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**USAID/UGANDA EDUCATION AND RESEARCH TO
IMPROVE CLIMATE CHANGE ADAPTATION
ACTIVITY FY2014 ANNUAL REPORT
NOVEMBER 1, 2013 - SEPTEMBER 30, 2014**

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SUBMITTED BY

Lynne Carter, PhD
Chief-of-Party
FHI 360

SUBMITTED TO

Mr. Robert Senkungu, Agreement Officer's Representative (AOR)
Office of Economic Growth
USAID/Uganda
Kampala, Uganda
Tel: +256 (0) 414 306 001
Email: rsenkungu@usaid.gov

DATE

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Acronyms	
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
CCU	Climate Change Unit
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
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

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
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
USAID	U.S. Agency for International Development
USG	U.S. Government
WSR	Whole-System-in-the-Room

I. INTRODUCTION

A. 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.

B. Year One Activity Highlights

The start of all new efforts incorporates a period where the partners and the Activity need to learn to work together. This Activity has undergone some significant shifts and revisions in its approach to accommodate and adapt to working under a University structure and to clarify various roles and responsibilities. While this initial period of collaboration, learning, and adapting was intense, the Activity is moving along well in concert with our partners at MAK and outside the University. We have made specific efforts to identify potential long-term partners for MUCCRI, for example through the Whole System-in-the-Room workshop and are working to focus and steer collaborative efforts within those relationships that will

help to support and showcase MUCCRI's leadership potential. In addition to undertaking actions to support collectively developed goals, MUCCRI/Activity also identified gaps and lessons that could be addressed (baseline assessments) and that would inform the various work plans. The University has sought the advice of the Activity staff on climate relevant information for courses and are supportive of the newly identified graduate students and their role in the University as well as a bridge to other partners – IITA/NARO. Many partners are working together to develop a sustainable dissemination network that will live long after this Activity is completed and help to continuously support MUCCRI in its information-sharing role.

In short, there have been accomplishments in all the result areas and a few of the highlights are listed below:

Start-up: Whole system-in-the-room workshop and Baseline Assessments – completed.

Result 1: MUCCRI proposal officially submitted to University Senate for approval; first Adapt2CC website prototype developed and partnering with GoU, Dept of Climate Change.

Result 2: Progress on cross-college course on climate change and submission of new MSc program for approval; Activity invited to comment on MAK Dept. of Environmental management graduate and undergraduate program review; monthly climate change seminar underway; 7 climate change trainings offered (5 invited); 25 minute TV interview.

Result 3: Graduate students on board.

Result 4: Proposed dissemination pathway draft; science to lay language template piloted.

C. Activity Matrix

Activities	Specific Action Implemented	Description	Progress/Achievements	Remarks	Q 1	Q 2	Q 3	Q 4	Realized Output/Outcome
START UP ACTIVITY									
Start-up Administration and Planning	On boarding staff	The Activity awarded Nov 1, 2013. The three critical staff were brought on board Dec 1. Over the next few months advertising, interviewing and hiring of the final two staff was completed	All required full time staff have been hired		√	√	√		All staff on board
	Start-up meetings	Meetings for discussions with USAID, MUCCRI, Activity partners to introduce the scope of the partnership engagement by the Activity w/ MAK	Lessons on partnership engagement were documented and used to adjust the initial planned partnership approaches	There were some initial misunderstandings at the start of this Activity that took some time to clarify and resolve	√	√			Organized and participated in meetings from which avenues for partnership engagement have been identified and seized
	Baseline Assessments	Process undertaken to draw together expertise and knowledge relevant in identifying critical baseline information for the result areas of the Activity.	Gaps to be filled and successes to build upon during the Activity implementation were identified	Assessment results were critical in aligning work plans to current situations	√	√	√		Baseline Assessments completed and Report released
	Whole System-in-the-Room workshop	A workshop was held that aimed at harnessing the potential and collective power of the various institutions and individuals to work with MUCCRI to become a legitimate and leading authority on Climate Change Research and Innovations	Common goals for climate change adaptation actors were developed	The Activity/ MUCCRI will continue to steer the partnerships to realize the shared goals	√	√	√		The Activity identified and documented allies to call upon and to work with in partnership to realize a better prepared society in relation to adapting to a changing climate. A summary report was written and distributed

Activities	Specific Action Implemented	Description	Progress/Achievements	Remarks	Q 1	Q 2	Q 3	Q 4	Realized Output/Outcome
RESULT 1: Institutional structure of MUCCRI is established and supports MUCCRI Objectives									
Support official recognition of MUCCRI by the University	Provided supportive information to demonstrate importance of establishing an institution of MUCCRI	Distributed the Activity description one-pager; verbally described and introduced the Activity and its support for the establishment of MUCCRI in various meetings within and outside the University	The required documentation to support approval for MUCCRI establishment has been submitted to MAK senate. Faculty from various MAK units have continued to express interest in participating in MUCCRI activities.	Senate policy cmt. is expected to discuss the MUCCRI proposal by mid-November, 2014 Activity is in "active waiting" mode to support response to any changes from Senate process		√	√	√	MUCCRI proposal officially submitted for approval to the University Senate
Review and update CAES strategic plan	Establishment of procedures for reviewing CAES strategic plan	During a working retreat attended by the Activity team, USAID and MUCCRI interim advisory committee members, various Activity implementation options were discussed including the review of the CAES strategic plan	Agreement by CAES on the need and procedures to have the strategic importance of MUCCRI reflected in the strategic direction of CAES	This will be an important action after MUCCRI approval by Senate		√			MUCCRI/Activity have a shared basis for reviewing CAES Strategic Plan
	Review CAES Strategic Plan	The Activity Staff reviewed the CAES strategic plan in preparation for developing recommendations of where MUCCRI supportive language could be inserted	Notes were developed in preparation of recommendations being generated. Activity asked to hold recommendations until MUCCRI is approved	Changes to CAES plan not yet submitted – waiting for MUCCRI official recognition by senate		√	√		Review to include MUCCRI in CAES Strategic Plan completed

Activities	Specific Action Implemented	Description	Progress/Achievements	Remarks	Q 1	Q 2	Q 3	Q 4	Realized Output/Outcome
Develop MUCCRI/ Activity informational campaign	Designed and distributed MUCCRI /USAID branded flash drives with climate change information	100 flash drives were procured and branded with MUCCRI and USAID. They were loaded with CC related information to remind partners and actors that MUCCRI is a place to supply information needs	Approximately 50 drives have been distributed to media, Uganda Law Society training participants or leaders, MUCCRI interim committee members (CAES faculty) and other MAK participating faculty				√	√	Other University departments and non-university personnel familiar with MUCCRI
	Introductions and discussions of MUCCRI/ Activity at meetings	The Activity staff have been proactive in participating in discussions and describing the concept of MUCCRI to a variety of MAK departmental faculty and staff as well as with members from outside the University community	The Activity Staff deliberately have at the ready the Activity 1-pager for distribution at every opportunity. Many of the meetings discussed in the section on partner meetings allowed just such introduction of the concept of MUCCRI	Many potential partners are interested in MUCCRI as it will remain after Activity's end – an important resilience factor		√	√	√	Increasing visibility of MUCCRI and its potential roles
	Design of MUCCRI one-pager	The Activity, in consultation with MUCCRI interim coordinator and steering committee, are developing a 1-pager containing information on the purpose and planned activities for MUCCRI	Draft in place awaiting approval by MUCCRI interim steering committee	The one-pager is expected to be ready by the end of the first quarter of Yr Two				√	

Activity	Specific Action Implemented	Description	Progress/Achievements	Remarks	Q 1	Q 2	Q 3	Q 4	Realized Output/Outcome
Plan for and facilitate the establishment of MUCCRI steering and science committees	Discussions on procedures for identifying the steering and science committees' members were held with the interim coordinator	Activity/MUCCRI evaluated the potential roles and responsibilities and membership of the cmnts. It was resolved that the actual identification of membership and establishment of the cmnts should occur after MUCCRI approval by Senate	Activity and MUCCRI have shared and agreed on the strategies for establishing MUCCRI steering and science committees	Accomplishment of this action depends on Senate responses to MUCCRI proposal and when approval decisions will be made then specific names and invitations will be let		√	√		Activity requested to hold off specific planning and development of MUCCRI Steering & Science committees' official establishment and the suggested 2/4 mtgs per year until MUCCRI officially approved
Networking with partner organizations	Participated in partnership and network building meetings	Various partners and potential partners (on-campus and off) invited the Activity Staff to participate in their activities. The Activity team also initiated meetings with various partners linked to a variety of planned activities	Activity staff participated in over 25 meetings. Shared activities have emerged. Introduction of MUCCRI accomplished (contributes to information campaign)	Partnership engagement is helping the Activity in Learning and Adapting	√	√	√	√	Networking events and mtgs conducted and participated in with potential partners
	Social Network Analysis	Mapping MAK/MUCCRI relationships as a basis for stock-taking of potential social capital and identification of important actors	Some identified partnership opportunities are underway and others are being followed-up	SNA to be repeated at event-based intervals during this Activity		√	√		SNA report developed and strategic networking opportunities have been identified and begun

Activity	Specific Action Implemented	Description	Progress/Achievements	Remarks	Q 1	Q 2	Q 3	Q 4	Realized Output/Outcome
Set-up MUCCRI website with a platform entitled Adapt2CC	Planning and designing first concepts and prototypes for MUCCRI website	In consultation with University/CAES IT and communication personnel the concept for the website has been developed	Review/testing of first prototype website was completed and led to the next version (see below). MAK Directorate of Information and Communication Technologies (DICTS) and CAES are considering options for hosting the platform under the MUCCRI website	Specific needs from interested users from MAK/CAES and outside the Univ. might call for broader changes to allow a wide scope of platform inter-linkages		√	√		First Adapt 2CC platform prototype w/in MUCCRI website reviewed and necessary changes occurring to allow a wide range of linkages with partners and other useful sites
	Adapt2CC prototype refinement and full development	The student-generated prototype was subjected to review by consultants and IT personnel from MAK and resulted in an improved version of the platform	The consultants and MAK IT personnel are refining the platform design for further development	Dept. of Climate Change (DCC) is cost sharing by compensating consultant time on platform development				√	Refined working document for the second version of the platform prototype development

Activity	Specific Action Implemented	Description	Progress/Achievements	Remarks	Q 1	Q 2	Q 3	Q 4	Realized Output/Outcome
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									
Support MUCCRI/ CAES cross-college course approval process	Follow-up discussions on technical input for course approval	Provided the MUCCRI coordinator with suggested technical inputs for the Atmosphere, Weather, and Climate course.	The Activity has provided technical suggestions, the College principal and the deans need to agree on the host department, the Activity will support a portion of a college curriculum review in early Year Two that includes this course	The course will be ready for submission to the College Board after the curriculum review process – which will among other things remove any duplicate offerings		√	√	√	Offered revisions and support for submission of cross-college course for consideration by Academic Board
Support the approval process for the MSc in climate sciences	Technical review of the MSc Programme and addressing comments from CAES board	Activity staff reviewed the Programme, made technical/ content recommendations to the MUCCRI coordinator for inclusion in the development and approval process	Programme has been submitted to Senate for approval consideration	MAK Senate response could be in any of the next few quarters of the Activity			√	√	Revisions and submission to University Senate of MSc have been done, however, the University has suspended approval of any new programs as the University will undergo an overall review of programs before any new programs will be approved

Activity	Specific Action Implemented	Description	Progress/Achievements	Remarks	Q 1	Q 2	Q 3	Q 4	Realized Output/Outcome
Identify opportunities to review and develop climate change content for non-CAES and CAES courses	Identify potential non-CAES departments and individuals interested in climate change content uptake	Intentional and opportunistic discussions have been held to identify entry points for inclusion of CC in the curricula for the departments of Journalism and Communication, Gender Studies, and Education	Individuals to work with have been identified in the respective Departments. The Department of Education is most responsive and has stepped forward with interest in Climate Change input to their courses	MAK Dept of Education is in the curriculum review process now and has inquired as to input from the Activity staff during Year Two		√	√	√	Developed a list of potential non-CAES departments for possible addition of climate information
	Invited to and participated in review of graduate and undergraduate programs for the Dept. of Environmental Management (DEM) [a CAES department]	The Activity staff was asked by the Chair and Faculty members of DEM to participate in their complete program review. Many suggestions for specific course inputs of climate related information were offered	All of the suggestions for climate content additions will be reviewed and considered and one Professor has already notified us that he is accepting all of our recommendations	Changes in one offered course (REDD+ course) at least 1 year ahead of plan				√	New climate change materials are being considered for addition to many specific courses within the entire program for the undergraduate and graduate studies in the Department of Environmental Management
Identify and access on-line course offerings	Identify and review on-line courses, videos, webinars, among others	Compiling climate change related training materials to supplement MAK formal and informal trainings	Have first draft listing of online climate change training and educational options	Updates to information on on-line offerings will be continuous				√	Developed initial list of online courses for uploading to the e-learning portal when it is available
Climate adaptation training	Introduction to climate change	A DEM faculty member requested the Activity to provide an overview	The presentation provided the students a more complete understanding of					√	Climate Adaptation training provided to Mitigation-focused new graduate students

session provided to new graduate students focused on mitigation	adaptation presented	presentation in a graduate student orientation for students who will focus on mitigation issues	the response options available to a changing climate						
Plan and offer a monthly climate change seminar	Monthly climate change seminar underway	Monthly climate change focused seminar is developed and being offered on the 3 rd Thursday of the month	Seminar I has occurred and attracted 40 participants	Monthly seminars began in September at the start of Year Two of the Activity			√	√	Seminars planned and information regularly distributed on many campus bulletin boards and some email distribution
Support the launch and use of the aWhere platform as an instructional and research tool	Bring aWhere personnel to Uganda to train faculty, staff, partners and students on the use of the platform	In February, aWhere presented an introductory seminar for faculty and students on the MAK campus. In September the aWhere CEO and one training personnel traveled to Kampala for a public presentation (40+ participants) and presented two full days of training. Further, they held numerous individual meetings on how the platform can be used in classes and for research	There were about 45 individuals at the February introduction, about 40 in the public presentation in Sept, and 25 individuals participated in the two days of training. Participants represented faculty, students, and partner organizations (e.g. IITA/NARO) and USAID. Many individuals also interacted with the aWhere personnel on their specific research interests	There was a great deal of interest in this research and education platform and there will be many follow-up activities and trainings over the LOA		√	√	√	First round of trained users of the aWhere platform and a great deal of interest has so far been generated

Activity	Specific Action Implemented	Description	Progress/Achievements	Remarks	Q 1	Q 2	Q 3	Q 4	Realized Output/Outcome
Result 2b: Short term training to external stakeholders									
Identify audience, partners, develop and deliver initial training efforts	2 Training events for Uganda media on climate change basics	At the WSR mtg the Uganda media specifically requested climate change trainings	Two trainings were provided to Uganda media by Activity staff, 2 MAK faculty and an NGO rep. 63 total media participants - 19 participated in both	Presented in a story format and included discussions around using specific words and story ideas		√	√	√	Pre/post assessments show learning. Three articles written by trainees were reviewed by Activity staff for accuracy prior to their submission for publication
	Training/awareness raising for 2 MAK student associations	Mtgs with Climate Change and Forestry Association leaders were held to identify focused areas of information need. Materials were prepared and a climate change overview/basics event was presented	27 students were involved in this first climate change basics training/awareness raising event. More work with these students orgs is planned for Year Two	Student teaching and capacity building efforts are underway. They were not planned to begin until Year Two			√		Interest by students in climate change issues gaining momentum
	Presented at an awareness raising session on climate change basics for youth – young farmers	FTF EEA held a meeting with young farmers and this Activity was invited to present a quick overview of climate change basics	Activity staff presented climate basics to two groups of young farmers (~25 in each group) who had options of topics to learn about and they chose climate change	Time to interact was very short so just critical pieces of information were delivered: What climate change IS, what it is NOT, and what are the response options				√	
	Climate change training organized by NEMA for District Environmental Officers from	The Activity personnel were invited to present a climate change training to a quarterly meeting for the Uganda District Environmental Officers. All District Environmental officers	The training took place in Soroti in June and the Activity was allowed to administer pre/post tests	The pre/post tests showed specific learning. The discussion showed that some of the participants were a			√		Possible follow-up training opportunities were discussed

	across the country	participated – a total of 60 individuals.		great deal more knowledgeable than others					
	Climate change training for Uganda Army personnel	The Activity staff were invited to present a climate change training to 300 Uganda Army personnel who were involved in the MAK Agriculture Induction Training effort	This was part of a two-week training process for Army personnel some of whom will be deployed to work with farmers in an extension-like capacity. Pre/post assessments were administered	Army personnel showed the greatest change in the pre/post tests and thus gained the most knowledge of any trainees in Year One				√	If trainees are deployed in extension work this could result in additional dissemination avenues for climate change information
	Climate change training for Uganda Law Society	The Activity personnel were invited presenters at the Uganda Law Society Environmental Training event for approximately 80 Uganda lawyers	In this presentation, applications of the climate change science to the law were described and discussed. Pre/post assessments were administered					√	Interest in climate change related follow-up trainings was raised
	NTV Featured Interview	Activity COP was invited to be interviewed on the NTV morning show, Sept 25, to discuss climate change issues	This interview was meant to bring the international climate discussions to have a Uganda focus					√	
Design and develop short term training plan for external stakeholders	Planning for a central government climate change training program with EEA	EEA and Activity personnel have begun planning this training event by meeting together	In person meetings have resulted in a general approach. EEA is drafting a concept paper and the Activity will prepare materials				√	√	Plan and develop a climate change training program for Central Government - with EEA and USAID

Activities	Specific Actions Implemented	Description	Progress/Achievements	Remarks	Q 1	Q 2	Q 3	Q 4	Realized Output/Outcome
RESULT 3: MUCCRI is generating high quality climate change and climate change adaptation research									
Support student research in cooperation with IITA/NARO	Recruited PhD and MSc students for research scholarships	The Activity team worked with CAES, IITA, and NARO to advertise for the scholarships and interviewed shortlisted candidates	3 PhD and 2 MSc candidates have been selected and offered scholarships. Formal partnership arrangements with IITA/NARO/CAES/FHI 360 are in final stages	Documentation to formalize financial support to students is underway		√	√		Support 3 PhD and 2 MSc students and work with IITA/NARO on field research
	Technical support to students	Help students in developing concepts/proposals to reflect the expected research results by MUCCRI, IITA/NARO, and FHI 360	A series of presentations, trainings and one-on-one engagements	All actions are being undertaken in partnership with MUCCRI, IITA, NARO and FHI 360				√	All research concepts/proposals have been developed and 3 have been submitted for review by MAK
Activity	Specific Actions Implemented	Description	Progress/Achievements	Remarks	Q 1	Q 2	Q 3	Q 4	Realized Output/Outcome
RESULT 4: MUCCRI is communicating with external stakeholders and disseminating climate change adaptation information									
Disseminating research results – developing a dissemination pathway	Identified partnerships for developing and implementing dissemination pathway for research results	Reached out to potential partners w/ shared interest in disseminating research findings. Discussions have been held with IITA, EEA and other USAID FTF activities and are beginning with the Grameen Foundation	A list of partners and their contributions to a dissemination pathway for this activity is developed. The trial pathway will be pilot tested in Year Two				√	√	Have developed a list of contacts, sources, and options for disseminating research results. Trial pathway will be tested. Template for translation of research findings into lay language has been developed and piloted

II. ACTIVITY REPORT

A. Activity Start up

Description of activities to support Start-up for Year one:

Start-up Administration and Planning

After the Activity was awarded effective November 1, 2013, initial Administrative and Planning Actions were undertaken including hiring staff, start up meetings with partners and overall Activity planning.

- On boarding staff

Advertisement, interviews and recruitment for the Activity driver and Program Associate organized, carried out and accomplished during the second and third quarters of Year One.

- Start-up meetings

In the very first months of the Activity, meetings were organized between FHI 360 and key partner organizations: CAES/MUCCRI, USAID, IITA, NARO and EEA. The meetings were aimed at understanding key partners' activities, sharing the Activity scope of work (SOW) and the expectations by all partners. The meetings served as an opportunity for Activity orientation toward specific needs of partnership engagement. From the meetings, steps for partnership engagement were identified and aligned with Activity start up approaches. The start-up meetings with CAES/MUCCRI and USAID, as core partners to the Activity, were very crucial in harmonizing expectations. The meetings also resulted in the identification of and agreements on start-up actions necessary for the Activity implementation. These included nomination of official liaison from CAES and allocation of facilities at MAK to the FHI360 team, including office space at CAES/MUCCRI. It was also during these meetings that discussions on the baseline assessments were initiated; including identification of who from MAK would be invited to serve as team members and leaders for developing the assessment document for the different Activity result areas.

- Baseline Assessments

The FHI 360 team, CAES/MUCCRI members, MAK and public sector partners began the Activity with a series of baseline assessments to map the context of the climate change education and research effort at MAK and with partners as appropriate. During February and March 2014, multi-disciplinary teams led by University staff and topical experts comprised of members from CAES, other departments at the university (i.e., the School of Women and Gender Studies and the School of Journalism and Communication) as well as key partners such as the NARO, IITA, NAADS and the Meteorology Department, conducted baseline assessments for three of the former Activity result areas – results: 2, 3, & 4. Note: *Result area 1: Institutional structure of MUCCRI is established and supports MUCCRI Objectives* assessment was undertaken by Activity staff based on a review of MUCCRI related documents from CAES and discussions with MUCCRI steering committee members. This is because MUCCRI is not yet an officially recognized institution and thus any effort will start with assistance to get the Centre recognized by the University.

The baseline assessment teams set out to learn what has and has not worked, determine

institutional strengths, weaknesses, gaps and opportunities, and were asked to include a focus on technology applications, research, capacity development needs of CAES faculty, training providers, research scientists, extension officers and policy makers, among others. Key overview findings supported short executive-style briefs that were then compiled into a full assessment report that is available on request. The findings and recommendations from the baseline assessments served to inform and influence the development of the Year One and Year Two Activity work plans. The following section highlights the key assessment findings.

Rockefeller Foundation funding was sought to concretize the CAES concept of MUCCRI by supporting the establishment of an interim steering committee, the undertaking of a review of curricula, a one-time research effort for students for two years and a study to identify missing elements and links related to climate change mitigation and adaptation research, climate change and development and climate policy support. This initial funding also supported the development of a series of recommendations to address those identified critical gaps. A key MUCCRI lesson learned through the Rockefeller support was: when coordinating a number of climate change related activities, partnerships are essential not only within CAES but also around the country. This allows better response to climate change needs within the agricultural and natural resources sectors, as well as supporting the need for training, and the need to disseminate research results.

Regarding short term training, the baseline assessment report highlighted the importance of engaging a diverse range of stakeholders in designing tailored short term courses. The report also indicates that multiple meetings are more effective than one-time intensive trainings. Additional recommendations made in the report included the need for building a critical mass of skilled professionals to develop and offer short courses locally, and the need for a training-of-trainers effort to ensure sufficient underlying knowledge base.

CAES is at a nascent stage of undergraduate and graduate climate change adaptation education; although some courses or sections of courses addressing climate change issues exist in both undergraduate and graduate arenas. However, specific increased efforts to include climate change in course offerings were recommended along with recognition of the challenges involved. The recommendations made for improving coursework on climate change include: updating and mainstreaming curricula across a diverse range of disciplines to address climate change adaptation related to the agriculture sector. The suggested disciplines for review include ecosystem management, tourism, forestry, community planning and outreach. The MSc. in Environment and Natural Resources offered by the Department of Environmental Management is another of those programs highlighted that urgently needs to be updated with climate change content. There is a clear need for developing coordination mechanisms both within and outside MAK to harmonize climate change teaching and learning efforts.

The assessment also identified critical elements necessary to identify the most appropriate students to undertake research projects and the need to focus on farmer-identified research questions starting with research designs that reflect farmers' priorities. In addition, the baseline assessment identified a number of research focuses and partnerships that could be beneficial for climate change adaptation efforts in the agriculture sector.

Results from the baseline assessment on dissemination showed that there are numerous groups that focus on various ways to distribute information and some have been proven effective and could be utilized, e.g. farmer focused radio and extension workers. Further, results of the assessments showed that there is a critical need to package the information to be disseminated in appropriate language and in ways that support farmer needs. Some suggested methods for improving dissemination include establishing centers of excellence for information sharing, strengthening networks and working closely with trusted community-based agents, joint planning and sharing of good practices.

- Whole System-in-the-Room workshop

The Activity team and College of Agricultural and Environmental Sciences (CAES) organized a Whole System-in-the-Room (WSR) workshop on February 12 -13, 2014. The workshop brought Ugandan stakeholders and donors together to determine the common goals of those working on climate change and variability and adaptation issues in the agriculture sector and to obtain commitments for short- and medium- term collaborative actions to attain these goals.



Planning for the WSR effort started with mapping all the stakeholder groups in Uganda that might have an interest in climate adaptation and education and research. Stakeholder mapping was done through consultations with key stakeholders and Activity partners. A total of 200 stakeholders were mapped. The identified stakeholder groups included: International and Donor community; Private sector; Farmers; Local government; Central government; Media; Non-governmental organizations (NGOs);

Research; and Education. A cross-sector advisory committee was established with representatives from the identified stakeholder groups to help plan the WSR workshop. The advisory committee was also critical in supporting efforts aimed at broadening the stakeholders/perspectives, identifying critical individuals, as well as helping to identify the issues to be addressed. Identification of perspectives, issues and individuals was critical to the inclusiveness of the final outcomes. In addition to the advisory committee input on which groups should be represented and who the individuals might be, consultations were also held with the respective stakeholders to ensure that each group was represented by those considered to be champions.

Ninety people attended the workshop and committed to work together to develop a plan of collaborative efforts to improve education and research around adapting to climate change. Through a collaborative action planning process, common ground goals were jointly developed by all stakeholders. The categories of the identified goals include:

- Knowledge and Information Management Systems;
- Coordination;
- Financing;



- Accountability and Transparency;
- Policy and Advocacy;
- Conservation and Ecosystem Services;
- Value Addition and Processing for Agriculture Products;
- Infrastructure;
- Agricultural Productivity; and
- Research, Education, and Training Dissemination Strategies.

The collaborative actions that were identified by the various stakeholder groups included many efforts that the

Activity has included and will continue to include in its work planning. During Year One, some of the actions identified by the stakeholder groups were implemented, for example media trainings on climate change issues. The WSR process introduced the Activity to a wide range of stakeholders who have similar interests and who have discovered they can help and support one another in common goals. The Activity/MUCCRI now have many allies to call upon and work in partnership to reach the goals of a society better prepared to adapt to a changing climate. Through implementation of actions for Year One, it has been clearly shown that partnership engagement is important for broadening impacts of various actors.

B. Result 1: Institutional Structure of MUCCRI is Established and Supports MUCCRI Objectives

Description of activities to support Result #1 for Year one:

Support official recognition of MUCCRI by the University

- Provide supportive information to demonstrate importance of establishing an institution of MUCCRI

Starting in the second quarter, in collaboration with the MUCCRI coordinator and MUCCRI steering committee, the Activity compiled background information to support the importance and benefits of having MUCCRI fully institutionalized e.g., as a source of climate information. Activity one-pagers were also widely distributed as another of the ways to showcase what the Centre can do.

Review and update of CAES strategic plan

- Establishment of procedures for reviewing CAES strategic plan

Meetings with the MUCCRI coordinator and the MUCCRI steering committee were held to discuss the procedures for reviewing the CAES strategic plan to explicitly include MUCCRI in the strategic direction of the college. Some of the discussions were held during a working retreat attended by Activity team members, USAID representatives and MUCCRI interim advisory committee where it was agreed that it was essential to have MUCCRI as

part of the vision of CAES as reflected in the current strategic plan. From such discussions and consultations, review procedures for the strategic plan have been agreed upon.

- Review of CAES strategic plan

During the second quarter of Year One, the Activity team reviewed the CAES strategic plan to identify and document areas where MUCCRI will be reflected as a strategic institutional asset for CAES in particular and MAK in general. It is apparent that the reflection of MUCCRI in the plan will involve showing how the Centre is envisioned to contribute to the realization of the first three strategic goals of CAES which are to: 1) build national and regional human capacity for broader agricultural and environmental sub-sectors of the economy; 2) generate innovative and well-targeted development solutions; and 3) capability strengthening to deliver high quality services. The actual updating of the CAES plan will occur once MUCCRI is officially established.

Develop MUCCRI /Activity informational campaign

- Designed and distributed MUCCRI labeled flash drives with climate change information

One hundred flash drives were procured for packaging climate change information compiled by the Activity and to support raising the visibility of the Centre by branding them with MUCCRI and USAID. This is also a way of demonstrating one of the planned MUCCRI functions of serving as a center/collector of climate change information. The first recipients of the drives were participants of climate change basics trainings by the Activity. Additional drives have been distributed both within and outside MAK especially to Activity partners such as NARO and DCC.

The information on the flash drives included: climate science; climate change response actions; national and regional policies; climate change assessment reports; databases and data sources; and frequently asked questions. As was expected, distribution of the information has started raising interest from many potential users of MUCCRI services.

- Introductions and discussions of MUCCRI and Activity at meeting opportunities

For all the meetings, whether they are one-on-one or in group settings, attended by the Activity staff, introduction of MUCCRI/Activity plans are offered with the purpose of raising the visibility of the Activity and MUCCRI. Such introductions are usually accompanied by the Activity I-pager and explanations of purpose and the significance of the institution of MUCCRI. Description of MUCCRI was also shared in informal meetings especially with members of the university senate and other MAK administration staff.

- Design of MUCCRI one-pager

In the fourth quarter of Year One, a I-pager for MUCCRI was designed and presented to the MUCCRI interim steering committee. The Activity is currently awaiting comments and inputs from the MUCCRI team prior to finalizing. The I-pager is meant to provide a synthesis of MUCCRI, its vision and the intended purpose of the Centre including the kind of support that MAK and the wider community can obtain from the Centre.

Plan for and facilitate establishment of MUCCRI steering and science committees

- Discussions on procedures for identifying and establishing the steering and science committees

At the start of the Activity, the plan was to identify potential members of MUCCRI committees even before MUCCRI was approved by the University. However, after discussions and consultations with the interim coordinator and steering committee, it was realized that there was need to await decisions and changes that may arise from senate approval process on the institutional provisions for MUCCRI before the committees can be constituted. During Year One, the Activity/MUCCRI evaluated the potential roles and responsibilities and membership to the committees. Ideas on the potential committee composition have been generated which will be useful when time for establishing committees arrives.

Networking with partner organizations

- Participated in partnership and network building meetings

Through Year One, the Activity team was involved in 25+ networking and information sharing efforts with partners, particularly in meetings involving identification of potential areas of cooperation. Full details of the meetings and engagements can be found in the Activity's quarterly reports. The focus of the meetings and networking efforts were: Identification of areas of shared benefits and complementarity; Coordination and cooperation; Experience sharing; Raising MUCCRI/Activity visibility outside MAK; Awareness raising on climate change; Identification of training needs; Activity planning meetings; among others.

Identification of areas of shared benefits and complementarity with partners through meetings and event engagement has enabled the Activity to realize mutual cooperation and sharing of experiences, hence broadening the impact of the individual partners' actions. For example, working with DCC has enabled the Activity to build on the on-going efforts to plan for a broad impact of information sharing by jointly developing an e-learning and information sharing platform (Adapt2CC). The Activity has been involved in experience sharing meetings with partners such as EEA. One such consultative meeting, called by EEA in May 2014, led to a framework for developing training and awareness materials for climate change. Some of the results from the Activity baseline assessment were presented at that meeting. Many shared lessons helped to shape Activity plans going forward.

Participation in partnership and network building meetings has served as an avenue for identifying and responding to training and awareness raising needs. During Year One, the Activity team deliberately and opportunistically made presentations during partners meetings in an effort to raise awareness of climate change. Training being one of the major focuses of the Activity, the team deliberately used networking meetings and events to identify who needs to be trained on what and when. This helped in identifying and seizing training opportunities beyond what was planned for Year One. Similarly, the Activity staff participated in various meetings and events of different departments at MAK with intentions including identifying climate change related curriculum development and short term training needs. As a result, the Activity staff has received requests to offer technical support in training and curriculum development, some of which have already been addressed – more will follow.

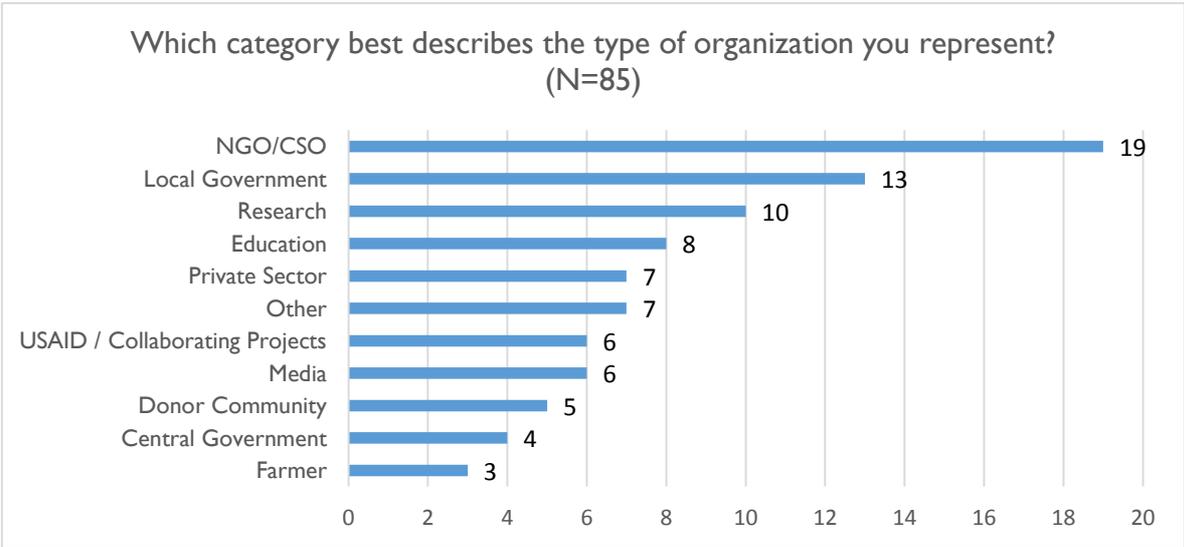
Some of the networking and partnership engagements were targeted at ensuring that knowledge of the Activity and MUCCRI extended beyond MAK. For example, in the fourth quarter the Activity participated in the IPCC Fifth Assessment Report (AR5) dissemination event during which the Activity COP and Adaptation Specialist made a presentation about MUCCRI and the Activity. A banner of MUCCRI was displayed throughout the two days of the event. The Activity also facilitated a networking event, the young scientist’s piece of the IPCC dissemination meeting. During the event, many people from within and outside Uganda came to know about the progress toward both the institutionalization of and potential contributions of MUCCRI.

- Social Network Analysis

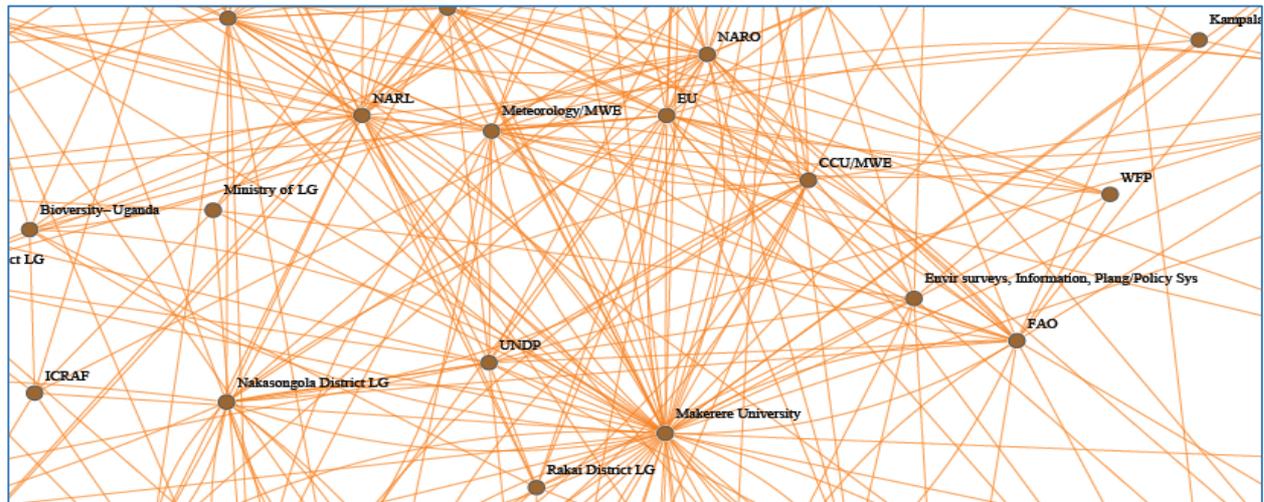
Social Network Analysis (SNA) was started during the WSR retreat/workshop. In an effort to understand the existing social capital around climate change adaptability in the agricultural sector, the bridges and bonding that exist among the Activity’s WSR participants, an SNA data collection questionnaire was designed and implemented with a total of 85 individuals representing 52 organizations in Uganda being interviewed. Many representatives of the organizations participating in the WSR retreat and others who could not attend were also surveyed and asked about their relationships with organizations and their knowledge about climate change adaptation. The SNA questionnaire was programmed for use on Android tablets by FHI 360’s TechLab who spearheaded the exercise. Three enumerators were recruited and trained for two days on administering the survey using the tablets.

Through the questionnaire, representatives of stakeholder organizations were asked about their relationships and communication with other stakeholders in the context of increasing knowledge around adapting to a changing climate. Questions asked, in addition to the types of relationships that exist with other stakeholder organizations, included: frequency of communication, and whether the respondent would recommend working with that stakeholder organization in the context of climate change adaptation.

The following chart shows the type of organizations the respondents represented.



Results of the SNA questionnaire survey were presented using relationship network graphs which also showed the level of centrality for the organizations active in climate change. The relationships mapped included: Meeting at professional events; Sharing same donor; Sharing data and/or information; Collaborating together on projects; Collaborating on joint funding proposal; Signing memorandum of Understanding to coordinate climate change related efforts; among others. An example of the SNA results is presented in the below network graph where an organization in the system is represented as a vertex (a dot or solid circle with the name of the organization on top), and the relationship between two organizations as a line connecting two vertices. The full SNA report from the WSR is available on request.



Set-up MUCCRI website with a platform entitled Adapt2CC

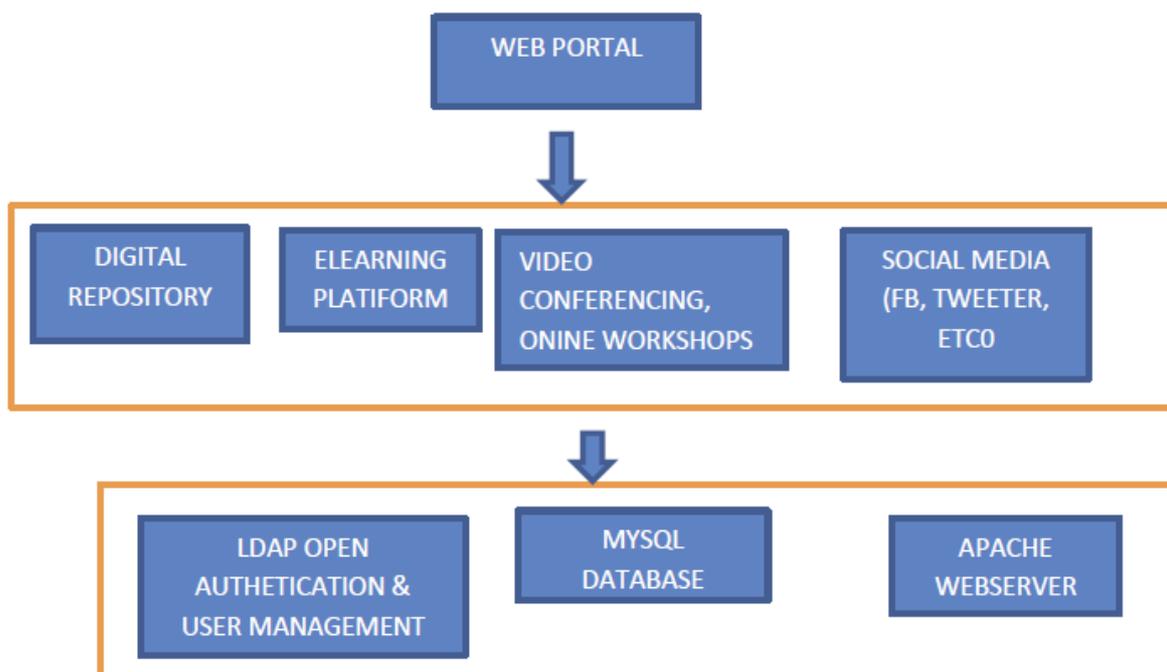
- Planning and designing the first concepts and prototypes for the MUCCRI website

The Activity worked with Makerere University College of Computing and Information Sciences (CoCIS) to begin the process of developing a climate change adaptation networking and e-learning platform (Adapt2CC) within a MUCCRI website. With help from a CoCIS faculty, a group of four students from CoCIS was identified to work on concepts for a MUCCRI website and Adapt2CC hub/platform. The students wrote a project proposal under the guidance of the faculty and inputs from the MUCCRI/Activity team. Based on the proposed concept, the students developed prototypes that were presented to a wider audience for comments and suggestions for improvement.

- Adapt2CC prototype refinement and full development

After the students had developed the first prototypes, experts were invited to provide guidance for further development of Adapt2CC. A team comprising of a consultant and MAK IT staff was constituted for the task. In an attempt to build partnerships for the platform with stakeholders from the design stages, the Activity staff reached out to the Department of Climate Change (DCC) in the Ministry of Water and Environment (MWE) and other stakeholders to seek their participation in the development of the platform. Through the involvement with DCC, areas of shared platform use were identified and adapted into the design of the platform. DCC has already offered to procure computer servers for the platform. One server will be located at the MWE while another one will be

at MAK. The main interest of DCC is in the digital repository module of the platform. Once fully functional, the platform will allow MUCCRI and DCC to share e-learning and e-library resources among others. The design plans have been finalized with a team of consultants and IT technical staff from MAK and MWE. It is anticipated that by the end of the second quarter of Year Two the platform will be ready for testing.



The Design of Adapt2CC platform under development

C. 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

Description of activities to support Result #2a for year one:

Support MUCCRI/CAES cross-college course approval process

- Follow up discussions on technical input for course approval.

The Activity staff worked with MUCCRI/CAES to identify technical inputs (e.g. course content and specific topical information) that the Activity could provide to update the proposed cross-college course (Atmosphere, Weather and Climate) and thus assist in moving the process of course approval forward. A number of college level specifics also require identification (e.g. documentation for course development, expected resources to implement the course, and a departmental host) to complete the package required for initiation of the college process for approval of the course. In Year Two, the Activity will support CAES/MUCCRI in a curriculum review effort that will include a review of this course to support decision making so that the course can be submitted to the CAES Academic Board: e.g. the host department needs to be identified and elimination of courses that duplicate information to be included in this new course. Once all the required

information is collected and the decisions are made, the course can be scheduled for submission for review and approval. The Activity is partially supporting the above mentioned curriculum review effort which is scheduled early in Year Two. The Activity has no control over when the course will be submitted nor when the Academic Board will render its decision. It is estimated, however, that completion of this process is not likely until mid Year Two.

Support the approval process for the MSc in climate sciences

- Technical review of MSc programme

The Activity staff reviewed the MSc programme prior to its submission to the University Senate for approval. This allowed the Activity to offer specific technical support to the final development of the MSc programme. The approval process is underway but the schedule for decision-making is not yet public so it is still unclear when it will be approved. The Activity believes that approval for the new MSc may not occur before early-mid Year Two. [Note: In October 2014, the University suspended all new program approvals until MAK has undergone a University-wide program review. Until that process is complete, no new program will be approved.]

Identify opportunities to review and develop climate change content for non-CAES and CAES courses

- Identify potential non-CAES departments and individuals interested in climate change content

The Activity has undertaken both planned and opportunistic discussions with representatives of various MAK departments (e.g. Journalism and Communications, Gender Studies, and Education) about the possibility of identifying any points of entry for climate information in their respective programs and courses. For example, the Department of Education invited Activity staff to describe, at a departmental faculty meeting, why climate issues might be of importance to their students. After discussions, the Department chair offered that their program was coming up for review and that they might be interested in including some climate and climate change issues. More discussions will follow in early Year Two.

- Invited to and participated in review of graduate and undergraduate programs for the Department of Environmental Management (a CAES department)

At the request of the Department of Environmental Management, Activity staff participated in a review of both the graduate and undergraduate programs for the Department. Many suggestions of courses that would be updated through addition of climate change content were made to the Department. The Department reports that it will include the recommendations from the Activity in their suggestions for updates to their programs. To date, one of the course professors has already notified the Activity that he has accepted the recommendations and will make the changes suggested to the course on Reducing Emissions from Deforestation and Forest Degradation (REDD+), which will be considered for approval by the school in the forthcoming school curriculum review effort.

Identify and access on-line course offerings

- Identify and review on-line courses, videos, webinars, among others

The Activity has a first draft of a catalog of available on-line in climate change-focused courses. This first round of listings will be continuously updated, but there is now information on on-line offerings that is available to be uploaded as soon as the Adapt2CC website is ready. As this process is time consuming and requires some climate-specific knowledge, an experienced graduate student will be brought on board to focus on continuously reviewing potential courses, developing and updating this database.

Training for CAES/MAK students

- Climate change adaptation training session provided to new graduate students focused on mitigation: Introduction to Climate Adaptation offered

A Department of Environmental Management faculty member requested the Activity staff to present an overview of Climate Change Adaptation to his new REDD+ funded graduate students (mitigation focus) during their student orientation. The presentation allowed the new graduate students to have a more complete understanding of the response options available to a changing climate.

Plan and offer a monthly climate change seminar

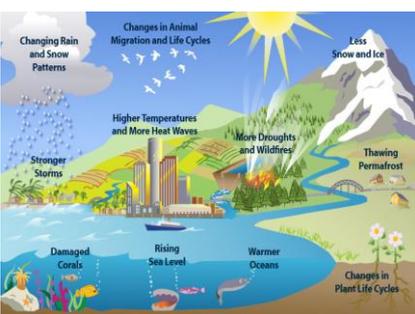
- Monthly climate change seminar underway

A monthly climate change-focused seminar series for Year Two began in September 2014 when students returned from their end of academic year break. The first seminar in September addressed the aWhere platform and introduced students and faculty, and well as other stakeholders to its capabilities. The next two seminars for this semester (October 16, November 20) are titled: *Responding to a Changing Climate: Mitigation and Adaptation*, and *Climate Change Economics*. The seminars are held on the 3rd Thursday of the month. The four seminars scheduled for the next semester are confirmed and will be advertised (e.g. fliers in many departments and some direct emailing) prior to each event.

MUCCRI CLIMATE CHANGE LECTURE SERIES



MAKERERE UNIVERSITY CENTRE FOR CLIMATE CHANGE RESEARCH AND INNOVATIONS



TOPIC: THE aWHERE PLATFORM: A New Tool for Displaying and Understanding Complex Spatial and Geographic Data
SPEAKER: Dr. John Corbett, CEO, aWhere
DATE: September 18, 2014
TIME: 8:00pm
LOCATION: FORESTRY CONFERENCE RM Top floor

TOPIC: Responding to a Changing Climate: Mitigation and Adaptation
SPEAKERS: Prof. John Tabuti and Dr. Lynne Carter
DATE: October 16, 2014
TIME: 2:30pm - 3:30pm
LOCATION: FORESTRY CONFERENCE RM Top floor

TOPIC: The Economics of Climate Change
SPEAKER: Prof. Bernard Bashaasha
DATE: November 20, 2014
TIME: 2:30pm - 3:30pm
LOCATION: FORESTRY CONFERENCE RM Top floor

Signs of a Warming World



Support the launch and use of the aWhere platform as an instructional and research tool

- Bring aWhere to Uganda to train faculty, partners, and students

The introduction of the aWhere Location Intelligence Platform (LIP) was made a public presentation for faculty, staff, students, and partners at MAK in February 2014. This introductory session garnered a great deal of interest and 45+ participants attended including: faculty, students, staff, partners and USAID personnel. Following identification of potential graduate students whose research would be supported as well as development of their scopes of work, aWhere personnel were invited to Uganda for 5 days in September to begin the training process. A public familiarization session was held and 40 individuals attended. This was followed by two days of intense trainings at the FHI 360 Kampala offices for 25 students, faculty and partners. These sessions were followed by individual meetings between students, researchers and aWhere personnel on how to individualize the platform analytics for specific research efforts. During the coming months, there will be many additional consultations between aWhere and Activity personnel, MAK faculty and students. At the present, aWhere is making their platform available for anyone affiliated with the Activity to use until the New Year. Following this introductory period, the Activity will have access to a certain number of licenses for MAK faculty and students to use to pursue climate adaptation research. aWhere plans to hold further MAK trainings (e.g. how to build your own model using aWhere), refresher sessions and project specific modifications to the platform. This will be an on-going effort over the LOA.

Result 2b): Short term training to external stakeholders provided

Description of activities to support Result #2b for Year one:

Identify audience, partners, develop and deliver initial training efforts

- Two training events for Uganda media on climate change basics

The Activity staff, CAES and Environmental Conservation Trust of Uganda (ECOTRUST), a partner organization presented a two part climate training series to Uganda media from TV, radio and print houses around the country. The Activity was assisted in the planning efforts by two local media personalities – one from radio and one from TV. Two half-day sessions were held on 17 June and 8 July 2014 and there were 28 and 35 media participants respectively (19 participated in both sessions). The training was directed toward helping the media to better understand climate change - the basic science, the impacts and the possible responses - both mitigation and adaptation and how to use that information to make climate stories interesting rather than DBI (dull but important). How to translate the science into normal "speak", what words to use and which ones to translate, how to ask questions to learn specifics to make a story interesting, and a list of story ideas were all aspects of the training.

The presentations were interspersed with small group activities that required that the participants verbalize and talk with one another about what they just learned. Discussing such issues helps to solidify new knowledge and through talking with peers one is often able to clarify and deepen individual understandings.

In addition to Activity staff, the CAES liaison to the Activity, a lecturer from Makerere University, presented on the international aspects of the science of climate change as well as the policy perspectives. A professor at MAK, and the lead investigator on the Norwegian funded REDD+ project, with the, Programme Coordinator of ECOTRUST, spoke on mitigation.

Terms that have different meanings for scientists and the public

Scientific term	Public meaning	Better choice
enhance	improve	intensify, increase
aerosol	spray can	tiny atmospheric particle
positive trend	good trend	upward trend
positive feedback	good response, praise	vicious cycle, self-reinforcing cycle
theory	hunch, speculation	scientific understanding
uncertainty	ignorance	range
error	mistake, wrong, incorrect	difference from exact true number
bias	distortion, political motive	offset from an observation
sign	indication, astrological sign	plus or minus sign
values	ethics, monetary value	numbers, quantity
manipulation	illicit tampering	scientific data processing
scheme	devious plot	systematic plan
anomaly	abnormal occurrence	change from long-term average

From Susan Hassol, Climate Communications

From the evaluations, the Activity knows the participants gained new knowledge and they seemed delighted with that and pleased with the trainings. Flash drives were presented to the participants that were pre-loaded with a great deal of climate information (Uganda specific, international, some chapters from the US National Climate Assessment, and reputable websites for additional info, etc.) that they could use as reference materials and models for stories.

- Training/awareness raising on climate change basics for Two MAK student associations

Beginning mid-Year One, meetings with Climate Change and Forestry student association leaders were initiated and continue to be held to discuss their requests to learn more about climate change and to help them get prepared to work with even younger students. Before finals and semester break, an initial presentation on climate change overview/basics was prepared and delivered on 5 May 2014 to 27 interested students.



Discussions that took place during and after the presentation highlighted the students' degree of interest, but also showed that they had little climate background or understanding, and could not take global information and think about how it might be applied to a Uganda setting. This session was the first step in what will be an on-going effort to educate and work with these MAK undergraduate students. They will be encouraged to participate in the monthly seminars as well as planning together for the Activity to support their "Climate Boot Camp" being planned for early-mid Year two.

- Awareness raising sessions on climate change basics for youth participating in the Feed the Future (FTF) National Youth Event

The Activity staff was invited to participate in the National Youth Event, “Youth and Agriculture: Exploiting Opportunities – Go for Gold” called together by two of the USAID Feed the Future Activities. At this event, the Activity participated in a panel to discuss climate change issues. Specifically, staff explained what climate change is, what it is not and what the response options include. MUCCRI was described, along with the Adapt2CC website, and was highlighted as a place to find climate change and climate change adaptation information.

- Three additional training events: NEMA Environmental Officers; Uganda Army personnel; and the Uganda Law Society

Activity personnel were invited to present training programs that address Climate Change and Climate Adaptation to three additional interested groups.

I. A climate change training organized by NEMA for the District Environmental Officers at their quarterly meeting in Soroti in June was the setting for an invited presentation by the Activity COP. There were 60 participants at the session and a pre/post assessment was allowed. The overall knowledge gained was positive (the amount depended on the specific question), however, there were many in the group with lower levels of knowledge than others and the questions during the discussion period reflected the difference in levels of understanding more so than the assessments. The Activity is finding that a number of questions on the assessments go unanswered and not all participants will respond to an assessment. It could be that the questions go unanswered because the participants are unsure of the correct response and do not want to record a wrong answer. Incomplete questionnaires pose difficulties in having definitive records about knowledge gain. This is something we will continue to assess and adapt as necessary.



Climate change presentation for Uganda District Environmental Officers at Quarterly meeting in Soroti (June, 2014).

2. Nearly 300 Uganda Army personnel participated in a two-week training program at MAK



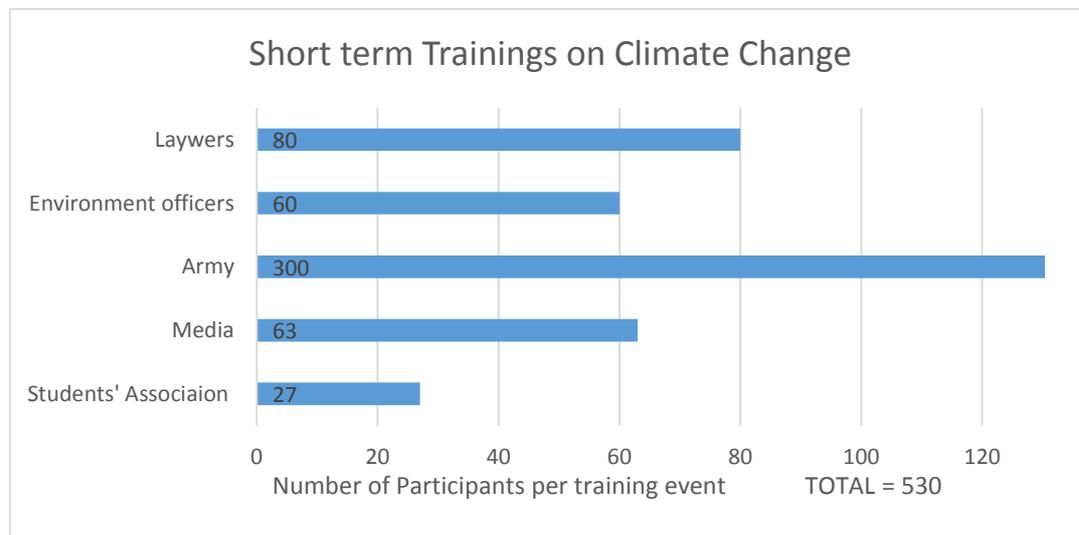
Uganda Army personnel at the closing event for their 2-week training program on agriculture held at Makerere University.

entitled the *Agriculture Induction Training* effort. The Activity was requested to offer climate training to all of the participants. The overall training was meant to increase the knowledge around agriculture with the highest scoring participants having the knowledge and thus potential to be deployed in an extension-type effort to reach farmers and share agriculture information. The presentation for this training specifically included some military perspectives on the climate concern – quotations and a citation to two US Military reports were presented. The Army assessment showed the greatest increase from pre to post evaluations of any of the assessed groups.

3. Invited by the Law Society Director, Activity staff had the opportunity to participate in a continuing education program offered by the Uganda Law Society at a session entitled: *Seminar on Environmental Law and Climate Change*. Approximately 80 Uganda lawyers participated. Activity staff were invited to present a 2-hour program and were allowed to ask for pre/post tests. Many participants (not all) responded by taking the pre and the post evaluations and a knowledge gain was recorded. To assist in greater understanding around climate issues and the legal perspective, a section was included that presented a number of examples of emerging climate



change related legal issues around the world. An activity was also developed and presented to assist in the early identification of potential Uganda climate change related legal issues that could emerge.



- NTV featured interview

To support local connections to an international meeting at the UN on Climate Change, NTV, a local Uganda TV station, invited the COP to be the sole interviewee for a 25-minute segment of a morning news program addressing climate change. The program was aired live on September 25, 2014.

Design and develop the next short term training effort

- Planning for Central Government training with Enabling Environment for Agriculture Activity (EEA)

In partnership with EEA, the Activity has begun the process of planning for a central government training effort in climate change. We have met together and EEA has begun working on a concept or draft of what needs to be addressed for this audience. This Activity will contribute climate information and materials. We will continue to meet with EEA until the training has been developed and a date for the event has been set. As this is for the central government, there may be some delays in receiving approval for such a meeting. It will likely take place in early-mid Year two of this Activity.

D. Result 3: MUCCRI is Generating High Quality Climate Change and Climate Adaptation Research

Description of activities to support Result #3 for Year one:

Supporting student research opportunities in cooperation with IITA and NARO

- Recruited PhD and MSc students for research scholarships

In May 2014, the Activity, in partnership with International Institute of Tropical Agriculture in Uganda (IITA-Uganda), the National Agricultural Research Organization (NARO), and MUCCRI advertised for interested students to apply for PhD and MSc Scholarships. Through a very competitive recruitment process, three PhD and two MSc candidates have been selected. Three PhD and one MSc student have so far been offered scholarships. One other MSc student to be considered in the first cohort has also been selected to complete the required five scholarship beneficiaries for Year One. The Activity will jointly fund the research scholarships with another USAID Activity—*Enhancing climate resilience of agricultural livelihoods* (implemented by IITA/NARO). Formal partnership arrangements for the joint scholarship support with IITA/NARO/CAES/and FHI 360 are in their final stages. Under the partnership, the NARO-IITA field research activities will link with the research and capacity building efforts of MUCCRI.

- Technical support to students

During the fourth quarter of Year One, the Activity staff devoted substantial time to offer technical support to students in developing their research concepts/proposals. Activity staff organized meetings with partners (MAK/MUCCRI, IITA, and NARO) to support student's research concept/proposal presentations as well as one-on-one engagements with the students to give them guidance on specific concept/proposal content. The Activity staff

organized and held a meeting focused on helping students in understanding the technical alignments of the individual student's research to the Activity outcomes and the linkages of all research actions to the research and capacity building efforts of MUCCRI. As noted above, the students were also invited to and participated in the aWhere training with an intention of helping them to identify how and where they were going to use the platform in their research design, implementation, and outputs dissemination. The students are currently engaging aWhere technical staff for further support in using the LIP in their research.

E.Result 4: MUCCRI is Communicating with External Stakeholders and Disseminating Climate Change Adaptation Information

Description of activities to support Result #4 for Year one:

Disseminating research results-developing a dissemination pathway

- Identify partnerships for a dissemination pathway for research results and other climate information

A critical part of building climate adaptation capacity is the broad sharing of climate change and climate adaptation information. Understanding and access to information are critical steps in the pathway to building capacity. Another step is ability to implement change from new information. The dissemination pathway that this Activity is working to develop has a variety of potential partners in at least three areas. The first group would encompass the generators or developers of research information. This is often in the form of a scientific journal article and written at a level for other peer scientists and thus not easily grasped by the layperson. The second group of pathway partners would be the “boots on the ground” folks who can actually take information and deliver it directly to the farmers, in this case, who would need to understand and implement the new research findings. But there is another part of the pathway that is also critical and this includes “the translators.”

The Activity staff has devoted time to following-up on avenues for information dissemination identified during the VSR and through the baseline assessment that was focused on information dissemination, as well as through connections made with various media representatives. Several meetings have been held with Resilient Africa Network, IITA, NARO and a number of USAID Feed the Future implementing partners. Each of these groups can support the pathway in various capacities. For example, IITA/NARO are generators of climate research information while many of the FTF groups have access to a wide range of “boots on the ground.” The Activity and MUCCRI are looking to play the role of the translators and the pathway supporters. Each of these roles, however, needs to be easy to maintain and fulfill in order for it to be sustainable in the long-term.

The draft pathway that will be tested in Year Two will flow from various information generators, to the MUCCRI website and a template that has been developed for scientists. The template is meant to assist scientists in making their research findings understandable and useable by farmers. Once they translate their research findings and information into lay language they will be asked to submit the filled template back to the website. That (now) lay language translation of the research findings will then be shared with “the boots on the ground” and who will ultimately share it with the farmers who need and will then use the information.

In preparation for the pilot test, an IITA researcher has used the draft template to guide his research “translation” into something more useable and understandable to non-scientists. That piece of translated research will be distributed to participating village agents and others to test its usefulness and applicability. There are also 6 previously MUCCRI supported student research reports that may be tested in this way. Use of MUCCRI funded research for testing the usability of the dissemination pathway will require the authors to participate in this translation effort and how to locate those students are now is not readily known. The Activity has also offered to provide training to various “boots on the ground” participants to be sure that the new information is well understood so it can be presented and used most effectively. This whole pathway is envisioned to remain active during and beyond the conclusion of this Activity. The pilot test will provide more learning and allow us to adapt the pathway for better long-term success.

F. Monitoring and Evaluation Indicators

The Activity is delighted to report that progress has been made in all result areas as documented above in this report and specifically in the appropriate indicators in the Monitoring and Evaluation Indicator Table (Annex). The establishment of meaningful indicators as measures of the Activities’ impact was accomplished following the development of this Activity’s Theory of Change (TOC). A TOC describes explicitly (making the assumed connections clear) what expected result will follow from a particular set of actions. Theories of change are also useful/practical because once they have been identified, the changes expected from an action can more easily be recognized when they occur. The TOC also facilitates evaluation and the move to or focus on evidence-based design. There are nine total indicators for the four result areas of this Activity that were developed from the TOC:

Result 1: Institutional structure of MUCCRI is established and supports MUCCRI objectives.

Support Recognition of MUCCRI w/in and outside University

- (1) MUCCRI approved and established by University Senate
- (2) MUCCRI Steering and Science committees established and functioning
- (3) Website: planned, established, usage (hits per month)

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 changed improved

- (4) Number of courses that newly include climate change information because of MUCCRI/Activity assistance /interactions

Result 2b: Short term training to external stakeholders provided

- (5) Number of short-courses in climate change and/or adaptation developed by or with Activity support and delivered under the auspices of MUCCRI
- (6) Number of individuals with increased capacity to adapt to the impacts of climate change as a result of USG assistance.

Result 3: MUCCRI is generating high quality climate change and climate adaptation research

- (7) Number of graduate and undergraduate student research efforts on climate change and climate change adaptation supported yearly by the Activity

- (8) Number of publications in peer-reviewed journals from Activity supported student research efforts (peer review and accepted indicates quality)

Result 4: MUCCRI is communicating with external stakeholders and disseminating climate change adaptation information

- (9) Number of farmers reached with research results and new climate information by dissemination pathway participants

G. Collaborating, Learning, and Adapting

Through partnership building and stakeholder engagement, a number of lessons are being documented. Lessons are also being gleaned from internal collaborations and the Activity team is noting what has or not worked well. In weekly meetings, the Activity team members continue to learn from each other and adapt plans accordingly for better results.

For example, during Year One, a major action has been the planning, concept design and prototype development for a MUCCRI website (Adapt2CC). The Activity is working with COCIS, CAES, DICTS, DCC and other partners on this effort. Through these engagements, the early perspectives on design and function of the Adapt2CC platform have been updated and changed. It is anticipated that such changes will allow the Activity to broaden the scope of potential targeted users of the Adapt2CC platform. Through collaboration and learning, the Activity has identified opportunities for sharing the costs involved in having a platform with a broader range of connective ability than was originally thought.

Through collaborative planning of our research efforts with IITA/NARO, the Activity has been able to identify leverage points for broadening the scope and information available to support a dissemination pathway(s). We are now working with IITA/NARO on identifying research results beyond our cooperative research efforts that could contribute to a more robust stream of research findings for a dissemination pathway. The details are still to be developed.

In the student research implementation plan, we are reflecting the results of the baseline assessment on Collaborative Adaptation Research and Field Trials that was conducted by reviewing a wide range of previous research activities and experiences. Some of the aspects now reflected in our student scholarship approach that we have adapted from the assessment include:

- Recruiting students on a full time basis which requires that they are provided with both stipend and tuition fees;
- Acknowledging that inquiry into academic background and student grades is critical before they should be considered for research support; and
- Specification and inclusion of a plan for translation of the science into useable information for farmers and a plan to deliver that information at the farm level in all research projects by all students funded by the Activity.

Through collaboration engagements with MAK/CAES, lessons have also been learned particularly on the University procedures and schedules that have led to Activity plan adjustments. For example, as a result of lessons learned during joint implementation planning

in Year One, the timing of some actions, such as curriculum review and establishment of MUCCRI governing committees, has been adjusted based on such lessons.

III. ADDITIONAL OBSERVATIONS/ISSUES

The appointed MUCCRI Interim Coordinator, Dr. Revocatus Twinomuhangi, has made a significant effort to work closely with the Activity team. He has supported the Activity, for example, in searching for and identifying a Program Assistant, in interviewing and choosing graduate student scholarship recipients, in working with the other MUCCRI faculty and in so many ways making this Activity more effective and run smoother. Dr. Twinomuhangi also participated in the media training by presenting on his specialty (international science and policy) and he will deliver a lecture in the MUCCRI lecture series next semester (February to May 2015). His involvement in the first training provided the media with a MAK-based point of contact. His connection with the Intergovernmental Panel on Climate Change (IPCC) resulted in the Activity being invited to provide two presentations during the August roll-out of the new IPCC Assessment Report #5 (AR5). His appointment and attention has been extremely beneficial for the Activity and helps a great deal to maintain good relationships with the other MUCCRI-related faculty.

It is important to recognize that a good deal of time and effort has been spent on finalizing the Year One work plan and the baseline assessment report, writing and getting the Year Two work plan approved. Revisions and re-workings take meetings with experts, with the MUCCRI faculty, and much collaboration, learning, and adapting to arrive at something that is acceptable and workable for all involved. Specifically, the team spent 2 days on a focused work planning effort with the MUCCRI interim steering committee members including the CAES Principal, USAID representatives, and Activity staff to arrive at the Year One work plan that was submitted at the end of the third quarter.

This process informed the Year Two Work plan development process and as a result Year Two work planning was streamlined and it was much simpler to gain consensus. Further, having the CAES coordinator in place greatly assisted the process. Another significant undertaking this year was development of a Theory of Change (TOC) for this Activity that lead to a final M&E plan and indicators that will meet Mission requirements. Arriving at approved plans took a bit longer than a normal start up effort. This was partially due to the need for the University and USAID to establish a Memorandum of Understanding (MOU) about what this Activity is and is not, nonetheless the team is making real progress across all of the Result areas.

IV. CONCLUSION

In our last quarterly report, the Activity noted that: “the focus of this Activity – climate change and climate change adaptation actions – seems to be one that excites and encourages working together.” This is becoming even more apparent as we progress. Activity staff are becoming recognized as authorities on climate change adaptation and people with information and who share the materials in a positive and constructive manner. We are working with students and student organizations, with the media, as presenters and contributing members of meetings on our topic and other related topics. MUCCRI is

becoming recognized as a positive force even before it is officially established by the University – as witnessed by the invitation and the web-linking efforts from the GoU/DCC.

ANNEX: MONITORING AND EVALUATION INDICATOR TABLE FOR YEAR ONE

Indicator Name & Number	Source	Frequency	Baseline Starting Pt	Target YR 1	Achieved	Comment
<i>Result 1: Institutional structure of MUCCRI is established and supports MUCCRI objectives.</i>						
Support Recognition of MUCCRI w/in and outside University						
(1) MUCCRI approved and established by University Senate	Process updates	Quarterly and annually until approval	0	Phase 1: MUCCRI proposal submitted for approval to University Senate	Phase 1: achieved MUCCRI proposal and supportive documents were submitted to the senate and staff are awaiting response	The policy committee of the University Senate will be considering the proposal in one of their next two scheduled meetings. The exact scheduling is not known by the Activity.
(2) MUCCRI Steering and Science committees (cmts) established (estb'd) and functioning	Activity records of agreements to serve, meetings held, and functionality score sheets	Quarterly and annually	0	0	0	The Activity was asked to wait on even developing suggested membership of these cmts until MUCCRI is approved in case there are suggestions from the Univ. Senate as to specific sector or other membership recommendations

(3) Website: planned, established, usage (hits per month)	Website progress recorded – hits counted	Quarterly and aggregate annually	0	Phase 1: Prototype development	Phase 1: achieved Prototype of website developed	The prototype 2 website will likely be ready for testing in mid-year Two of the Activity.
Baseline Targets						
Indicator Name & Number	Source	Frequency	Starting Pt	YR 1	Achieved	Comment
<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	Record of interactions and changed courses	Quarterly and aggregated annually	0	0	0	Recommendations have been made to entire programs and individual courses for inclusion of climate change info – now under review. For one course we have been notified of acceptance of recommendations - awaiting course approval
<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	Record of presentations and training materials	Quarterly and aggregated annually	0	5	7	In addition to those 7 full short term training programs delivered there have been at least 4 other brief introductions of what is climate change, etc –

						Young farmers, USAID mtg, MUCCRI seminar, & faculty mtg for MAK Dept. of Education							
(6) Number of individuals with increased capacity to adapt to the impacts of climate change as a result of USG assistance.	Follow-up surveys	Biannually	0	0	0	We have presented full short term training programs to over 500 individuals and to another 100+ in short briefings. We will assess a % of trainees at the end of year two for genuine capacity increase							
<table border="1"> <thead> <tr> <th>Indicator name & number</th> <th>Source</th> <th>Frequency</th> <th>Baseline Starting Pt</th> <th>Target YR 1</th> <th>Achieved</th> <th>Comment</th> </tr> </thead> </table>							Indicator name & number	Source	Frequency	Baseline Starting Pt	Target YR 1	Achieved	Comment
Indicator name & number	Source	Frequency	Baseline Starting Pt	Target YR 1	Achieved	Comment							
<i>Result 3: MUCCRI is generating high quality climate change and climate adaptation research</i>													
(7) Number of graduate and undergraduate student research efforts on climate change and climate change adaptation supported yearly by the Activity	Research funding records of students	Quarterly starting in year 2	0	0	0	5 students have been identified to undertake 2 MSc and 3 PhD research efforts. They are onboard and in the process of being admitted and supported							
(8) Number of publications in peer-reviewed journals from Activity supported student research efforts (peer review and accepted indicates quality)	Record of number of publications in quality journals	Quarterly starting in year 3	0	0	0	The research studies of the students have just started so are not yet ready for publication							
<i>Result 4: MUCCRI is communicating with external stakeholders and disseminating climate change adaptation information</i>													
(9) Number of farmers reached	Participant	Quarterly	0	Phase	Phase 1: achieved	The draft dissemination							

with research results and new climate information by dissemination pathway participants	reports	aggregated annually		1: Develop a draft dissemination pathway	A draft dissemination pathway is identified	pathway will be tested in Year Two. In addition to numbers of farmers reached the Activity will collect reports of example actions undertaken by farmers using the new info and those examples will be available on the MUCCRI/Adapt 2CC website.
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