INSIGHTS FROM THE AGNES ADVANCED COURSE ON CLIMATE INFORMATION SERVICES (CIS)

Tracking Knowledge Gains and Participant Engagement

Workshop Report

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October 2025

To cite this report
Sagliocco, L., Grossi, A., Ghosh, A., Koech, G., Gamoyo, M. (2025). AICCRA Workshop Report. Insights from the Agnes Advanced Course on Climate Information Services (CIS). Tracking Knowledge Gains and Participant Engagement.

Acknowledgements
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.

The authors would like to thank AGNES for their leadership, coordination, and commitment to strengthening climate governance across Africa, and for providing a platform for the in-depth learning of Climate Information Services (CIS) through the Advance Training Course.

About AICCRA Reports
Titles in this series aim to disseminate interim research on the scaling of climate services and climate-smart agriculture in Africa, in order to stimulate feedback from the scientific community.

Photos

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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. Explore our work at aiccra.cgiar.org

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ABSTRACT

This report summarizes the objectives, structure, and key takeaways from the Advanced Course on Climate Information Services (CIS), delivered by the African Group of Negotiators Expert Support (AGNES) in collaboration with AICCRA and the Alliance of Bioversity International and CIAT.

Designed as a 5-week intensive online training, the course aimed to equip professionals across Africa with practical and policy-relevant skills to design, deliver, and apply CIS. Grounded in African contexts and led by regional and global experts, the course combined scientific rigor, participatory methods, and real-world examples to strengthen the role of CIS in anticipatory action, policy planning, and climate resilience.

The course engaged a diverse cohort of participants, including government officers, researchers, practitioners, and representatives of NGOs and civil society, reflecting a strong cross-sectoral interest in CIS. A structured MELIA (Monitoring, Evaluation, Learning and Impact Assessment) process was integrated throughout the training, with baseline and endline surveys informing continuous improvement and capturing changes in participants' knowledge, skills, and intentions to apply CIS in their work.

Keywords

Climate information services (CIS); capacity building; curriculum; early-warning systems.

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CONTENTS

ACRONYMS

ACMAD	African Center of Meteorological Application for Development
AGNES	African Group of Negotiators Experts Support
AICCRA	Accelerating Impacts of CGIAR Climate Research for Africa
CIAT	International Centre for Tropical Agriculture
CIS	Climate Information Services
FAO	Food and Agriculture Organization
ICPAC	IGAD Climate Prediction and Application Center
IFPRI	International Food Policy Research Institute
ILRI	International Livestock Research Institute
IRI	International Research Institute for Climate and Society
IWMI	International Water Management Institute
KMD	Kenya Meteorological Department
RUFORUM	Regional Universities Forum for Capacity Building in Agriculture
WFP	United Nations World Food Programme.
WMO	World Meteorological Organization

INTRODUCTION

Africa faces disproportionate risks from the impacts of climate change, with rising temperatures, shifting rainfall patterns, and extreme weather events threatening livelihoods, food systems, and public institutions. In this context, strengthening climate-informed leadership and decision-making is not just desirable, it is essential. To meet this urgent need, professionals across the continent must be equipped with the tools, knowledge, and confidence to integrate climate information into development planning, policy formulation, and service delivery.

In line with this vision, AGNES, in collaboration with the Alliance of Bioversity International and CIAT, developed and delivered the AGNES Advanced Course on CIS. Conducted fully online over five weeks, from 21 July to 22 August 2025, the course aimed to strengthen technical and institutional capacities across Africa in the generation, communication, and application of CIS. CIS bridge the gap between climate science and real-world action, enabling individuals, organizations, and governments to anticipate risk, improve preparedness, and promote climate-resilient development.

Targeting professionals working at the science–policy–practice interface, the course brought together a diverse and multidisciplinary cohort, including representatives from academia, civil society, government, the private sector, development agencies, extension systems, and national meteorological institutions. A total of 286 participants were selected for the course, of whom 155 met the certification criteria by attending at least 90% of the sessions.

To monitor the course's reach, relevance, and effectiveness, AGNES and the Alliance of Bioversity International and CIAT implemented a robust monitoring and evaluation framework. This included baseline and endline surveys, weekly quizzes, and feedback mechanisms to assess learning gains, satisfaction levels, and the potential for application and future impact of CIS knowledge gained.

This report provides a comprehensive overview of the course structure, delivery, and participant experience, followed by a detailed analysis of survey results and reflections from participants. The report also distills lessons learned and recommendations to inform future iterations of the course and broader capacity-strengthening initiatives in CIS.

COURSE OVERVIEW

Background Information

Developed after a rapid needs assessment implemented via the AGNES Leadership Course, the AGNES Advanced Course on CIS was designed to enhance the capacity of African professionals to access, understand, and apply climate information for more informed decision-making across key sectors. The course aimed to build technical knowledge and practical skills related to the generation, communication, and use of climate information to address real-world challenges linked to climate variability and change. Emphasizing the importance of linking science, policy, and practice, the course sought to empower participants to act as knowledge facilitators, supporting the uptake of CIS at institutional, national, and regional levels.

Objectives

The **specific objectives** of the course were to:

- Strengthen core CIS competencies, including understanding of key concepts, types of forecasts, and best practices for communicating uncertainty;
- Introduce and explore the four foundational pillars of effective CIS, generation, translation, transfer, and use;
- Build capacity for user-centered design, enabling participants to tailor climate information for diverse users;
- Demonstrate sectoral applications of CIS in agriculture, water, health, energy, infrastructure, and social protection, with a focus on African contexts;
- Enhance participants' ability to link CIS to planning and policy frameworks, such as National Adaptation Plans (NAPs), NDCs, and Early Warning Systems;
- Provide hands-on experience with digital platforms and innovations used in the CIS landscape;
- Facilitate cross-regional peer learning.

Approach and Delivery Methods

The Course adopted a **dynamic and participatory learning model** to effectively engage a diverse audience of professionals across the African continent. Each virtual session featured two to three structured presentations delivered by expert facilitators, including staff from the Alliance of Bioversity International and CIAT, covering a wide range of technical and practical content related to CIS. Presentations were delivered using PowerPoint slides to support clarity, structure, and visual engagement. The content was designed to be accessible to both technical and non-technical participants and was

complemented by open discussions that encouraged reflection, dialogue, and cross-sectoral learning.

To promote **inclusivity and regional participation**, live interpretation into French was provided throughout the sessions, allowing Francophone participants to engage fully with the content and discussions. Interactive elements such as live quizzes were also used during selected presentations to capture participants' real-time feedback and assess immediate comprehension. In several sessions, specific tools and platforms were introduced to enhance participants' practical exposure to climate information generation, visualization, and use.

To support ongoing access to materials, a dedicated **WikiPage** was developed as a central resource hub. It included the detailed agenda, downloadable presentations, session recordings, and links to relevant resources, enabling participants to revisit materials at their own pace or catch up on missed sessions. This combination of structured technical delivery, real-time engagement, bilingual accessibility, and self-paced learning contributed to a rich, inclusive, and practical learning experience tailored to strengthen the application of CIS across sectors and regions.

Structure and Contributing Institutions

The course was structured over **five online weeks**, each week progressively building on key competencies in the design, delivery, and application of CIS. The first week offered an essential introduction, establishing the foundations of CIS, including climate risk framing, user engagement, vulnerability analysis, and inclusive co-production. Week two shifted focus to technical aspects such as data sources, forecasting systems, and communication channels used to make climate data actionable. In week three, the agenda explored sector-specific applications, diving into agriculture, water resource management, early warning systems, livelihoods, and disaster risk management. Week four addressed governance dimensions, highlighting policy entry points, institutional frameworks, financing strategies, and monitoring and evaluation mechanisms. The final week turned to innovation and future directions, covering topics such as responsible climate services, digital access and equity, business models for scaling, and closing reflections.

The course drew on the knowledge and experience of **27 organizations** operating across Africa and internationally, offering participants access to a uniquely diverse and multidisciplinary pool of expertise. These institutions included **UN bodies** such as *FAO*, *WMO Regional Office for Africa*, and *WFP*; **research institutions** like the *Alliance of Bioversity International and CIAT*, *IRI-Columbia University*, *ILRI*, *IFPRI*, and *IWMI*; **regional organizations** including *ICPAC*, *KMD*, *ACMAD*, and *RUFORUM*; **NGOs and humanitarian actors** such as *Save the Children*, *Mercy Corps AgriFIN*, and the *Red Cross*; as well as **private sector and innovation actors** like *Google*, *Busara Center for Behavioral Economics*, and *iShamba*. This broad representation allowed the course to cover a wide range of CIS-related themes, spanning technical forecasting, behavioral science, policy mainstreaming, and inclusive service delivery, ensuring relevance to a variety of professional and regional contexts.

EVALUATION SURVEYS: KEY FINDINGS

Methodology

To evaluate the effectiveness and relevance of the Course, a two-tier survey approach was adopted, consisting of baseline and endline surveys administered to all course participants via Google Forms, both in English and in French. These tools aimed to capture both the initial expectations and final reflections of participants, as well as measure self-reported shifts in knowledge, confidence, and perceptions.

The **baseline survey**, circulated at the beginning of the training, focused on gathering detailed information on participants' professional profiles, prior exposure to CIS, knowledge and skill levels, and initial attitudes towards the use of CIS. It also explored participants' expectations regarding course content, delivery, and relevance to their work. At the end of the course, an **endline survey** was shared to assess participants' satisfaction, perceived value of the course, changes in confidence and competence in using CIS, and suggestions for improvement.

A **mixed-methods approach** was used to analyze the results, combining quantitative data from Likert-scale questions (1 = strongly disagree to 5 = strongly agree) with qualitative insights gathered from open-ended responses. Quantitative data were analyzed using basic descriptive statistics (primarily frequency and average scores), while open-ended responses were reviewed qualitatively. Responses were examined to identify recurring themes and feedback trends, which were then synthesized and integrated into the report to complement the numerical findings.

Participants' Profile

The Course engaged a **diverse cohort of more than 150 participants** from across the African continent. A total of 286 participants registered to the course, of whom 155 successfully completed the course and received a certificate of participation. Among these, the great majority were male participants (77%) with only a small proportion of female (23%). Unless otherwise specified, participant profile figures, including country, age, and gender breakdowns, refer specifically to the 155 individuals who completed the course.

In terms of **age distribution**, the course reached a well-balanced mix of early- and mid-career professionals, with the majority falling within the 26–35 age group (45%), followed by 36–45 (39%), and 18–25 (9%). Smaller proportions were recorded in the 46–55 (7%) and 56 and above (1%) categories (Figure 1). This age spread reflects a notable engagement of both emerging and established professionals in the CIS field.

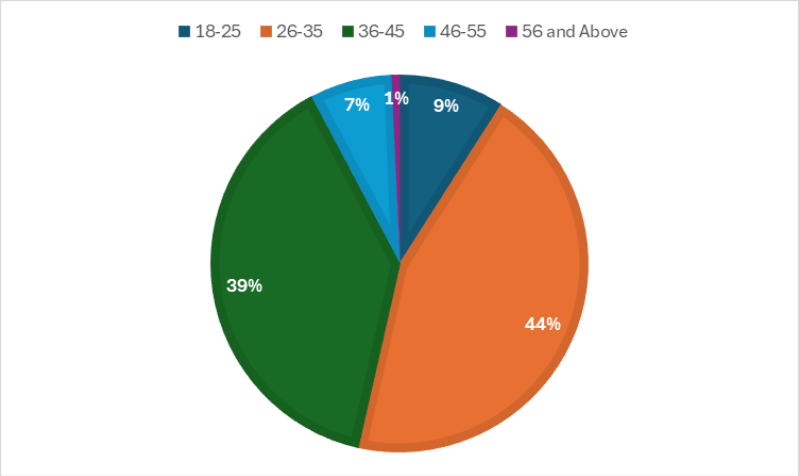

Figure 1 Age distribution of participants

The Course brought together a diverse group of participants from across the African continent. Most **respondents** indicated that they **primarily operate in Eastern Africa (47%),** followed by **Western Africa (33%), Southern Africa (14%), Northern Africa (3%)**, and **Central Africa (3%)** (Figure 2). The countries most represented were **Kenya (24%)**, **Nigeria (15%)**, **Ethiopia (14%)**, and Ghana (8%). These were followed by smaller percentages from Zambia (4%), and Benin, Côte d'Ivoire, Malawi, Somalia, Uganda, and Zimbabwe (each at 3%). The remaining 25% of participants came from more than 20 other African countries, demonstrating the course's broad continental reach and its cross-regional relevance for climate information services.

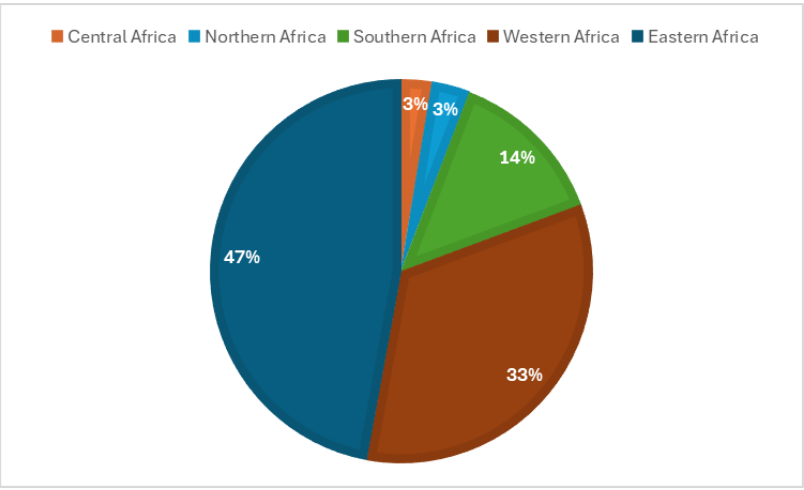

Figure 2 Distribution of course participants by African regions

The following section presents statistics based on data collected through the baseline survey, which was completed by 191 respondents. Participants came from a wide range of professional backgrounds, reflecting the interdisciplinary nature of CIS work (Figure 3). The largest share (35%) identified as **researchers or academics**, followed by professionals from **NGOs and civil society** (18%), and the **private sector** (12%). Individuals working in **policy and government** roles accounted for 11% of respondents, while meteorologists and climate

scientists made up 9%. Additional representation came from development practitioners (8%) and extension agents or advisors (5%).

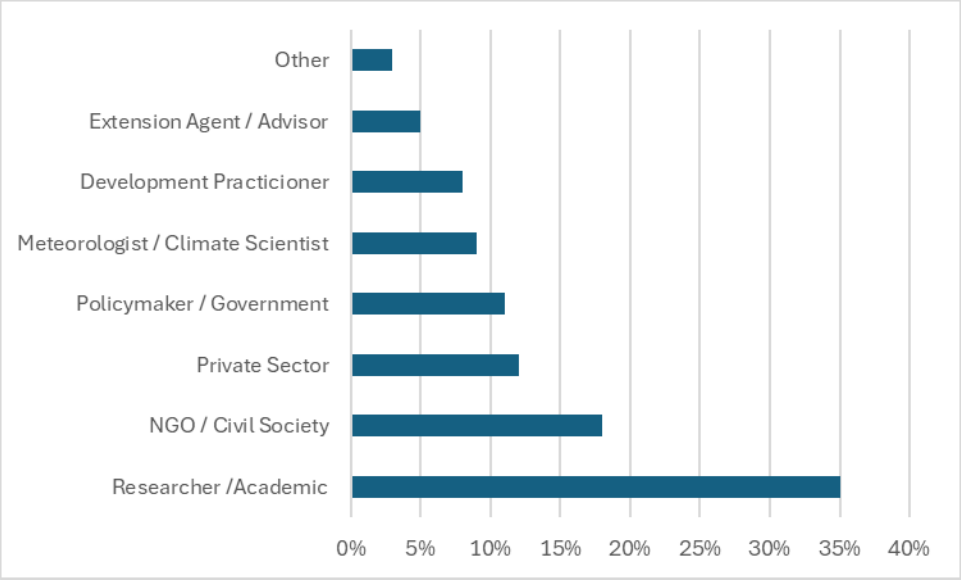

Figure 3 Distribution of participants by current role or area of professional focus

Participants reported a wide range of professional engagements across multiple climate-sensitive sectors, often supporting more than one area. **Environment and conservation** emerged as the most represented sector, cited by **30%** of respondents, closely followed by **agriculture** at **26%**. Other frequently mentioned areas included **water resources** (**13%**), **energy** (**9%**), and **infrastructure or urban planning** (**8%**), underscoring the growing demand for climate-informed approaches across diverse systems (Figure 4).

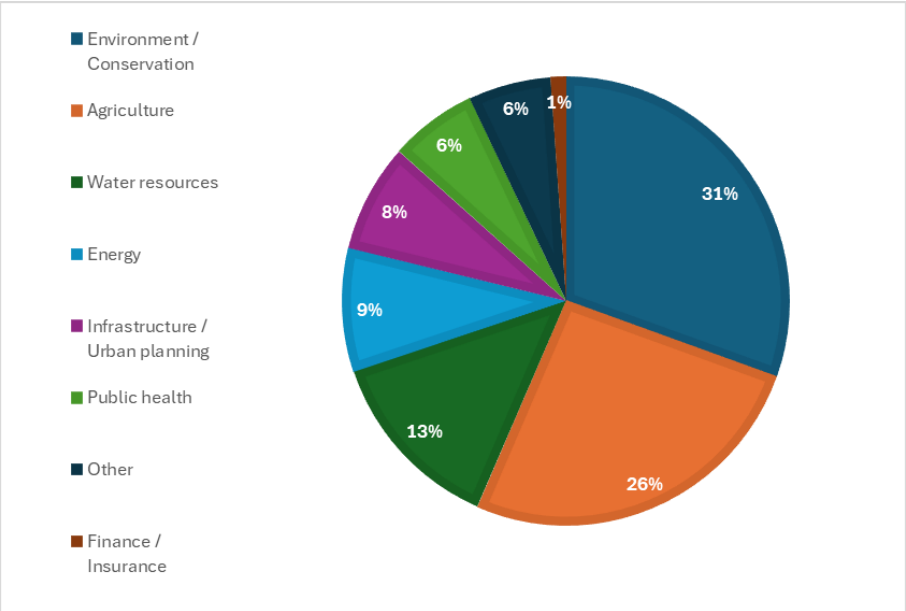

Figure 4 Percentage of participants by sector of work

A small proportion of participants (14%) had **previously attended the AGNES Climate Leadership Course**, which included a module on Climate Information Services, while 38% reported having participated in other training or courses that touched on CIS-related content. For the remaining 62%, this advanced course marked their first structured learning experience on Climate Information Services—highlighting its significant contribution to building foundational knowledge among a wide range of professionals.

Knowledge and Skills Gained

To assess the effectiveness and impact of the course, baseline and endline surveys were conducted among participants. A total of **191 responses** were collected at baseline and **124 at endline**, providing valuable insights into participants' knowledge, skills, and attitudes before and after the training. Additionally, 155 participants successfully completed the course and received a certificate, indicating a high level of engagement and commitment. The following sections present a comparative analysis of the survey data, highlighting key areas of learning and improvement.

Cross-regional learning

Participants from 30 different African countries reported a strong level of cross-regional learning throughout the course. A significant majority indicated that they **gained new knowledge or perspectives from peers based in other regions**, highlighting the course's success in fostering exchange beyond national and regional boundaries. This suggests that the course not only strengthened technical capacities but also served as a platform for continental dialogue, allowing participants to broaden their understanding of how CIS are applied in diverse contexts. Such interaction likely enriched discussions with varied insights, practical experiences, and locally adapted strategies, deepening collective learning and supporting future cross-country collaboration.

"I learned from participants in West Africa about how farmer cooperatives are using climate information services to jointly decide on planting calendars and negotiate better access to markets. This was insightful because in my region most adaptation decisions are made at the household level, so the cooperative approach showed me the value of collective action in strengthening resilience."

"…colleagues from East Africa shared how community-based climate information hubs are helping farmers access localized weather forecasts in their native languages. This was particularly insightful because it showed me how translation and grassroots dissemination can improve adoption of climate information. It broadened my perspective, as in my region, the challenge is not the absence of forecasts but limited accessibility and trust. Learning how others addressed similar barriers gave me practical ideas to adapt, such as integrating local leaders and cooperatives in sharing climate advisories."

Knowledge, skills and attitudes

The comparison between baseline and endline survey responses across the 18 questions in the "Knowledge, Skills, and Attitudes" section shows a clear improvement in participants' self-assessed capacities over the course of the training. The share of respondents rating themselves at the lowest levels (scores 1 or 2) dropped from 45% at baseline to just 2% at endline. Conversely, those rating themselves at the highest levels (scores 4 or 5) rose significantly from 27% to 89%, reflecting strong gains in awareness, skills, and confidence following the course.

The following section presents a detailed analysis of participants' self-assessed progress across core areas of knowledge and skills related to CIS. Each question explored a specific dimension, from conceptual understanding and sectoral application to institutional roles, financing, and co-production methods. The comparison between baseline and endline responses highlights significant learning gains across all dimensions.

The **baseline survey** responses revealed **limited familiarity with the concept of CIS and its four core pillars**, generation, translation, transfer, and use. A combined 35% selected the lowest scores (1 or 2), and 42% rated themselves at a mid-level score of 3. Only 23% indicated a strong understanding (scores 4 or 5). By the **endline**, this **pattern shifted dramatically**: 93% of respondents selected scores 4 or 5, with 56% giving the maximum score. These results reflect a significant gain in conceptual understanding of CIS.

Participants' **awareness of CIS applications in key sectors** grew significantly. At baseline, only 36% rated their understanding as high (scores 4 or 5), while 64% reported limited or moderate knowledge (scores 1–3). At **endline, 97% of respondents rated their understanding at the top levels** (4 or 5), with no one selecting the lowest score. This suggests strong gains in sector-specific competence.

At baseline, participants demonstrated limited **clarity regarding the roles of various actors in the CIS ecosystem**, with 70% rating their understanding at score 3 or below. However, the endline results indicate a significant improvement: 96% of respondents rated their understanding as strong (scores 4 or 5), with 42% selecting score 4 and 54% selecting score 5. Only 4% selected lower scores (1–3). This shift suggests that the course was effective in enhancing participants' grasp of institutional roles and actor dynamics within the CIS landscape.

At baseline, understanding of **CIS financing pathways, including public budgeting, donor funds, and private-sector engagement**, was limited: 83% of respondents rated themselves at or below score 3, with only 17% selecting scores 4 or 5. By contrast, endline results show a significant improvement: 81% of participants rated their understanding as high (scores 4 or 5), with 41% selecting the maximum score. Only 2% selected low scores (2 or below).

At baseline, nearly half of participants (48%) reported limited knowledge of **participatory and co-production methods** to design tailored climate services (scores 1 or 2), and only 22% rated themselves highly (scores 4 or 5). By the endline, this pattern reversed: 85% of respondents rated their knowledge as high

(scores 4 or 5), with over half (51%) selecting the top score. These results highlight a substantial improvement in participants' confidence and familiarity with co-production approaches to climate services.

The comparison shows a strong improvement in participants' **understanding of recent innovations in CIS (e.g. AI tools).** At baseline, 63% of respondents rated their knowledge at the lowest levels (scores 1 or 2), while only 14% rated themselves at the highest levels (4 or 5). By the endline, 81% of respondents selected the top two scores, reflecting a marked gain in confidence and familiarity with these participatory approaches.

The baseline results show limited **awareness** among participants regarding **strategies for scaling CIS and ensuring long-term sustainability**. A combined 52% rated their knowledge at the lowest levels (scores 1 or 2), and only 20% at the higher end (scores 4 or 5). By contrast, endline results indicate a strong improvement: 85% of respondents now report high awareness (scores 4 or 5), with only 3% remaining in the lowest categories. This shift suggests a substantial gain in participants' understanding of sustainability and scaling strategies for CIS.

At baseline, most participants had limited awareness of **how CIS could be integrated into sectoral policies**, with 45% selecting the lowest levels (scores 1 or 2) and only 29% identifying a strong understanding (scores 4 or 5). By the end of the course, however, there was a notable improvement: 87% of respondents rated their awareness at higher levels (scores 4 or 5), while only 3% selected the lowest scores.

Overall, the course led to **substantial improvements in participants' knowledge, skills, and confidence across all key dimensions of CIS**, with a marked shift from low baseline scores to high endline ratings, demonstrating the course's effectiveness in strengthening conceptual knowledge increased.

Practical tools and approaches

When asked about specific tools, platforms, or approaches they found particularly relevant and would be willing to adopt in their work, participants frequently cited **LEAP**, **PICSA**, **AWARE**, and **GLAM**. These tools were recognized for their practical applicability, user-friendliness, and potential to enhance climate-informed decision-making in participants' respective sectors. The widespread interest suggests that the course content successfully introduced actionable resources that aligned with professional needs across diverse contexts.

"PISCA enhances local ownership and inclusiveness where communities are not just recipients of information, they actively co-create scenarios and build trust and ownership, making people more likely to adopt solutions."

Participants' Satisfaction and Feedback

Attitudes and perspectives

Across the seven questions related to the section on Attitudes and Perspectives on the value, inclusion, institutional support, and personal motivation to work with CIS, participants showed a clear positive shift between the baseline and endline. At the start of the course, only 48% of respondents on average rated

their agreement with the statements at the highest levels (scores 4 or 5). By the endline, this proportion had increased to 56%, with a rise in the percentage of respondents selecting the maximum score of 5 (from 36% to 42%). Concurrently, the share of participants selecting the lowest three scores (1–3) decreased significantly, from 12% to just 5%. These trends reflect a strengthened conviction in the value of CIS, improved confidence in their ability to apply it, and a greater motivation to promote its integration into planning and decision-making within their respective organizations and sectors.

Overall satisfaction of the course

Participants rated the course highly across all evaluation criteria. A strong **95% of respondents expressed satisfaction with the overall course experience** (scores 4 and 5 combined) (Figure 5), with **71%** selecting the highest score of 5. Similarly, **94%** of participants found the course content relevant to their professional needs, and **71%** rated it at the top level. The sessions were also considered engaging and well-delivered by **92%** of the participants (scores 4 and 5 combined), with 81% selecting score 5. Finally, **93%** of participants agreed that the course improved their ability to apply CIS in their work, with **70%** giving the highest rating. These figures reflect the course's strong impact on participants' satisfaction, relevance to their roles, and practical applicability.

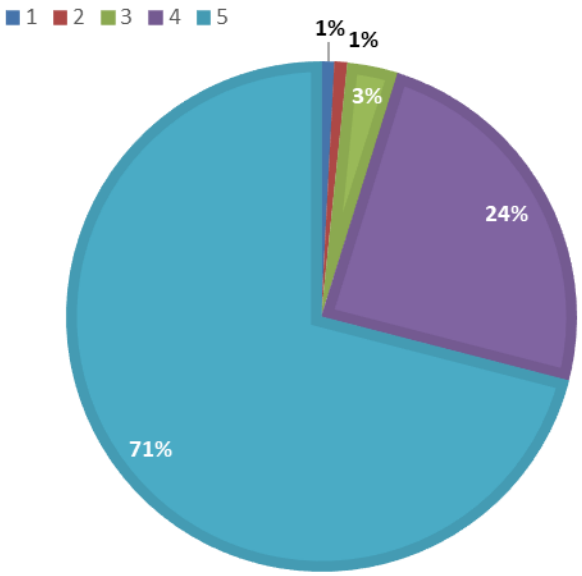

Figure 5 Overall Satisfaction of Participants

"The AGNES Advanced Course in Climate Information Services was an extremely relevant and applicable learning program. The modules were innovative, and the case studies gave an excellent representation of how climate information can be converted into practical information for action at the ground level. I particularly enjoyed the interactive sessions and the opportunity to learn from the different experiences of other learners from different regions. To further enhance the course, subsequent cohorts could stand to benefit from more hands-on activities using specific software or platforms, whereby theoretical concepts would be more embedded. On the whole, the course was invaluable to my professional development and has provided me with new knowledge to apply in the workplace."

One of the most effective aspects of the course delivery, as noted by participants, was the combination of expert moderators, the diverse mix of presenters, and the easy access to presentation materials through the course Wiki page.

Participants expressed **high satisfaction with the course delivery**. A strong majority agreed or strongly agreed with the statements, with 80% confirming the course length and pace were appropriate, and 89% finding the online platform (Wiki webpage) useful and user-friendly. Notably, 98% of participants appreciated the knowledge and competence of facilitators and guest speakers, with 65% giving them the highest score. These findings suggest that the structure, tools, and instructional team of the course effectively met participants' expectations and contributed to a positive learning experience.

"I would like to commend AGNES, AICCRA, and the Alliance of Bioversity International & CIAT for creating such a timely and impactful course. The Advanced Course on Climate Information Services directly addresses the urgent need to strengthen Africa's capacity to interpret, apply, and integrate climate information into decision-making."

Feedback and suggestions

While the course was widely valued for its content and structure, several participants offered **constructive suggestions** for enhancing future editions. A consistent theme across responses was the call for a **stronger hands-on component**. Participants appreciated the theoretical grounding but expressed a desire for more interactive, practical sessions using specific climate information tools and data platforms. They felt that guided practice, live demonstrations, and real-time application would reinforce their understanding and build greater confidence in using these tools within their own professional contexts.

Many also recommended that the course include **more region-specific case studies**, particularly from underrepresented African countries. Some respondents emphasized the need for case studies and exercises tailored to vulnerable and marginalized populations.

While time for questions and answers (Q&A) was consistently allocated after each presentation, several participants noted that tight schedules occasionally limited the opportunity for meaningful engagement and clarification. To enhance interaction, many respondents suggested the inclusion of breakout sessions, group discussions, and collaborative assignments in future editions of the course. These additions were seen as valuable for promoting teamwork, facilitating peer-to-peer learning, and enriching the exchange of regional perspectives. The feedback underscores a strong interest in creating a more participatory learning environment with adequate time for both reflection and dialogue. Another suggestion that emerged was to limit the number of presenters per session to ensure clarity and avoid cognitive overload. Two speakers were considered optimal for maintaining participant attention while still providing diverse insights.

Finally, suggestions were made to expand the scope of the course by including additional sector-specific applications, particularly for **aquatic environments**, **wetlands**, and the **blue economy**.

In terms of **course logistics**, a number of participants found the daily content intensity to be high and proposed distributing the sessions over more days, suggesting three sessions per week as a more manageable alternative. Others recommended exploring alternative time slots to accommodate professionals with demanding work schedules. A few participants also raised the idea of complementing online delivery with face-to-face sessions.

Future Use and Impact

The vast majority of participants expressed a strong commitment to applying what they learned: **46% indicated they had already started using the knowledge**, and **44% planned to do so in the near future**. A smaller share, 10%, reported needing additional support or resources before applying it. Notably, no participants found the course content irrelevant to their current roles, underscoring its practical applicability and alignment with participants' professional contexts.

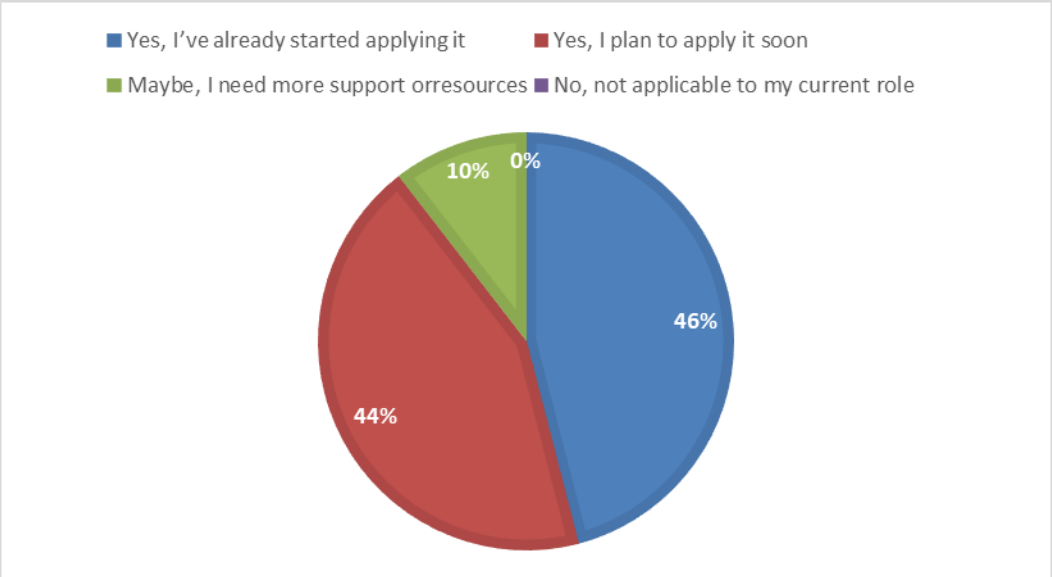

Figure 6 Intention to Apply Course Knowledge in Professional Contexts

KEY RESULTS AND FINDINGS

The AGNES Advanced Training on Climate Information Services engaged a diverse cohort of more than 150 participants from across the African continent, including representatives from government institutions, academia, non-governmental organizations, and regional bodies. Participants worked across multiple sectors such as agriculture, water and sanitation, climate change adaptation, disaster risk management, and early warning systems, underscoring the cross-sectoral importance of CIS in achieving climate-resilient development. Some of the key findings of the course were:

- **Strengthened Knowledge and Capacity on CIS Tools and Approaches:** The course provided participants with an advanced understanding of the conceptual foundations and practical applications of CIS.

- **High Participant Engagement and Satisfaction:** The training was well received, with 95% of endline survey respondents expressing satisfaction with the course and 93% reporting improved ability to apply CIS in their professional contexts.

- **Increased Demand for Practical Application and Regional Relevance:** While participants valued the technical depth of the course, several emphasized the need for greater hands-on learning opportunities, more geographically balanced examples, and stronger integration of real-world case studies.

- **Robust MELIA Process:** A two-stage survey process (baseline and endline) was conducted to assess the evolution of participants' knowledge, skills, and attitudes. A follow-up survey will be administered approximately three months post-training to evaluate the real-world application of course content.

CONCLUSION AND RECOMMENDATIONS

Lessons Learned and Recommendations

Several key lessons emerged from internal reflections and participant feedback on the Course. While the Course was overall well-received, a number of areas for enhancement were identified:

- **Stronger integration of practical, hands-on components:**
  While the course provided a robust conceptual foundation, there was a consensus that more interactive and applied learning opportunities would have enhanced participant engagement. Future iterations would benefit from incorporating dedicated sessions for tool demonstrations, step-by-step technical walkthroughs, and guided exercises that allow learners to apply what they have learned.

- **Broader regional representation in examples and case studies:**
  Although the course successfully attracted participants from across the African continent, several presentations and case studies were perceived to disproportionately feature examples from East Africa, highlighting the need for more balanced regional representation in future editions.

- **More time for questions, interaction, and discussion:**
  Time constraints occasionally limited in-depth engagement with the material and with presenters. Allowing more space for Q&A, interactive polling, and small group discussions, such as breakout rooms, would foster a more participatory learning environment.

- **Guidelines for speakers and technical support materials:**
  Developing a simple guide for speakers, including expectations on slide formatting, time management, and delivery tips, was identified as a useful tool to ensure greater consistency across sessions. Clear and precise information should be given to speakers on the specific topics to be covered, to prevent overlap and ensure complementarity among presentations.

- **Optimal number of speakers per session:**
  Sessions that featured more than two speakers often became content-heavy, reducing the time available for participant questions and dialogue. Two speakers per session appears to be a practical limit that allows for both diversity of perspectives and meaningful interaction.

- **Streamlining content load and course pacing:**
  Several participants noted that the daily intensity of the sessions was demanding. Spreading sessions over more weeks or reducing the number of sessions per week (e.g., 2–3 per week instead of daily) could allow more time for absorption, reflection, and participation by those with professional constraints.

- **Accessibility of materials in multiple languages:**
  While French interpretation was successfully provided live during the sessions, the lack of French-language PowerPoint slides and resource

materials was noted as a limitation. Translating key content and ensuring simultaneous access in both English and French would significantly enhance inclusivity.

The Way Forward

Sustainability of the course

To ensure the **long-term sustainability of the course**, discussions highlighted the need to transfer leadership and coordination to regional institutions with relevant mandates, such as AGNES, ICPAC, or IGAD. Entrusting ownership to these entities could facilitate the institutionalization of training within relevant African institutions.

Monitoring, evaluation, and learning (MEL)

To ensure the long-term impact and relevance of the training, a structured follow-up survey will be conducted approximately three months after the course's conclusion. This will assess how participants are applying the knowledge gained—whether by influencing project design, shifting professional practices, or contributing to policy development. The insights from this follow-up will complement initial evaluations and feed into a formal Outcome and Impact Case Report (OICR), contributing to institutional learning at the Alliance. Emphasizing MELIA not only supports accountability and adaptive learning but also helps generate robust evidence on how Climate Information Services (CIS) training can strengthen decision-making among policymakers and practitioners in Africa.

Conclusion

The AGNES Advanced Training on Climate Information Services (CIS) demonstrated both strong technical relevance and institutional value, equipping a broad range of African stakeholders with the knowledge and tools to integrate CIS into climate-resilient development planning. With over 150 participants from diverse sectors and geographies, the course served as an important step toward strengthening regional capacity in CIS generation, interpretation, and use.

The high levels of participant satisfaction and reported improvements in technical competency affirm that the training addressed a critical knowledge gap. Furthermore, the strong engagement throughout the sessions highlighted a growing demand for more applied, context-specific learning opportunities that can directly inform policy, programming, and practice.

Reflections from both facilitators and participants underscore the need to enhance future iterations of the course through greater regional representation, expanded use of hands-on exercises, and stronger coordination with speakers. There is also a shared recognition of the importance of institutionalizing this training within African-led organizations to ensure its long-term sustainability and continued regional ownership.

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