

ACE CLimate SABC Newsletter

Africa Center of Excellence for Climate Smart Agriculture and Biodiversity Conservation Newsletter from March-May 2022



Africa Center of Excellence for Climate Smart Agriculture and Biodiversity Conservation (ACE Climate SABC) at Haramaya University has successfully organized a Five Days Training on predicting and projecting climate change and variability.

The Deputy Leader of ACE Climate SABC, Dr. Bobe Bedadi has opened the training by warmly welcoming the participants of the training. In his speech he has addressed that the Africa Center of Excellence has been giving different short-term trainings on various areas of fields, knowledge, and skills related to Climate Smart Agriculture and Biodiversity Conservation since 2018. Accordingly, to date, the Center has successfully delivered trainings on food security, climate change, ecosystems, biotechnology, information and digital literacy, waste management, greenhouse gas emission and mitigation, scientific writing and on integrated decision support systems focusing on three different models namely Agricultural Policy Environmental eXtender Model (APEX), Farm Income Simulator Model (FARMISM) and Soil and Water Assessment Tool (SWAT).

He also added that the current training on predicting and projecting climate change and variability is believed to be relevant and timely as climate change is increasingly becoming a worldwide problem and agenda, for which updating staff and post graduate students in such areas is

Training on Predicting and Projecting Climate Change and Variability held at Africa Center of Excellence for Climate Smart Agriculture and Biodiversity Conservation from May 23-27, 2022.

INSIDE THIS ISSUE

- Training Story
- Sustainability Story
- Research and academic progress
- Completion of PhD
- Student Case Story

very important at this point in time. He also asserted that the Center has a plan to organize skill based short courses in climate change and agriculture, to establish climate data base to provide up dated information on climate change, establish a digital platform for resource sharing among stakeholders, to revise the existing curriculum and to establish CSA model village to continually serve as a regional hub in a academic and research in the areas of climate change and agriculture in the future.

The training on predicting and projecting cli-

mate change & variability was focused on basic concept of climate change, climate variability and analysis, climate scenarios and data sources, regional climate and basic concepts of climate downscaling with basic models that would support the topics of training. A total of 16 participants of the training are mainly graduate students of ACE Climate SABC, staff from the college of agriculture and school of geography and GIS. According to the participants, having training on the issue of climate change is a good opportunity that they had at this time and the way it has been organized and fully handled by the trainer was so exceptional. The trainees expressed that they were very happy to the whole aspects of the training.

On the closing session, Dr. Mulugeta Damie, a project manager of ACE climate SABC said that the Center will plan another round for the training on this topic since there were many more applicants who didn't get the opportunity of the training in this round. We were also more confident about our Trainer Dr. Asfaw Kebede, since he is our colleague and faculty member, we know the capacity and personal qualities and we believe that he has already met our expectation. The deputy center leader, Dr. Bobe also advised the trainees that they must have enjoyed the training and they need to practice what they have trained in their research work instead of putting them aside, underlining that it would be forgotten otherwise.



Africa Center of Excellence for Climate Smart Agriculture and Biodiversity Conservation is working on Sustainability of the Project

Africa Center of Excellence for Climate Smart Agriculture and Biodiversity Conservation (ACE Climate SABC), academic and research project funded by the World Bank at Haramaya University has incessantly been hunting for grant opportunities by which the Center continues its academic and research endeavors with excellence. In this regard, the Center has been competitively selected to host PASET RSIF PhD Scholars to study in the area of Climate Smart Agriculture and Biodiversity Management. Eleven RSIF scholarship winners from Rwanda, Benin, Burkina Faso, Democratic Republic of Congo (DRC), Nigeria and Ethiopia have already started joining the Center. In this month, 10 regional students are expected to join ACE Climate SABC under PASET-RSIF PhD Scholarship grant.



Moreover, ACE climate SABC has also submitted other grant project proposals including PASET-RSIF Innovation Grant; DAAD, ERASMUS +, to compete for additional grants. As a result, there is a full hope that the Center will continue as an academic and research excellence and training expertise in the field of Climate Smart Agriculture and Biodiversity management for a long time in the future.



RSIF offers a unique and historic opportunity for African countries to train new doctoral students in high quality PhD programmes in applied sciences, engineering and technology, at an affordable cost in competitively selected African universities partnered with international universities.

RSIF African Host Universities (AHUs) are universities or research institutes/centers (Africa Centers of Excellence) in sub-Saharan Africa that offer a strong PhD program in one of the PASET priority thematic areas. RSIF African Host Universities are selected competitively by an independent, international panel of experts and endorsed by the PASET Executive Board.

A glorious progress of the ACE Climate SABC to excel and sustain research and academics in Climate Smart Agriculture and Biodiversity Conservation

Africa Center of Excellence has been showing a big tried towards excelling and sustaining academic and research projects it has been implementing since 2017, the year it had admitted 21 PhD students and 25 MSc students in the fields Climate Smart Agriculture and Biodiversity management. Since that time, it has continuously been admitting students from countries in the eastern and southern Africa region including Ethiopia alike on a competitive basis in their respective areas of studies. Students are invited to apply from eight countries, namely: Ethiopia, Kenya, Uganda, Rwanda, Malawi, Tanzania, Zambia and Zimbabwe. In this way, the Center provides a new opportunity for African students to enroll in a transdisciplinary post-graduate study conducted by a truly global faculty.

Until this time, the Center has admitted a total of 160, from which 60 are PhD students and 100 are MSc students admitted under five different cohorts. The first and second Cohort MSc students have all completed their studies and successfully graduated from the Center; whereas one PhD from the first Cohort was graduated in 2021 academic year. A total of 43 MSc students have been graduated up to date.

In its capacity building endeavor, the center has recently, inaugurated state of the Art video Conference Center which has been constructed by Moti Engineering with a total budget of around 9 million Ethiopian Birr, out of which around 3



Video Conference Enauguration Ceremony

million Ethiopian Birr was covered by Haramaya University as a basement budget to start the construction. This video conference was initiated to boost the teaching learning and training capacity of the Center in response to the virtual learning and training needs of the University in general and of the Center in particular, as the University is planning to launch virtual scholarship programs that would enable students to be engaged in from the far distance. On top of this, the Center has plenty of resources for students to exploit for matters pertaining to their studies.





It is equipped with state-of-the-art laboratories, digital libraries, video conferencing facilities and conducive student accommodations that would make learning at Haramaya University easier and enjoyable. Currently, the center is processing foreign purchase of laboratory equipment aiming at building the capacity of the University in making laboratories accessible to researchers, and left with Opening Letter of Credit (L/C) for suppliers and facilitating the payments through the National Bank of Ethiopia.

The Center also offers courses with well experienced distinguished professors from HrU and other Universities, and research institutions in the country, or elsewhere in the world making the Center venue for staff exchanges for short courses and research advisership. What is more, the Africa Center of Excellence for Climate Smart Agriculture (ACE Climate SABC) has established collaborative partnership with ten (10) institutions, namely: African Conservation Tillage Network (ACT), Nairobi, Kenya; Natural Resource Institute of the University of Greenwich, UK; Purdue University, USA; Center Excellence for Sustainable Agriculture and Agribusiness Management at Egerton Univer-

sity, Kenya; WISE-Future Center of Nelson Mandela Institution of Science and Technology (NM-AIST) Arusha, Tanzania; Aqua Soul (a Private Mineral Water Factory) in Dire Dawa, Ethiopia; Harar Brewery, the Subsidiary of Heineken NPV in Ethiopia, NINT Agrobusiness, a private farm in Ethiopia, RUFORUM in Uganda, and Ethiopian Biodiversity Institute. These partnership engagements have supported the Center a lot to achieve its planned goals of training more than the targeted number of MSc and PhD students (i.e., 80 MSc and 30 PhD students) in its earlier proposal.

One of the Second Cohort Students Working on her Research field



Tigist Kibru is one of the hard working female PhD students at Africa Center of Excellence doing her research on the topic of “Conservation tillage effects on soil properties and Onion productivity at Haramaya and Dire Dawa, Ethiopia”. Tigist is now on harvesting and collecting her data for making them ready for analysis. She has mentioned problems she encountered on her research that are mainly related to the failure of seed and changing whether conditions and variation in rainfall. However, she is now successfully working on her data wishing that she will get in to the write up very soon



Partners that Signed a memorandum of associations with ACE Climate SABC

Some of the partners that signed a memorandum of association with ACE Climate SABC are working closely with the Center in some concerning issues. By this time ACE's top partners are seven (8) institutions, namely: African icipe (PASET-RSIF), Conservation Tillage Network (ACT), Nairobi, Kenya; Natural Resource Institute of the University of Greenwich, UK; Purdue University, USA; Center Excellence for Sustainable Agriculture and Agribusiness Management at Egerton University, Kenya; WISE-Future Center of Nelson Mandela Institution of Science and Technology (NM-AIST) Arusha, Tanzania; Aqua Soul (Mineral Water Factory) in Dire Dawa, Ethiopia; and Harar Brewery, the Subsidiary of Heineken NPV in Ethiopia.



PhD and MSc Students are successfully defending their Dissertations and Theses at ACE Climate SABC, Haramaya University

Africa Center of Excellence for Climate Smart Agriculture and Biodiversity Conservation continues to examining PhD and MSc Students who have successfully submitted their papers in this season. From April 14-15, the Center has examined members of its first and second cohort PhD, and second and third Cohort MSc students in an open defense session. In this round of open defense, Five PhD papers and Five MSc papers have been critically evaluated by the board of examiners from different fields of specializations.

The examination has been implemented in a virtual and face to face presence of the board of examiners, defendants and board of advisory committees. The board of examiners with potential experiences in advising and examining graduate students, and tremendous experiences of publishing many more articles have joined the center from some international and national research institutions and Universities in Ethiopia and outside. Critical examinations were undertaken, scientific debates have been exchanged with the participation of students and members of staff from college of agriculture and environmental sciences at Haramaya University.



All the presented papers were successfully defended and accepted in the partial requirements of fulfillments of the degrees in their respective fields of studies scoring very attractive grades. The PhD papers have focused more on the areas of climate change and its impacts on agricultural production and productivity with specialization on plants and Live-stock. The five PhD students who have successfully defended and ready to graduate can be taken as an emblem of progress in the performance of the Center in changing its objectives into remarkable goals that it has successfully managed to graduate six PhD students including the one that has already graduated in 2021.

By this time, about 48 MSc and 6 PhD students have successfully completed and graduated from the Center. In the near future, the Center expects more PhD and MSc candidates who are on a way to finish their studies by which it aspires to continue to produce more graduates in the fields of climate smart agriculture and biodiversity management.



Dr. Michael Abera, PhD in Climate Smart Agriculture, a short story of his academic journey

My name is Michael Abera Hareri. I was born in 1986 in Benishangul Gumuz, National Regional State, Metekel Zone, Wombera district (Ambifeta rural Kebele). I attended primary and junior secondary school education at my birthplace (Ambifeta rural Kebele) and Senkora, respectively, and senior high school education at Wombera Senior Secondary School. After completing high school education, I joined Mada Walabu University in 2008 and graduated with a Bachelor of Sciences in Animal and Range Science in 2010 with very great distinction. After graduation, I was assigned by the Ministry of Education (MOE) to Debre Markos University in 2011 and served for one year in the Department of Animal Science as a Graduate Assistant I.

Then I joined Haramaya University in 2012 and graduated with a Master's of Sciences in Animal Breeding and Genetics in 2014. After graduation, I went back to my previous workplace, Debre Markos University, and have been working as a lecturer for about four years. I then joined Haramaya University for the second time to pursue my PhD study in October 2018 under the program of Climate Smart Agriculture and Biodiversity Management (Livestock).

I think I have been selected as ACE's PhD student because of several factors. Among the first reason was the articles I have published from my MSc study results,

as well as from different research activities in which I was involved in at my workplace. This is because publication/s were the major criteria during the application. Secondly, the basic criteria to be selected as MSc and PhD candidate at the Center was scoring 3.00 and above at the undergraduate level. Thus, my undergraduate CGPA was in very great distinction. Thirdly, I tried to develop a strong concept note concerning climate change's impacts on livestock production and productivity which was also the target area of the center. Fourthly, I have also developed a strong motivation letter in the areas of climate-smart agriculture and biodiversity conservation. By organizing these credentials for application, I finally tried to get reference letters from my previous supervisors



during my MSc study and highly qualified professionals who had good informations about my background. Thus, the cumulative effect of all these qualifications led me to be selected as ACE PhD student.

Initially, when I came across the call, I was very much eager to join the program partly as it was a timely opened program and partly because climate change is a global issue currently as it affects the world population in different aspects. Thus, joining Climate Smart Agriculture and Biodiversity Conservation was my number one priority at the time. Moreover, I was also interested in the program because of its time boundedness, four years program with no possibility of extension.

I completed my PhD study in a short period be-



cause of different reasons. Among these, I tried to plan my dissertation research work before joining the study program as follows: -

1. what I should do?
2. Where I should do?
3. How I should do it?

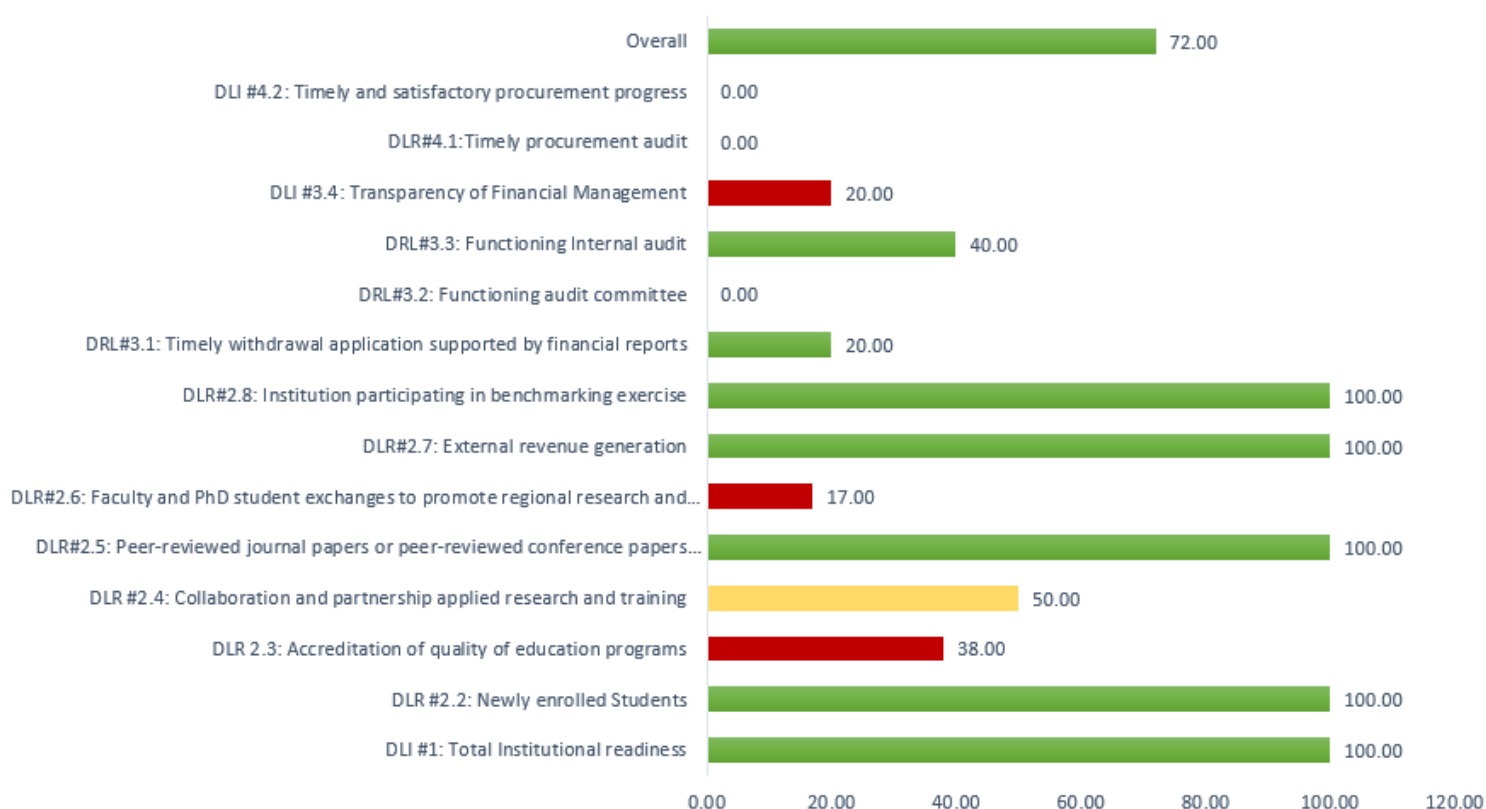
Then, I properly managed my time to complete my study. On top of these, the positive reaction I made with my supervisors and their timely feedback on my work, good communication with ACE management concerning funds, and with different stakeholders made me to complete the study in a very short period (almost 3 years).

PhD students have to plan their research ideas: what to do, where to do, and how to do it before they join their study program. Moreover, to work on a research budget is the dominant factor. Thus, they should also search for budget sources. After planning for all the necessary things to conduct their experiment, they should also properly use their time.

I want to be a good professional in my future career, especially in the areas of climate-smart agriculture and biodiversity conservation with a special emphasis on livestock production under changing climate. Nowadays, the climate change effect is more pronounced in developing countries including our country Ethiopia. Therefore, I want to know more about it and conduct research to tackle the effects of this global issue on our smallholder farmers to enhance their resilience capacity.

Percentages of DLRs achieved since establishment

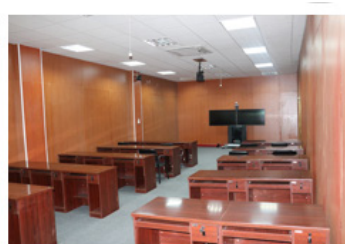
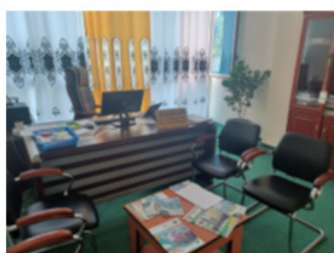
% Achievement



Key Collaborators



Key Facilities and Resources at the Center



Possible Contacts

Prof. Mengistu Urge
Center Leader
urgeletta@yahoo.com

Dr. Bobe Bedadi
Deputy Center Leader
bobedadi2009@gmail.com

Dr. Mulugeta Damie
Project Manager
muliewe@gmail.com

Dr. Sintayehu Workeneh
Training & Research Head
sintekal@gmail.com

Gizachew Nemomsa
Communication Officer
nemomsa.gizachew@gmail.com

ACE CLIMATE SABC
Haramaya University
Ethiopia
Telephone :
+251 25 553 0333 +251 25 553 0480
+251 25 553 0541
Website:
www.climatesabc.haramaya.edu.et