being tested

The dissemination pathway 3-step process is being developed. The research generators are step 1, the “translation template”, developed by the Activity, is considered step 2., and the boots-on-the-ground participants are considered step 3. The translation template has been developed because it is unlikely that a science paper or policy report could be shared directly with most of the public through the boots-on the-ground. Rather the translation template asks the author to summarize briefly, in lay language, their findings that they believe would interest a farmer, an extension agent or perhaps a policy implementer, among others.

The “translation template” has been pilot tested by an agricultural scientist and also by the boots-on-the-ground pathway participants and revised accordingly. There is such a demand for access to new science related to climate change from the self-identified interested “boots-on-the-ground” that this quarter saw the hiring of a new environmental science graduate to begin working with MAK faculty (those who work on climate-related issues) to fill out the first round of templates to begin to populate a temporary website that will act as a dissemination step to the boots-on-the-ground participants. This information is meant to be normally housed in the website that the Activity is partnering with the CCD to develop. Development is slow to date, but we believe it is critical to the long-term sustainability of the website and dissemination pathway for it to be developed in partnership with CCD. At the present, the Activity is pursuing both the final website development with the CCD in tandem with a faster website set-up that will be transferred to the official website once it is operational.

The plan is to have the website generate notices of new information once per month and send to those on the distribution list. The complete pathway will be tested as soon as we have some of the information templates completed and a web-based site to house and distribute them. The boots-on-the-ground are actively looking for this new information to share with farmers and others so we are looking to this temporary website to begin the process earlier than waiting for the final website to be established.

### **III. COLLABORATING, LEARNING, AND ADAPTING**

The Activity is constantly collaborating and from those collaborations learning what would work perhaps better than the original ideas and adapting our events and plans accordingly. The following are some of the lessons that have been learned this quarter.

Examples of CLA include:

For Result Area I: The development of the website with the CCD is moving along but slowly compared to the demand that is arising for new climate-related science information for example. As a result, the Activity is pursuing a plan B – the tandem development of a temporary website that could begin to house and distribute new information to be shared and that could be transferred to the formal website once it is ready to be launched. Thus, testing the dissemination pathway and responding to the increasing demand for new

information while still looking toward sustainability for the official website through its connection with the Ministry of Water and the Environment's CCD.

For Result Area 2: The Activity has a one-pager titled Reflections on the Boot Camp effort that presents lessons and thoughts on the Boot Camp experience. Three of these lessons learned are: 1) Start planning the boot camp at least 6 months prior to the delivery date – earlier is even better; 2) Have help in generating student interest from more than just MAK; and 3) Align and link the presentations with intended deliverables/outputs from student activities planned at the end of the camp. These and others will be used as guidance for the planning of the next Boot Camp.

For Result Area 3: Working with undergraduates requires a great deal of time so should be started earlier than imagined. Eliciting greater faculty support to the undergraduates is an important but difficult task. Extra time needs to be set aside to accomplish these tasks.

For Result Area 4: There seems to be a need for more participation on behalf of the generators of new information to take the few minutes to fill in the template that would summarize their work. The Activity is looking for a long-term sustainable method (not requiring a great deal of paid personnel time) so we will continue to encourage that the authors prepare their summaries themselves and we will put the template and instructions in an *easy to reach* location on the website. We hope that once we start sharing these new research results that the faculty will see how well it works and how important it is and become more ardent supporters of the dissemination effort.

### **Monitoring and Evaluation Indicators**

The Annex to this document is the M&E table for Year 2. Any activities that are assessed will be indicated there as to progress achieved each quarter towards the annual targets.

## **IV. UPCOMING EVENTS**

- April 8: Activity research partners meeting on students' progress and harmonization of schedules among partners;
- April 10 and 11: Teaching in Development Studies: two presentations of the final section of the climate change information - Response options: Adaptation and Mitigation
- April 14-17: aWhere trainings: the aWhere training team will be in Uganda to work with Activity graduate and undergraduate students and interested partners
- April 16: Climate Change Lecture: 3:00 pm, Forestry Conference room
- April 21 and on-going: Discussions on creating regional Climate Champions with potential partners – CAES, EEA, Ag Inputs, DENIVA.
- April 26-29: Activity staff will participate in the 9<sup>th</sup> International Conference on Community-Based Adaptation, Nairobi
- On-going: Collaborating with CEES – setting a date for a requested meeting with the College Principal and planning teaching events with potential national scope with faculty and staff
- May 7: Climate Change Lecture: 3:00 pm, Forestry Conference room
- June 4: Stakeholder meeting for MUCCRI as requested in the Senate approval process comments

## **V. ADDITIONAL OBSERVATIONS/ISSUES**

This quarter it seems that many external organizations as well as some university departments are starting to recognize what this Activity can offer in terms of trainings and climate change content. Much of the willingness to work with the team though seems to be built through personal relationships or at least experiencing one of our presentations/trainings. It is not uncommon for someone to contact us after they have participated in a training arranged by a partner organization. They often then want us to work with them as well, even if we contacted them directly previously. Thus it seems to take a few interactions with this information and with us as individuals for people to understand what we are saying and explaining. Once though someone understands then they want to know more and more about climate changes and how we can help to make it less bad – either in the total problem (mitigation) or increase our coping abilities (adaptation).

## **VI. CONCLUSION**

The Activity has made good progress in all of the Result areas this quarter – not always where we expected. After the slow and difficult start we can see that the calls on the Activity time and information are increasing. We have one collaboration that we feel is moving along slowly but that it is a critical one so we are working on a plan B at the same time so we can serve our partners and others interested in these issues now and into the future.

## ANNEX: MONITORING AND EVALUATION INDICATOR TABLE FOR YEAR TWO

Indicator Name & Number	Target YR 2	Quarter One	Quarter Two	Quarter Three	Quarter Four	Year 2 Total	Notes
<i>Result 1: Institutional structure of MUCCRI is established and supports MUCCRI objectives.</i>							
Support Recognition of MUCCRI w/in and outside University  MUCCRI approved and established by University Senate	Phase 2: MUCCRI Approved and Instituted	Decision still with University Senate	Decision still with University Senate				
(2) MUCCRI Steering and Science committees (cmts) established (estbl'd) and functioning	Phase 1: 2 committees estbl'd one mtg held Baseline functionality estb'd	Cannot happen until MUCCRI is officially instituted	Cannot happen until MUCCRI is officially instituted				

(3) Website: planned, established, usage (hits per month)	Phase 2: Website online and active	Collaborative development work with CCD still on going	Collaborative development work still on-going – working on a temporary website to use faster				
Indicator Name & Number	Target YR 2	Quarter One	Quarter Two	Quarter Three	Quarter Four	Year 2 Total	Notes
<i>Result 2: MUCCRI provides cutting edge short and long term training to students, staff, and external stakeholders</i>							
<i>Result 2a: Undergraduate and graduate coursework on climate change improved</i>							
(4) Number of courses that newly include climate change information because of MUCCRI/Activity assistance /interactions	4	Reviewed 12 programs of courses and suggested climate content additions	1				
<i>Result 2b: Short term training to external stakeholders provided</i>							
(5) Number of short-courses in climate change and/or adaptation developed by or with Activity support and delivered under the auspices of MUCCRI (not all with pre/post testing associated)	4	1	+5				
(6) Number of individuals with increased capacity to adapt to the impacts of climate change as a result of USG assistance. (Identified by pre/post tests or follow-up surveys)	% of respondents with increased capacity to	88*  *there were about 3x more participants at the end of one	+107				

	adapt	of the trainings than filled in post tests – only those who filled in post tests are added here					
Indicator Name & Number	Target YR 2	Quarter One	Quarter Two	Quarter Three	Quarter Four	Year 2 Total	Notes
<b>Result 3: MUCCRI is generating high quality climate change and climate adaptation research</b>							
(7) Number of graduate and undergraduate student research efforts on climate change and climate change adaptation supported yearly by the Activity	11	5	+ 3				
(8) Number of publications in peer-reviewed journals from Activity supported student research efforts (peer review/accepted indicates quality)	0	0	0				
<b>Result 4: MUCCRI is communicating with external stakeholders and disseminating climate change adaptation information</b>							
(9) Number of farmers reached with research results and new climate information by dissemination pathway participants	Phase 2: Pilot test the pathway and note numbers of farmers reached	Tested and revised the template	Collecting new information to test the dissemination pathway via a website				