

REPORTING 2025 EVIDENCE



AICCRA institutionalizes training on gender-responsive cost-benefit analysis of climate information services within two Africa-wide capacity development institutions

OVERVIEW OF THE RESULTS

Between 2021 and 2025, Accelerating Impacts of CGIAR Climate Research for Africa (AICCRA) developed and piloted a gender-responsive cost-benefit analysis (CBA) methodology for Climate Information Services (CIS) in Africa. Through methodological research, a toolkit, and stakeholder consultations, the approach was tested in Kenya and subsequently integrated into selected training programs at the Institute for Meteorological Training and Research (IMTR). Course materials were also made available through the Regional Universities Forum for Capacity Building in Agriculture (RUFORUM) Regional e-Learning Platform, providing access for use in academic and professional training contexts.

HIGHLIGHTS

- **Developed a CBA Toolkit (2021) and methodological papers (2022-2023)** on gender-responsive resilience analysis.
- **Delivered pilot training in Kenya (2025)**, where 18 County Directors of Meteorological Services (CDMS) applied the approach.
- **Integrated a gender-responsive CBA module** into IMTR curricula
- **Adapted course materials for RUFORUM's e-learning platform** to enable broader academic access.
- **Engaged stakeholders across Africa** (2022 consultation) to refine tools and frameworks.
- **Extended CBA scope beyond financial returns** to include gendered and non-market outcomes.

GEOGRAPHIC SCOPE: REGIONAL



COUNTRY: Sub-Saharan Africa

SDG TARGETS



13.2 - Integrate climate change measures into national policies, strategies, and planning.

13.3 - Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning.

PRINCIPAL CGIAR IMPACT AREA(S)



Impact Area 4: Climate Adaptation and Mitigation

CONTRIBUTING EXTERNAL PARTNERS:

- International Food Policy Research Institute (IFPRI)
- Institute for Meteorological Training and Research (IMTR) - World Meteorological Organization Regional Training Center (WMO-RTC)
- Regional Universities Forum for Capacity Building in Agriculture (RUFORUM)
- Kenya Meteorological Service Authority (KMSA)

ELABORATION OF OUTCOME/IMPACT STATEMENT

Across Africa, investments in Climate Information Services (CIS) are growing, yet evidence on their socio-economic value—and how benefits differ for women and men—has been limited. Traditional cost-benefit analysis rarely accounts for reduced climate risk or how resilience investments affect women and marginalized groups differentially (11, 12). Building on evidence that CIS strengthens smallholders' empowerment and resilience (14), AICCRA developed a methodology for estimating CIS costs and benefits (10), refined through a working paper on smallholder resilience (12), a stakeholder consultation across Africa (13), and a peer-reviewed intrahousehold framework (11). These advances underpin a gender-responsive cost-benefit analysis (CBA) enabling practitioners to assess the efficiency and inclusivity of CIS and related interventions (7, 9, 10–13).

Through capacity development and co-design, AICCRA institutionalized this approach within two continental institutions. The Institute for Meteorological Training and Research (IMTR)—a United Nations World Meteorological Organization (WMO) Regional Training Centre for anglophone Africa—validated a module on gender-responsive CBA of CIS in its curricula (1, 4, 15). Following a 2025 pilot with 18 County Directors of Meteorology in Kenya, participants applied the approach to quantify gender-differentiated CIS value (6). “The cost-benefit analysis training is a game-changer—empowering stakeholders to generate data-driven insights that inform policy decisions and drive sustainable investments in climate services,” said Edward Muriuki, Principal, IMTR WMO-Regional Training Centre, underscoring IMTR's mandate (1, 15).

The Regional Universities Forum for Capacity Building in Agriculture (RUFORUM)—a network of 175 universities in 40 African countries—integrated the training course into its e-learning platform, expanding its reach. “By making these materials widely accessible through our regional e-learning platform, RUFORUM is empowering the education system to train a new generation of climate-resilient leaders across Africa,” noted Florence Nakayiwa, RUFORUM Deputy Executive Secretary (3).

These institutional adoptions strengthen capacity for gender-responsive CBA of CIS across Africa. IMTR embedded the module in WMO-accredited training to deliver it regionally (1, 4, 8, 15). RUFORUM's integration enables asynchronous trainer-of-trainers scale-up (3).

The co-development process engaged Kenyan county officers, lecturers, researchers, and CIS implementers—including those involved in the 2022 stakeholder consultation (13)—strengthening locally led adaptation and inclusive decision-making. Foundational AICCRA resources—the CBA Toolkit (2021), the Kenya-adapted version (2025), and methodological work (2022–2023)—operationalize data collection and analysis, extending CBA beyond financial returns to include non-market and gendered outcomes (5, 7–15).

By linking local pilots to continental institutions, AICCRA has institutionalized sustainable capacity to evaluate and enhance equity in CIS, ensuring Africa's CIS and adaptation investments are guided by rigorous, gender-responsive evidence (1, 3, 4, 6, 8, 15).

EVIDENCE

1. Grossi A, Murage P. Stage set to scale Africa's early warning and adaptation capacity through six validated climate curricula at WMO Regional Training Centre. AICCRA; 2025 Nov 6. available [here](#)
2. Kiogora J, Grossi A, Kramer B, Ghosh A. Pioneering training course on integrating gender in cost-benefit analysis for climate action. 2025 Mar 10 available [here](#)
3. Integrating Gender Cost-Benefit Analysis of Climate Interventions: Training Guide for the Regional Universities Forum for Capacity Building in Agriculture (RUFORUM)(2025) available [here](#)
4. Integrating Gender in Cost-Benefit Analysis of Climate Interventions: IMTR WMO RTC Training Guide (2025) available [here](#)
5. Integrating Gender in Cost-Benefit Analysis of Innovations to Enhance Smallholder Farmers' Resilience and Climate Change Adaptation (2024) available [here](#)
6. Cost-Benefit Analysis for Climate Information Services: Training for County Directors of Meteorological Services (CDMS)(2025) available [here](#)
7. Toolkit for Cost-Benefit Analysis of Climate Information Services: An Outline (2021) available [here](#)
8. Cost-Benefit Analysis (CBA) for Climate Information Services Toolkit – Kenya Adaptation (2025) private

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9. A course on gender and cost-benefit analysis of innovations to enhance smallholder farmers' adaptation to climate change (2024) available [here](#)
10. A New Methodology for Estimating Costs and Benefits of Climate Information Services (CIS) among Smallholder Farmers (2022) available [here](#)
11. Estimating the intrahousehold costs and benefits of innovations to enhance smallholder farmers' resilience. (2023) available [here](#)
12. A New Approach for Cost-Benefit Analysis of Innovations to Enhance Smallholder Farmers' Resilience (2022) available [here](#)
13. Costs of Climate Information Services Development and Implementation: A Stakeholder Consultation Survey to Inform a Cost-Benefit Analysis Toolkit (2022) available [here](#)
14. Information as a Source of Empowerment: The Role of Climate Information Services (2023) available [here](#)
15. Cost-Benefit Analysis Training for County Directors of Meteorology: Use of Climate Information Services with a Gender Equality and Social Inclusion (GESI) Lens (2024) available [here](#)

OTHER NOTABLE REFERENCES, PROMOTIONAL PRODUCTS AND COMMUNICATION MATERIALS

- Pioneering training course on integrating gender in cost-benefit analysis for climate action (2025) available [here](#)
- Stage set to scale Africa's early warning and adaptation capacity through six validated climate curricula at WMO Regional Training Centre (2025) available [here](#)

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The International Food Policy Research Institute (**IFPRI**) is a CGIAR Research Center that provides research-based policy solutions to sustainably reduce poverty and end hunger and malnutrition.

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. Learn more at aiccra.cgiar.org



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The Alliance of Bioversity International and the International Center for Tropical Agriculture (CIAT) delivers research-based solutions that harness agricultural biodiversity and sustainably transform food systems to improve people's lives. Alliance solutions address the global crises of malnutrition, climate change, biodiversity loss, and environmental degradation.

The Alliance is part of CGIAR, a global research partnership for a food-secure future.



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