

# Integrating Climate Products in the Existing Undergraduate Curricula: An Approach to Respond to Climate Change through Climate Education

Berhanu Belay | Gebermedihin Ambaw | Yosef Amha |  
Sintayehu Workneh | Tadesse Terefe | Teferi Demissie |  
Dawit Solomon

---

Workshop Report



# **Integrating Climate Products in the Existing Undergraduate Curricula: An Approach to Respond to Climate Change through Climate Education**

## **Workshop Report**

**Accelerating Impacts of CGIAR Climate Research for Africa (AICCRA)**

**December 2022**

**Berhanu Belay  
Gebermedihin Ambaw  
Yosef Amha  
Sintayehu Workneh  
Tadesse Terefe  
Teferi Demissie  
Dawit Solomon**



### **To cite this workshop report**

Belay B, Ambaw G, Amha Y, Workneh S, Terefe T, Demissie T, Solomon D. 2022. Integrating Climate Products in the Existing Undergraduate Curricula: An Approach to Respond to Climate Change through Climate Education. Workshop Report. Accelerating Impacts of CGIAR Climate Research in Africa (AICCRA).

### **About AICCRA reports**

Titles in this series aim to disseminate interim climate change, agriculture, and food security research and practices and stimulate feedback from the scientific community.

### **About AICCRA**

The Accelerating Impacts of CGIAR Climate Research for Africa (AICCRA) project is supported by a grant from the International Development Association (IDA) of the World Bank.

### **Contact us**

Accelerating Impacts of CGIAR Climate Research for Africa (AICCRA). Email: [aiccra@cgiar.org](mailto:aiccra@cgiar.org)

**Disclaimer:** This workshop report has not been peer-reviewed. Any opinions stated herein are those of the author(s) and do not necessarily reflect the policies or opinions of AICCRA, donor agencies, or partners. All images remain the sole property of their source and may not be used for any purpose without the written permission of the source.

This workshop report is licensed under a Creative Commons Attribution – NonCommercial 4.0 International License.

© 2022 Accelerating Impacts of CGIAR Climate Research for Africa (AICCRA).

## **Acknowledgments**

The Accelerating Impacts of CGIAR Climate Research for Africa (AICCRA) project is supported by a grant from the International Development Association (IDA) of the World Bank. IDA helps the world's poorest countries by providing grants and low to zero-interest loans for projects and programs that boost economic growth, reduce poverty, and improve poor people's lives. IDA is one of the largest sources of assistance for the world's 76 poorest countries, 39 of which are in Africa. Annual IDA commitments have averaged about \$21 billion over circa 2017-2020, with approximately 61 percent going to Africa.

## **About the authors**

Berhanu Belay is a Consultant at the International Center for Agricultural Research in the Dry Areas (ICARDA) and AICCRA Ethiopia.

Gebermedihin Ambaw is a Research Officer at AICCRA Eastern and Southern Africa at the International Livestock Research Institute (ILRI).

Yosef Amha is a Consultant at AICCRA Eastern and Southern Africa at the International Livestock Research Institute (ILRI).

Sintayehu Workneh is a Training and Research Head at Africa Center of Excellence (ACE) for Climate-Smart Agriculture and Biodiversity Conservation (Climate SABC) and Associate Professor at Haramaya University.

Tadesse Terefe is a Associate Professor of Meteorology and Atmospheric Science at Addis Ababa University, Institute of Geophysics, Space Science and Astronomy (IGSSA)

Teferi Demissie is a Senior Climate Scientist and Modeler at AICCRA Eastern and Southern Africa at the International Livestock Research Institute (ILRI).

Dawit Solomon is AICCRA Eastern and Southern Africa Program Leader at the International Livestock Research Institute (ILRI).

# Table of contents

<b>Abstract</b> .....	2
<b>Background</b> .....	3
<b>Short-Term Interventions</b> .....	4
<b>Long-Term Interventions</b> .....	5
<b>Approach and procedures</b> .....	7
<b>Key findings from the gap analysis</b> .....	8
<b>Recommendations and future activity</b> .....	9
<b>Key issues captured during the discussion</b> .....	10
<b>References</b> .....	12
<b>Annexes</b> .....	13
<b>Annex 1. Workshop activity schedule</b> .....	13
<b>Annex 2. List of participants in the validation workshop to integrate climate in the existing curricula</b> .....	14
<b>Annex 3. A timeline agreed by the workshop participants to integrate climate into the existing curricula</b> .....	16

## Abstract

---

*Climate change is real, and the severity of the problem is critical in developing countries where agriculture is the backbone of the economy. The agricultural sector in Ethiopia is highly climate dependent. More than 95% of farmed land grows crops under rain-fed agriculture. Given continually increasing climate change trends and variability, Ethiopia is expected to get hotter in the foreseeable future. This situation will increase small farm households' vulnerability to climate-related shocks that may induce food insecurity, malnutrition, diet-related non-communicable diseases, and large-scale displacements. Since there is no vaccine for climate change, equipping next-generation agricultural science graduates with the concepts of Climate Information Services (CIS) and Climate-Smart Agriculture (CSA) is one of the best ways to address climate change related challenges and envision knowledge-based innovative practices that strengthen adaptation to climate change and leverage mitigation actions. Climate Change Education (CCE) and trainings have long been recognized by the national CCE strategy (2017-2030), the United Nations Framework Convention on Climate Change, the Paris Climate Change Agreement, and the Sustainable Development Goals of the United Nations (Agenda 2030) as key tools to unravel the complex and multi-sectorial challenges induced/posed by climate change. Thus, Accelerating Impacts of CGIAR Climate Research for Africa (AICCRA), in collaboration with Ethiopian Higher Education, initiated the integration of the concept of CIS and CSA in the agricultural program in Ethiopia. Demand was created among Ethiopian public universities by engaging university vice presidents, Professionals from agriculture and climate sciences. Through consultation workshops and discussions with university management, it was noted that integrating climate products as a sub-chapter and case studies in the existing curriculum is one of the strategies to respond to climate change through education. To implement the integration of climate products (CIS, CSA, CRMA and CB) in the existing curricula, a committee was named to collect the agriculture curricula, execute gap analyses and recommend the integration of CP in the existing curriculum. A draft document was produced and circulated among committees, and the comments were received. The gap analyses revealed that there were 11 climate-related courses offered in 10 departments in the Undergraduate program. The courses were either shallowly addressed or do not address climate products in the curricula. This has necessitated integrating the existing curriculum with climate products to contribute to the efforts of climate education, ensuring the relevance and quality of education. A validation workshop was organized, and the findings of the gap analyses and gap-filling recommendations were presented to university representatives drawn from 27 Universities. Comments in the validation workshop were included, and a final integrated curriculum was approved. A document that integrated climate products were produced and passed to the universities, and action points and a timeline was established for implementation. It was recommended that incorporating CP in the curricula be extended to other disciplines (e.g., health, Water Engineering etc.). It was also suggested to extend the experience to PG programs of all disciplines coupled with strong capacity-building efforts for teaching staff. It was also recommended that a standalone, common course and credited courses should be offered to all University students to advance climate education and respond to climate change.*

**Keywords:** *Climate products, Climate education, integration of a curriculum, undergraduate Curricula*

## **Background**

---

Climate change is real, and there is a need to adapt, mitigate, and continue a decent life. Several countries have developed policies, set institutions, and allocated budgets to adapt and mitigate climate change. However, the commitment of the respective governments to adapt and mitigate climate change varies among countries and governments. Climate issues have become the attention of the respective countries' researchers, practitioners, and policymakers. The climate agenda should not be a one-time activity and show. The initiative should be integrated into our research agenda, strategic plan, annual plan and day-to-day activity supported by expertise, budget and monitoring and evaluation at each stage.

The universities have a greater role in installing climate in their research agenda, curriculum, academic programs, and extra curricula activities. Various authorities and institutions well acknowledge the role of the higher learning institution in climate education. Article 12 of the Paris Agreement encourages nations to "enhance climate change education, training, public awareness, public participation and public access to information" (UNFCCC, 2015). The Paris Agreement also calls for creating new academic programs across a diverse range of disciplines to ensure our future professionals have a better understanding of the challenges posed by climate change and the tools used for climate mitigation and adaptation (UNESCO, 2017). It was also argued that while climate change education is important at all levels, from primary schools to universities (UN CC: Learn, 2013), it is the higher education sector that is most in need of developing a systemic approach (Leal Filho, 2010; Leal Filho et al., 2018).

To put higher learning institutions on the climate agenda, integrating climate-related research products in the university curriculum and providing gap-filling capacity-building training ensures the sustainability of climate-related interventions in respective countries. Universities are also creating model villages as learning sites and scaling up technologies generated from the research endeavors. The model village could capture climate products that could be scaled up through accumulating experiences under the supervision of universities to enhance teaching and learning.

It is a well-recognized fact that a number of research products need to be integrated into the curriculum to ensure the dynamic nature of the curriculum and relevance of education. In the areas of climate sciences, Climate Information Services (CIS), Climate Risk Management in Agriculture (CRMA), and Climate-Smart Agriculture (CSA), research products are available through the research efforts of AICCRA and other Institutions. Therefore, it is important to package and introduce such climate products in the University academic program and curriculum by devising appropriate modalities to ensure the relevance of education and the use of appropriate local data in our curriculum and program. The lessons in the same initiative will

support and guide the installation of the culture of integrating the curriculum with contemporary research results in the university program by devising suitable modalities in the university program. There are several modalities to integrate new findings in a curriculum that will be implemented flexibly by analyzing the realities on the ground (Fig. 1). Case studies related to climate products need to be integrated into each of the modalities. The approaches and modalities are addressed through short- and long-term interventions. The Universities can address climate-related products by devising one or more approaches flexibly.



*Figure 1. Overview of AICCRA mandates and activities as presented by Dr. Teferi Demissie*

## **Short-Term Interventions**

**Integration in the existing curriculum:** Climate products generated from Climate research are integrated into the existing curriculum as a sub-chapter and case studies, which is under the discretion of the department head and course offering staff.

**Customized training:** A short course training targeted to fill the knowledge gap emanated from the gap analyses and amends the knowledge needed, which was not addressed in the formal and existing curriculum.



## Long-Term Interventions

**Common course:** A standalone and credited course offered to all university programs in a freshman or senior program. A degree offering new Program is initiated in climate-related topics based on need assessments.

**New Program:** A degree offering program (e.g., Ph.D., M.Sc, B.Sc) initiated based on demand analyses and approved through passing all university channels to implement new programs

**Review the existing curriculum and integration:** A curriculum is reviewed, and contemporary climate products are integrated into the existing curriculum after graduating one or more graduates through passing all university channels in approving new programs.

**Conference:** Research conferences could be organized periodically under the grand theme of climate products and research outputs presented, and conference proceedings are produced and disseminated.

**Seminars:** Course seminars and term papers are geared towards climate topics so students can learn the state of knowledge through self-learning modalities. Departments could organize weekly seminars on climate-related topics, where staff and students can share their state of knowledge.

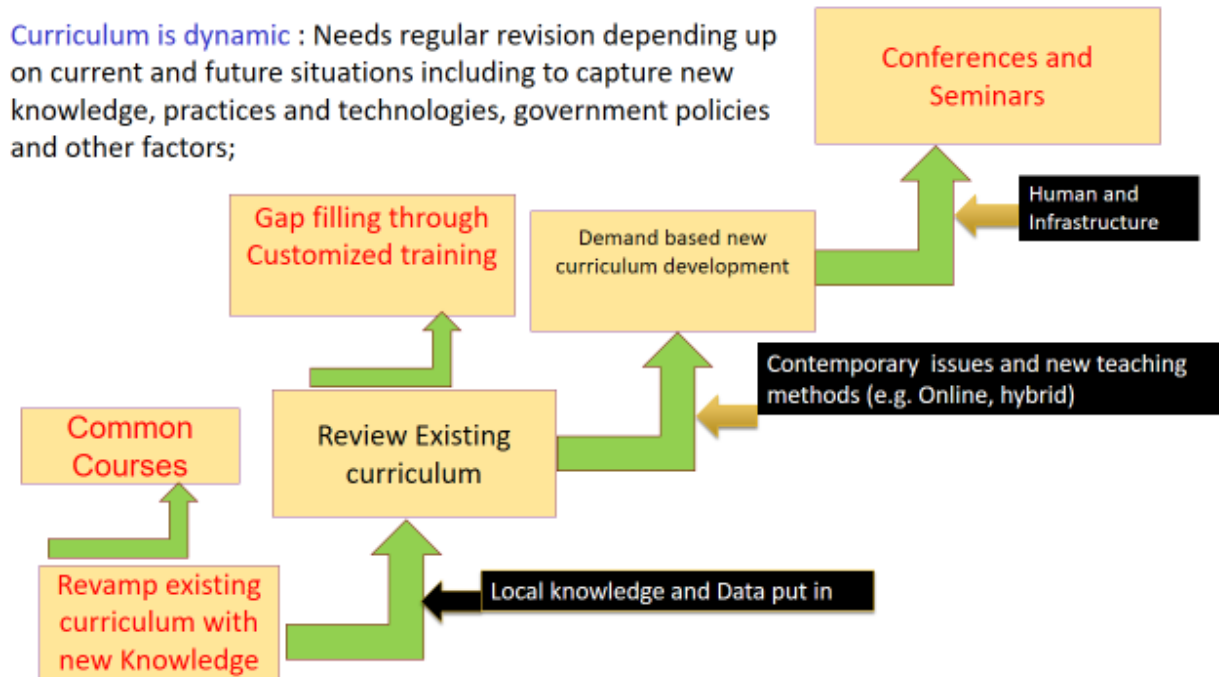


Figure 2. Modalities in integrating Climate research products in the University Program

In filling the curriculum gap, AICCRA is committed to supporting the integration of climate-related research products in Eastern and southern countries' curricula by looking at appropriate approaches and modalities. Participatory curriculum integration is a choice of approach involving universities vice presidents for Academics, climate professionals and Agriculture professionals. Of all the approaches in Fig 1, this activity report focuses on integrating climate products into the existing curriculum through the participation of 27 Universities (Fig 3). The workshop was organized on December 17, 2022, with the following goals and objectives.



*Figure 3. Participants of the validation workshop in integrating Climate products into the existing curricula*

**Goal:** Improve the understanding of climate change and interventions to adapt to climate change through curriculum integration.

## **Objectives**

1. Execute the gap analyses of Undergraduate Agriculture curricula in relation to the depth and coverage of climate products in the existing curricula.
2. Integrate the existing climate-related curricula with Climate Products emanating from the gap analyses

Document the process to extend the experiences in other disciplines and programs

## **Approach and procedures**

Recognizing the role of climate education in adapting and mitigating climate change, a consultative workshop was conducted with 10 universities on May 13, 2022, that constituted vice presidents for academic and senior professionals in agriculture and climate sciences. A consultative workshop was designed to find ways to streamline climate products (CIS, CSA, CRMA and CB) in the existing curricula of Agriculture programs (Berhanu et al., 2022). The experiences of integrating community-based breeding programs in small ruminants in the existing Animal Science program have given the confidence to integrate climate products in undergraduate agriculture programs. Ethiopian public universities curricula are harmonized to serve all public universities, with few flexibilities to incorporate some contents to suit the centre of excellence of the respective universities. The conference participants agreed to integrate climate products into the curriculum, and a committee was named that steers the integration of climate products in Agriculture curricula. We opted for integrating climate products in the agriculture field to use as an entry point and extend the experience into other disciplines such as health, Engineering and other social science professions and post-graduate programs. The committee led by the AICCRA has collected the agriculture curricula, scanned the undergraduate agriculture programs, identified climate-related courses, and analyzed the gap between the existing curricula in coverage and depth of coverage of climate products through a desk review. In addition, the climate products were integrated into the existing curriculum and comments were collected from committee members and incorporated into the curricula. A validation workshop was organized that attracted 27 universities, Vice Presidents of 27 Universities, senior Agriculturalists and climate professionals on December 17, 2022. In the same validation workshop, the mandates of AICCRA, the notable achievement of AICCRA in climate research, packaging climate products and the experience of CBBP integration in the Animal Science program were presented to the participants (Annex 4 and 5). The procedure that we followed in integrating climate products, the gap analyses and the draft streamlined curricula were presented by committee members to the participants of the validation workshop. The comments were collected from the participants of the validation workshop, the comments were incorporated, and we produced a final document for implementation.



*Figure 4. A committee member presenting the procedures followed in integrating CP in the curriculum*

## **Key findings from the gap analysis**

The gap analyses were explored to ascertain if there is a gap between climate-related course contents and the current CIS, CRM and CSA knowledge and innovations to address climate-related agricultural challenges in undergraduate agricultural curricula of Ethiopian Higher Education Institutes. Eleven climate-related course descriptions, outlines and reference materials content were analyzed. The following outstanding findings were noted for the gap analyses, and recommendations were forwarded

- Eleven climate-related courses offered to 10 departments were identified to hasten the integration of climate products in the curricula
- There were gaps between the current curriculum and the desired knowledge and innovation of CIS, CRM, and CSA to address the current and emerging climate change challenges in the agricultural sector.
- The undergraduate agricultural curricula either shallowly addressed or did not address the concepts of climate basics, CIS, CRMA and CSA in the existing climate-related courses.



*Figure 5. A committee member presenting the gap analyses and integrated curriculum with the existing curricula*

## **Recommendations and future activity**

The concept and knowledge of CB, CRMA, CIS and CSA contribute to increasing productivity gains, enhancing resilience and reducing emissions. The recommendation is forwarded to enhance the integration of climate products in the existing curricula as a short-term strategy. And hence the following recommendations are put forward for future action, which has been emanated from the desk review and validation workshop.

- There is a clear indication from the gap analyses that climate products are not adequately addressed in the existing curricula. There is a need to integrate Climate products in the 11 agriculture curricula to equip university graduates with comprehensive knowledge of climate change.
- Based on the recommendation, a document that has integrated climate products has been produced and channeled for university vice presidents for implementation and feedback through consultation of universities document production for implementation as agreed. The implementation action points and activity schedule has been agreed upon and passed to universities (Dejene et al., 2022).



*Figure 6. Recommendations of the validation workshop in integrating a curriculum with Climate products*

### **Key issues captured during the discussion**

- The AICCRA and Universities should consult the Ministry of Education to install Climate education from primary to university education by devising short-term and long-term modalities. It was noted that a policy brief was developed by AICCRA and submitted to the Ministry of Education to streamline climate basics as a standalone and common course in the university. The policy brief submitted to the Ministry of education should be implemented to streamline the 'climate' in all disciplines of higher learning institutions.
- The universities should install climate in their programs by considering short-term and long-term modalities of integrating climate products into a curriculum.

- The experience gained in integrating Community-Based Breeding Programs and Climate products in agriculture curricula should be extended to all undergraduate disciplines and post-graduate programs
- Integrating climate products into the existing curricula should be supported with capacity building of staff teaching the climate-related courses.



*Figure 7. A group photo of the participants of the validation workshop in integrating climate products in the curriculum*

## References

---

- Belay B, Ambaw G, Amha Y, Makonnen B, Solomon D. 2022. Streamlining climate change, climate risk management in Agriculture, climate information services, and climate-smart agriculture innovations into undergraduate university curriculum modules in Ethiopia. Workshop Report. Accelerating Impacts of CGIAR Climate Research in Africa (AICCRA).
- Dejene SW, Terefe T, Belay B, Amha Y, Ambaw G, Demissie T. 2022. Integrating Climate Basics, Climate Information Service, Climate Risk Management and Climate Smart Agriculture into the undergraduate agriculture Curriculum in Ethiopian Higher Education. AICCRA Report. Accelerating Impacts of CGIAR Climate Research for Africa (AICCRA).UNFCCC (United Nations Framework Convention on Climate Change), 2015. Paris Agreement. [http://unfccc.int/paris\\_agreement/items/9485.php](http://unfccc.int/paris_agreement/items/9485.php). (Accessed 5 January 2018).
- UNESCO, 2017. UNESCO at COP23. Climate change education. Available at: <http://unesdoc.unesco.org/images/0026/002600/260083e.pdf>.
- UN CC: Learn, 2013. The One UN Climate Change Learning Partnership. Integrating Climate Change in Education at Primary and Secondary Level. Geneva. <https://www.uncclearn.org/learning-resources/integrating-climate-change-educationprimary-and-secondary-level-interactive>. (Accessed 5 January 2018). UNESCO, 2017. UNESCO at COP23. Climate change education.
- Leal Filho, W., 2010. Climate change at universities. Results of a world survey. In: Leal Filho, W. (Ed.), Universities and Climate Change: Introducing Climate Change to University, pp. 1e19. <http://www.springer.com/de/book/>
- Leal Filho, W. (Ed.), 2017. Climate Change Research at Universities Addressing the Mitigation and Adaptation Challenges. Springer, Berlin. Leal Filho, W., Shiel, C., Paço, A., 2016. Implementing and operationalizing integrative approaches to sustainability in higher education: the role of project-oriented learning. J. Clean. Prod. 133, 126-135.



## Annexes

### Annex 1. Workshop activity schedule

Timing	Activity	Who
8.30–9:00	<ul style="list-style-type: none"><li>Registration</li></ul>	AICCRA
9:00-9:15	<ul style="list-style-type: none"><li>Opening remark</li></ul>	Dr. Teferi Demissie
9:00-9:15	<ul style="list-style-type: none"><li>Overview of AICCRA</li></ul>	Dr. Teferi Demissie
9:20-9:40	<ul style="list-style-type: none"><li>Gap Analysis Process for Revamping CIS, CRM and CSA in the Existing Curriculum</li></ul>	Committee Representative
9:45-10:05	<ul style="list-style-type: none"><li>Outcome of Gap Analysis</li></ul>	Committee Representative
10:10-10:40	<ul style="list-style-type: none"><li>Coffee break</li></ul>	Organizers
10:45-11:05	<ul style="list-style-type: none"><li>Discussion</li></ul>	
11:10-11:30	<ul style="list-style-type: none"><li>Modality of implementation<ul style="list-style-type: none"><li>Experience on integration of CBBP in undergraduate and PG curriculum</li></ul></li></ul>	Prof. Berhanu Belay
11:35-12:00	<ul style="list-style-type: none"><li>Way forward / Action and schedule</li></ul>	Participants
	<b>Lunch</b>	

## Annex 2. List of participants in the validation workshop to integrate climate into the existing curricula

No.	Name	Organization
1	Dr. Habtamu Admassu	Bahir Dar University
2	Mr. Wondwosen Kibre	Injibara University
3	Ms Enetye Gesese	Injibara University
4	Dr.Wale Tesfaye	Mekedela Amba University
5	Mr. Sintayehu Eshetu	Mekdela Amba University
6	Ms. Shewanesh Abrham	Mekdela Amba University
7	Mr. Fentahun Mihret	Bahirdar University
8	Hawulet Mohammed	Bahirdar University
9	Mr. Muluneh Getaneh	Bahirdar University
10	Dr. Woyessa Gardew	Jimma University
11	Dr. Kefelegne Getahun	Jimma University
12	Mr. Sintayehu Teka	Jimma University
13	Ms. Hanna Samuel	Hawassa University
14	Mr. Tasisa Temesgen	Hawassa University
15	Dr. Alemu Nega	Wolita Sodo university
16	Mr. Abinet Tadesse	Wachemo University
17	Dr. Belayneh Bufebo	Wachemo University
18	Mr. Chala Hailu	Ambo University
19	Mr. Anbes Tenaye	Haramaya University
20	Dr. Zerihun Demerew	Haramaya University/RUFORUM
21	Ms. Meskerem Terefe	Debre Berhan University
22	Dr.Yitea Senshaw	Debre Berhan University
23	Dr. Yohanis Muluneh	Debre Berhan University
24	Sintayehu Workneh	Haramaya University
25	Tadesse Tujuba	Arba Minch University
26	Tadesse Terefe	Addis Ababa University
27	Tamirat Bekele	Addis Ababa University
28	Prof. Berhanu Belay	AICCRA/ICARDA
29	Teshome Lemma	Debre Birhan University
30	Seada Abdu	Semera University
31	Habtamu Zegeye	Injibara University
32	Dr. Mamuye Belihu	Hawassa University
33	Awol Seid	Wollo University
34	Jemal Ahmed	Wollo University
35	Dr. Yibekal Alemayehu	Haramaya University
36	Tigist Mulatu	Wolaita University
37	Dr. Gudeta Neper	Ambo University

38	kassa Shawl	Mekedela Amba University
39	Betelihem Dagne	Semera University
40	Dr. Temesgen Thomas	Wachemo University
41	Dr. Alemayehu Chufamo	Arbamich University
42	Desalegn Dargaso	Wolaita University
43	Dr. Abreham Abiya	Wachemo University
44	Dr. Adem Mohamed	Wollo University
45	Kehali Jembere	Gondar University
46	Dr. Getnet Ashenafi	Debre Berhan University
47	Dr. Galme Bonaya	Borana University
48	Prof. Mengistu Urge	Haramaya University
49	Dr. Amin Mohamed	Oda Bultum University
50	Solomon Adissu	Bahir Dar University
51	Dereje Ademe	Debre Markos University
52	Michael Abera	Debre Markos University
53	Dr. Mulugeta Tilahun	Matu University
54	Dr. Habte Dulle	Wolkite University
55	Dr. Adem Kedir	Arsi University
56	Dr. Mohamed Habib	Werabe University
57	Alamudin Kufa	Werabe University
58	Dr. Berhanu Lemma	Arba Minch University
59	Solomon Abirdew	Wolkite University
60	Mekuannent Gashaw	Debre Tabor University
61	Dr. Tesfaye Molla	Debre Tabor University
62	Najib Umar	Oda Bultum University
63	Dr. Befekadu Chemere	Arsi University
64	Wakala Gababo	Borana University
65	Fisiha Getachew	Hawassa University
66	Dr. Mulatu Dea	Wolita Sodo University
67	Dr. Befikadu Zewdu	Asossa University
68	Dr. Oumer Sherif	Asossa University
69	Dr. Asmamaw Workneh	Debark University
70	Dr. Birku Misganaw	Gondar University
71	Sintayehu Ygrem	Hawassa University
72	Elias Sultan	Matu University
73	Dr. Abdisa Alemu	Haramaya University
74	Dr. Bizunesh Borena	Ambo University
75	Aragaw G/mariam	Debark University
76	Dr. Nigussie Bekele	Ambo University
77	Tsegaye Deyou	Selale University
78	Dr. Yosef Amha	ACPC

79	Bedilu Geleto	Mekedela Amba University
80	Gebermidihin Ambaw	AICCRA
81	Ayalenh Mulatu	AICCRA
82	Dr. Teferi Demissie	AICCRA

### Annex 3. A timeline agreed by the workshop participants to integrate climate in the existing curricula

## Revamp : Action and Schedule

Action/ Activity	Schedule / date	Responsibility
Document sharing / መስጠት/	Dec. 2022	Committee / AICCRA
Common understanding of the Revamped document through discussion with HoD, Deans and lecturers chaired by the VPA / Minuted /	January , 2023	VPA and SA
Dean and HoD to orient the respective lecturers to revamping the curriculum	February, 2023	HoD and SA
HoD to minute the revamped curricula through DC	February , 2023	HoD and SA
Report the minute with cover letter to HoD/AICCRA	March , 2023	SA
Use the revamped curriculum for teaching	September 2023	HoD and Dean
Survey assessment / Feedback	Jan , 2024	AICCRA and SA



# AICCRA

Accelerating Impacts of CGIAR  
Climate Research for Africa



## About AICCRA

Accelerating Impacts of CGIAR Climate Research for Africa (AICCRA) is a project that helps deliver a climate-smart African future driven by science and innovation in agriculture.

It is led by the Alliance of Bioversity International and CIAT and supported by a grant from the International Development Association (IDA) of the World Bank.

Discover more at [aiccra.cgiar.org](http://aiccra.cgiar.org)

AICCRA Eastern and Southern Africa is led and hosted by OneCGIAR centers:

Alliance



ILRI



RESEARCH PROGRAM ON Livestock

AICCRA is supported by the International Development Association of the World Bank:



IDA

International Development Association  
WORLD BANK GROUP