AICCRA PARTNERS' SATISFACTION SURVEY RESULTS FOR 2024

Use and Satisfaction of AICCRA's Services by Partners and Next Users

Survey Results Report

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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

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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Disclaimer
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ABOUT THE REPORT

Accelerating Impacts of CGIAR Climate Research for Africa (AICCRA) supports climate-smart agriculture and climate information services through six country teams and thematic clusters. Its 2024 Partners' Satisfaction and Partnership Efficacy survey collected 417 responses from 227 stakeholders across 12 clusters, achieving a 70% response rate. AICCRA uses this feedback to strengthen partnerships, improve service delivery, and inform performance metrics such as Intermediary Progress Indicator on 'Use or adaptation of AICCRA-funded climate-relevant knowledge products, decision-making tools and services confirmed by surveyed partners and stakeholders. The survey assessed 46 AICCRA services, reporting an average usage rate of 84% and a satisfaction score of 88%. Services were perceived as demand-driven by 67% of respondents. Capacity strengthening (43% of services) reached over 70,000 people, while tools and technologies (35%) reached nearly 9,000. Technical assistance (22%) scored highest in satisfaction (90%). The survey also indicated improved integration of climate-smart Gender and Social Inclusion (GSI) (87%). The multilingual survey supports citizen engagement and captures diverse perspectives across Africa's climate resilience landscape.

Keywords

Partnerships; agriculture; climate change; food security.

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ACRONYMS

AF	Additional Financing
AGNES	African Group of Negotiators Expert Support
CSA	Climate-smart agriculture
CSAIP	Climate Smart Agriculture Investment Plans
CSV	Climate-Smart Villages
CIS	Climate Information Services
CRMAE	Climate Risk Management in Agricultural Extension
ESA	Eastern and southern Africa
GSI	Gender and Social Inclusion
ToT	Training of Trainers
WA	Western Africa

HIGHLIGHTS

- *The annually conducted 2024 AICCRA Partners' Satisfaction and Partnership Efficacy survey collected 417 unique responses from 227 respondents on 46 AICCRA services.*

- *On average, the services were reportedly used by 84% of the partners participating in the survey who were familiar with each service, who expressed an average overall satisfaction of 88%.*

- *The survey has achieved a 70% response rate. It was sent to 323 people across the 12 AICCRA clusters, of which 227 responded. Out of the 227 respondents, 23% (52) were female. 30% of the total pool of respondents was below 35, which 2% was younger than 25 years old. 66% of the respondents were men aged between 25 and 55. 78% of respondents are affiliated with organizations based in the six AICCRA focus countries (Mali, Kenya, Senegal, Ethiopia, Ghana, Zambia).*
-
- *On average, 67% of the respondents felt that the services surveyed were demand-driven, i.e. either offered in response to specific requests from partners or co-identified. Technical assistance services were perceived as being delivered in response to specific needs by 39% of the respondents, while 31% felt this was the case for AICCRA products, tools, technologies and capacity strengthening, curricula or trainings events.*

- *Overall, respondents agreed that because of AICCRA's work with their organization the integration of climate-smart GSI had increased (87%), while an increased focus on youth as a specific group scored 80% and the integration of Gender and Social Inclusion (GSI) goals scored 83%. There was an average 85% agreement on the intention to integrate GSI in the future.*

- *43% (20) of the services surveyed by AICCRA were capacity strengthening, curricula or training events. On average, these services were reportedly used by 86% of the partners participating in the survey who were familiar with the capacity strengthening service, and which expressed an average overall satisfaction score of 89%. 10 services were reportedly used by all the respondents familiar with the service. 72% of respondents stated that they have used the knowledge acquired to train other people, reaching in total over 70.000 people, of which 42% are estimated to be women.*

- *35% (16) of the services surveyed by AICCRA were products, tools, technologies. On average, these services were reportedly used by 81% of the partners participating in the survey who were familiar with the products, tools, technologies, and which expressed an average overall satisfaction score of 87%. Two services were reportedly used by all the respondents familiar with the service. 80% of respondents stated that they have used the knowledge acquired to train other people, reaching in total almost 9000 people, of which 35% are estimated to be women.*

- *22% (10) of the services surveyed by AICCRA were instances of technical assistance. On average, these services were reportedly used by 84% of the partners participating in the survey who were familiar with the products, tools, technologies, and which expressed an average overall satisfaction score of 90%. Four services were reportedly used by all the respondents familiar with the service.*

- *The survey was provided both in English and in French for the four thematic clusters, West Africa, Mali, Ghana and Senegal. French was picked by all of the respondents of the Mali cluster, 97% of those of Senegal, and 79% of those of West Africa.*

INTRODUCTION

Accelerating Impacts of CGIAR Climate Research for Africa (AICCRA) works with national and regional partners to transform climate services and scale climate-smart agriculture, increasing access to and use of CGIAR innovations for the benefit of millions of small-scale farmers in Africa. The framework of AICCRA is structured around thematic, regional, and country-specific project components referred to as 'clusters', designed to streamline the implementation of project activities. The project has teams in six countries, each implementing AICCRA activities with support from CGIAR centers - Ethiopia, Kenya and Senegal by International Livestock Research Institute (ILRI), Zambia by International Water Management Institute (IWMI), Mali by AfricaRice, and Ghana by International Institute for Tropical Agriculture (IITA). And teams focused on regional work through two clusters in West Africa and East & Southern Africa. The thematic work cuts across AICCRA's activities through: Theme One: Climate-Smart Agriculture Policies and Priorities; Theme Two: Climate-Smart Technologies and Practices; Theme Three: Gender and Social Inclusion; Theme Four: Climate Information Services.

AICCRA works closely with a growing network of national and regional partners to scale the reach of climate-smart agriculture and climate information services for Africa's small-scale farmers. For this reason, AICCRA strongly values the feedback from its partners and organizes an annual partnership satisfaction survey, featuring questions tailored to each of the 12 AICCRA Clusters.

The satisfaction survey has multiple objectives:

- Provide a space for citizen engagement reflections, as encouraged by the World Bank
- Inform the Intermediate Progress Indicator (IPI) 3.3 on the *"Use or adaptation of ACCRA-funded climate-relevant knowledge products, decision-making tools and services stated and confirmed by surveyed partners and stakeholders (Percentage)"*
- Understand the satisfaction of AICCRA partners with the services developed by AICCRA, collecting feedback, challenges and recommendations for improvement
- Understand how AICCRA services are driven by partner requests and offered in a timely manner
- Understand how AICCRA works with partner organizations increases their consideration of Gender and Social Inclusion (GSI)
- Provide a space to collect feedback and suggestions on the scope of the partnership efficacy between AICCRA and partner organizations.

RESULTS AT AICCRA LEVEL

Demographics

Response rate

The 2024 AICCRA partnership survey had a 70% response rate. It was sent to 323 people across the 12 AICCRA Clusters, of which 227 responded. Theme 1 invited the most partners (N=45) to take the survey, and the highest response rates were observed in ESA (100%), Mali (97%), and Senegal (94%) (Figure 1).

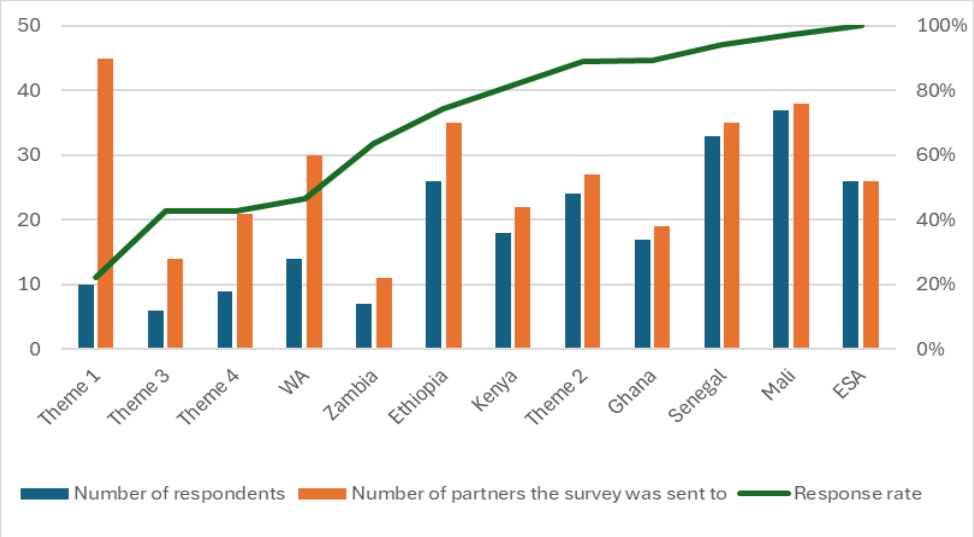

Figure 1. Number of respondents, number of partners the survey was sent to and response rate (%, secondary axis) per AICCRA cluster

Gender distribution

Out of the 227 respondents, 23% (52) were female (Figure 2). One respondent in Mali preferred not to express their gender.

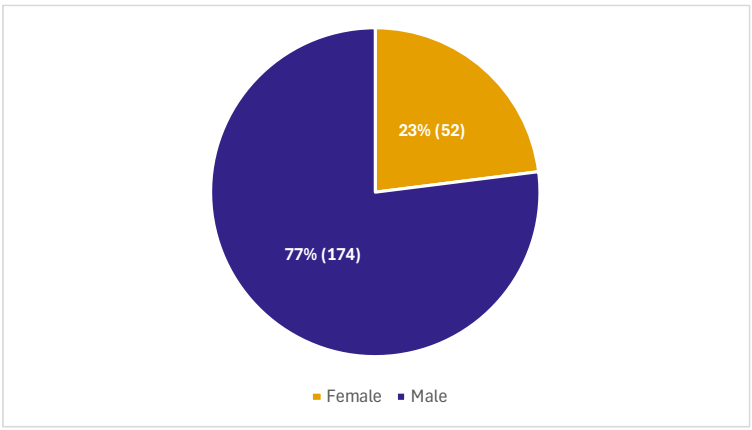

Figure 2. Number and percentage of male and female respondents of the AICCRA partnership survey

The highest share of female participants was observed in the Theme 3 (50%), Theme 2 (42%), and West Africa (36%) Clusters, while the most female respondents were in the Theme 2 cluster (N=10) (Figure 3).

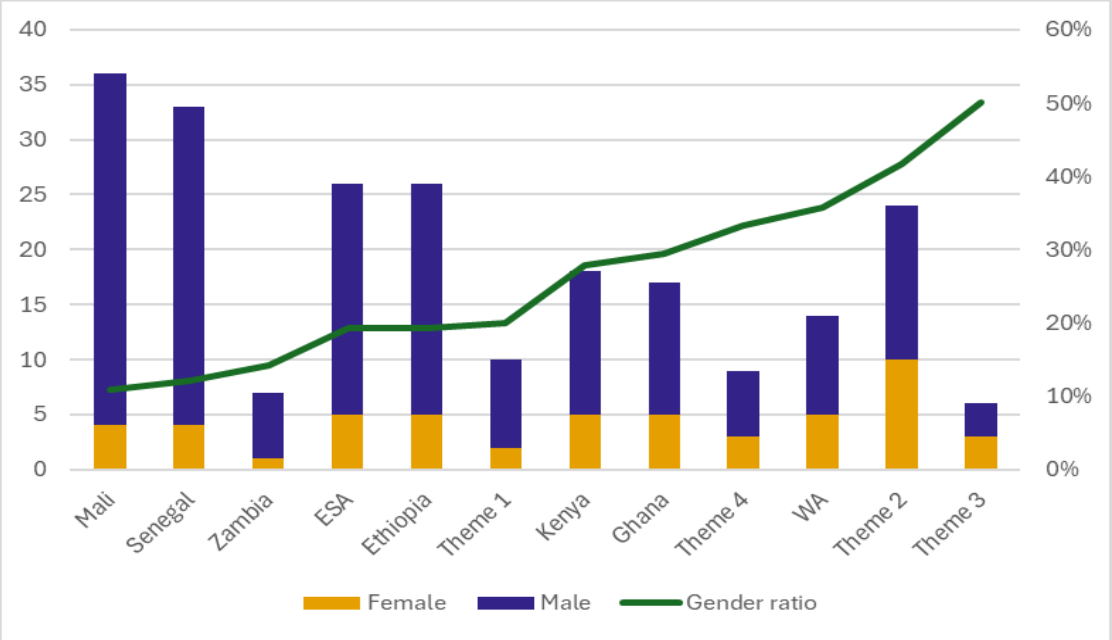

Figure 3. Number of male and female respondents, and gender ration (%, secondary axis) of each AICCRA cluster

Age and gender distribution

66% of the respondents were men between 25 and 55 years old. 30% of respondents were below 35, of which 2% were younger than 25 years old (Figure 4).

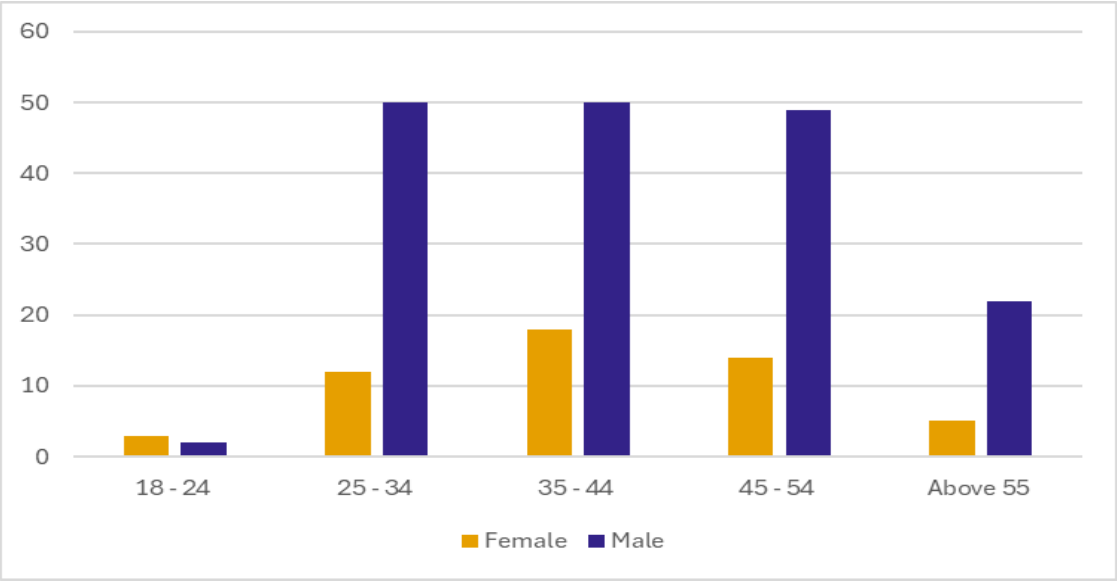

Figure 4. Respondents disaggregated by gender and age groups

Age and cluster distribution

The most respondents were observed in Mali (N=37), Senegal (N=33) and Ethiopia and Easter and Southern Africa (N=26 each). Theme 3 (N=6), Zambia (N=7) and Theme 4 (N=4), had the least (Figure 5).

The youngest share of respondents was observed in Mali, where 60% of the respondents were younger than 35 years old.

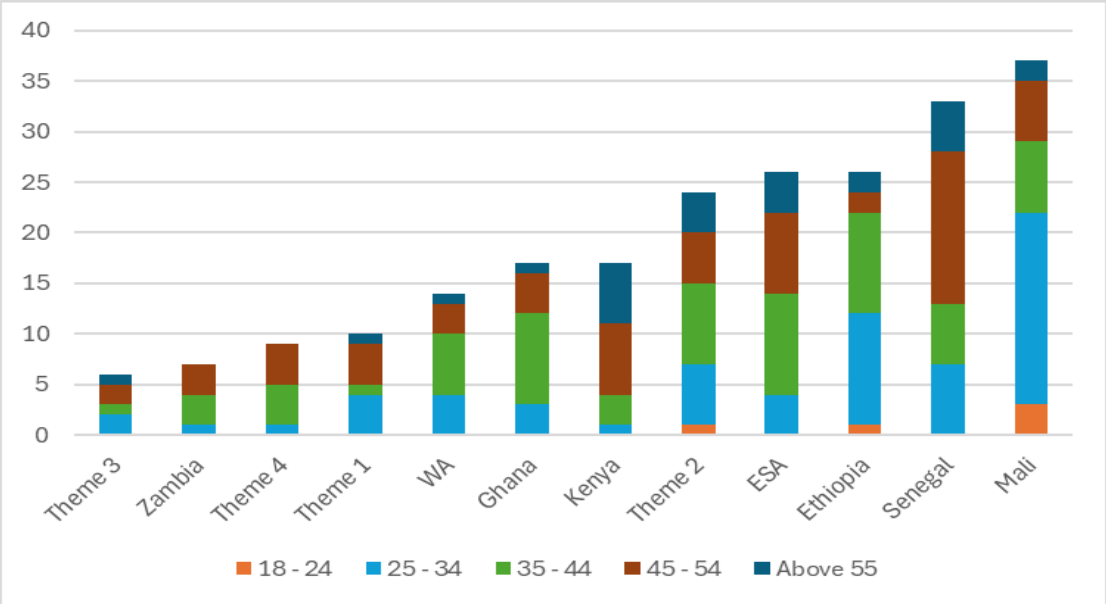

Figure 5. Number of respondents in each age group across the AICCRA Clusters

Countries

78% of respondents are affiliated with organizations based in the six AICCRA focus countries (Mali, Kenya, Senegal, Ethiopia, Ghana, Zambia), while the remainer reported being based in 14 other African countries, or in the wider Eastern and southern Africa and western and central Africa regions (Figure 6).

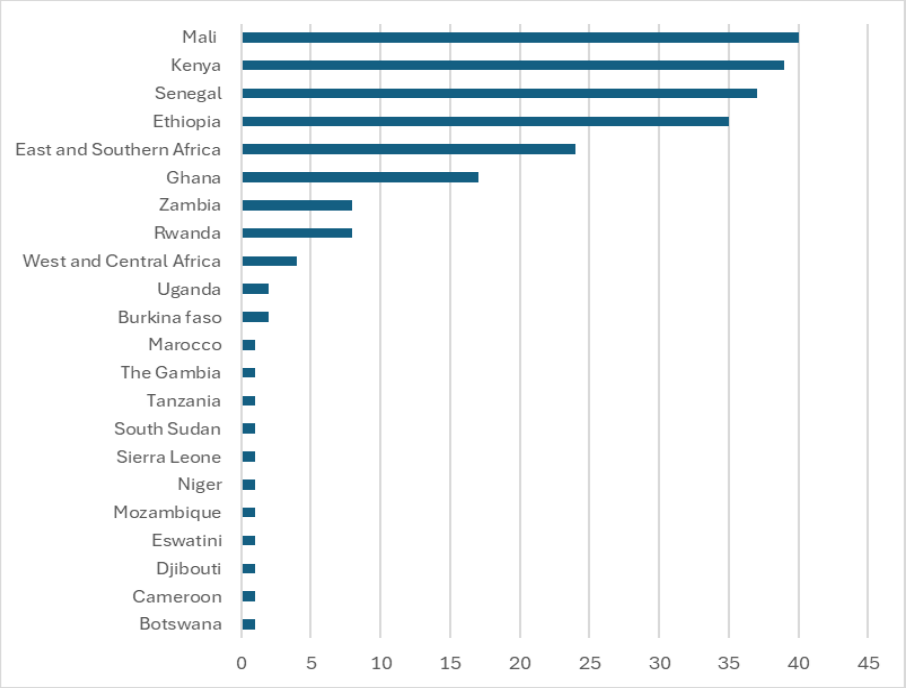

Figure 6. Countries in which the respondents' organizations are based in

Languages of the survey

The surveys were developed in English and in French for the four thematic Clusters, West Africa, Mali, Ghana and Senegal. None of the respondents of Ghana or the thematic Clusters chose to answer the survey in French. In Mali, all the respondents chose French, in Senegal the 97%, and in West Africa 79% (Figure 7).

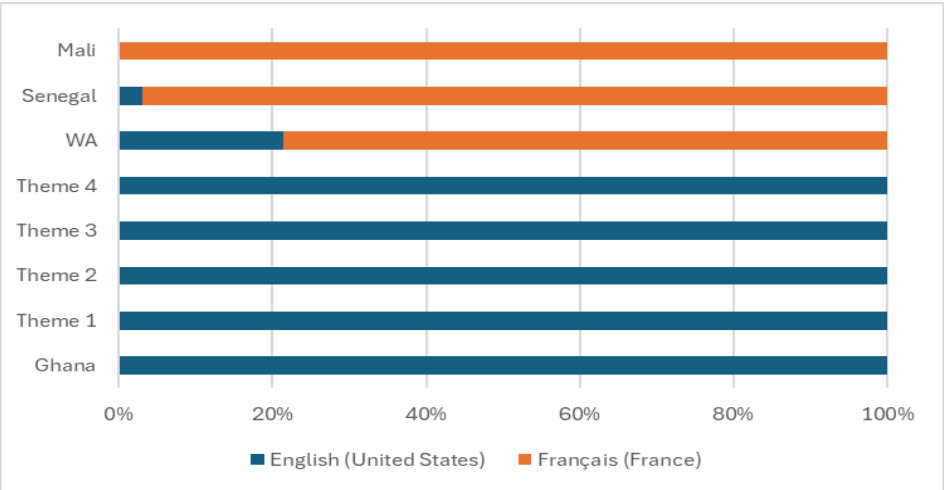

Figure 7. Percentage of respondents who chose French or English as the survey language, when offered the choice

Demand-driven nature of the Services

Respondents were asked whether they felt that each service surveyed was: i) offered by AICCRA, ii) offered in response to specific partners' needs and requests, or iii) co-identified. Overall, 67% of the respondents felt that the services surveyed were either offered in response to specific requests or co-identified. 32% of the respondents felt that the services surveyed had been offered in response to specific requests, 35% felt the services were co-identified, and 33% felt that the services were offered by AICCRA, but variability was observed among the 12 Clusters (Figure 8). For example, 60% of Theme 1 respondents and 59% of West Africa respondents felt the services surveyed by the cluster responded to specific requests, as opposed to Ghana (5%).

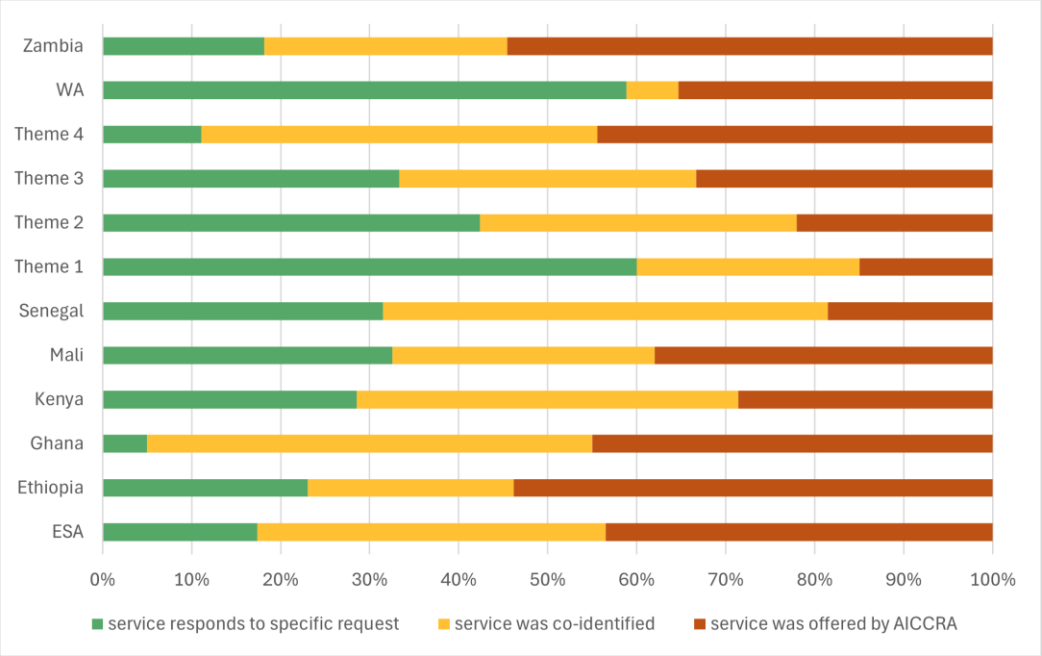

Figure 8. Demand-driven nature of AICCRA services

Technical assistance services were perceived as being delivered in response to specific needs by 39% of the respondents, while 31% felt this was the case for AICCRA products, tools, technologies and capacity strengthening, curricula or trainings events (Figure 9)

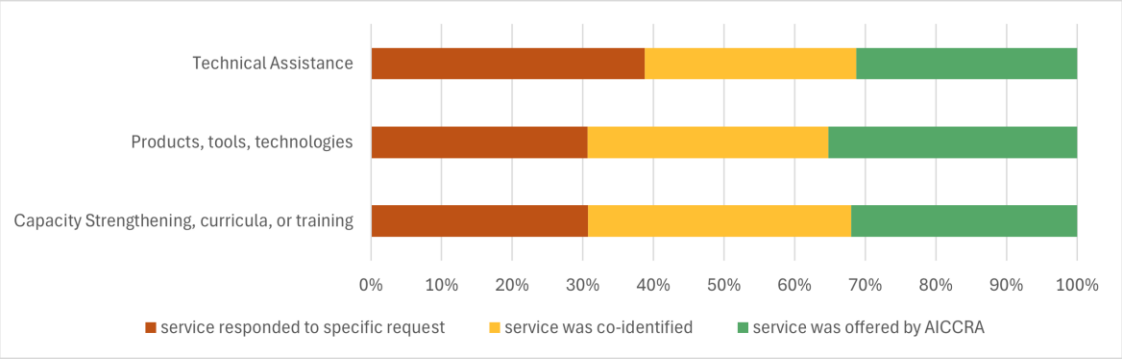

Figure 9. Average demand-driven nature of each typology of AICCRA services

Gender and Social Inclusion (GSI)

Respondents were asked whether they agreed that due to the work of AICCRA with their organization, there had been an increase in the consideration of the following different GSI dimensions: i) Integration of specific GSI goals, components, programs, and/or policies, ii) focus on youth as a specific group, iii) knowledge and awareness on how climate-smart GSI components can be integrated and strengthened, iv) intention to integrate GSI in the near future.

Overall, 87% of the respondents were in agreement with the fact that the integration of climate-smart GSI components in their organization had increased because of AICCRA's work, while an increased focus of youth was scored 80% and the integration of GSI goals was scored 83%. There was an average 85% agreement on the intention to integrate GSI in the future (Figure 10).

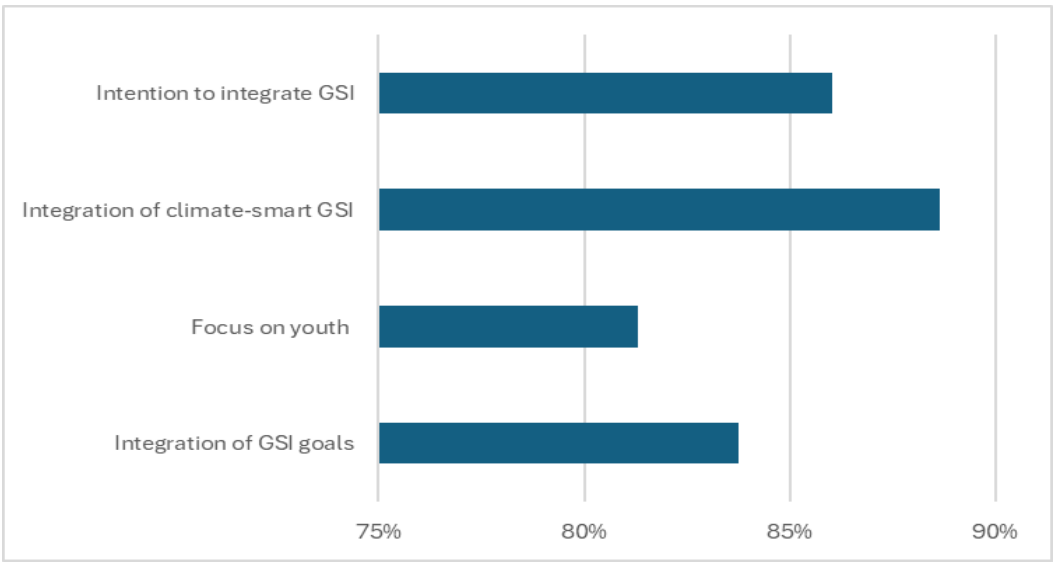

Figure 10. Average agreement on AICCRA-driven increase in the consideration of four GSI dimensions among partners' organizations

In Mali (96%) and in the Theme 2 cluster (93%) was observed the most agreement on the fact that AICCRA's work led to an overall increase of GSI consideration in the partners' organization (Figure 11).

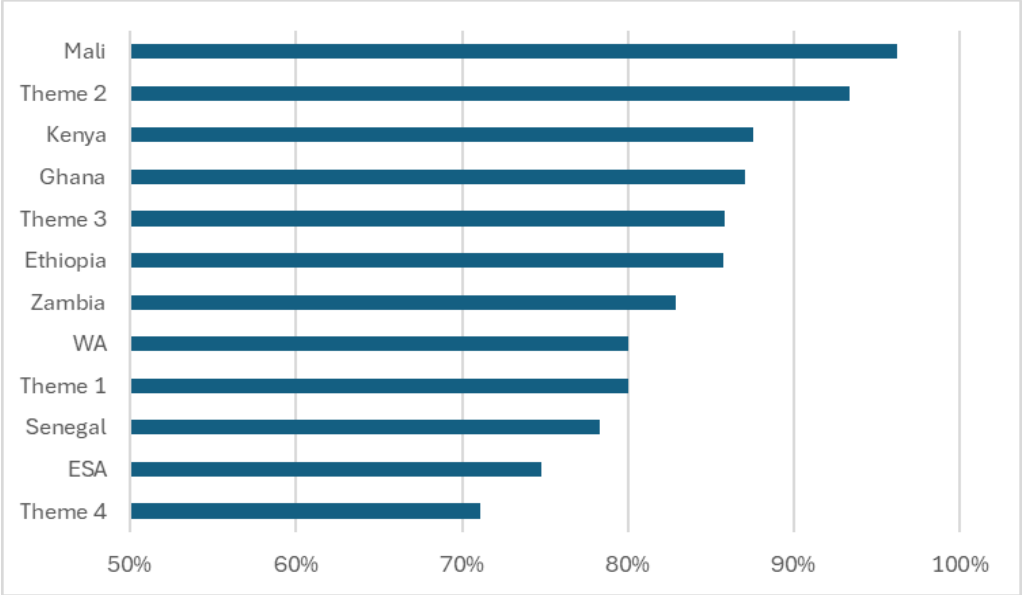

Figure 11. Agreement on AICCRA-driven increase in the overall consideration of GSI among partners' organizations, for each AICCRA cluster

More work could be done to increase the integration of GSI goals and of youth as a specific group in partners organization of the Theme 4 and ESA Clusters (all scored below 75%). There was at least a 79% agreement on the fact that the integration of climate-smart GSI in the respondents' organization increased due to AICCRA's work. Apart from Theme 4, there was at least a 75% agreement on the intention to integrate GSI in the future (Table 1).

Table 1 Agreement on AICCRA-driven increase in the overall integration of four GIS dimensions, for each AICCRA cluster

CLUSTER	INTEGRATION OF GSI GOALS	FOCUS ON YOUTH	INTEGRATION OF CLIMATE-SMART GSI	INTENTION TO INTEGRATE GSI	OVERALL GSI CONSIDERATION
Mali	96%	96%	97%	97%	**96%**
Theme 2	93%	88%	97%	95%	**93%**
Kenya	82%	81%	93%	93%	**88%**
Ghana	87%	84%	93%	85%	**87%**
Theme 3	87%	80%	87%	90%	**86%**
Ethiopia	85%	77%	92%	88%	**86%**
Zambia	83%	83%	86%	80%	**83%**
Theme 1	80%	78%	82%	80%	**80%**

CLUSTER	INTEGRATION OF GSI GOALS	FOCUS ON YOUTH	INTEGRATION OF CLIMATE-SMART GSI	INTENTION TO INTEGRATE GSI	OVERALL GSI CONSIDERATION
WA	77%	77%	83%	83%	**80%**
Senegal	77%	78%	81%	77%	**78%**
ESA	72%	71%	79%	77%	**75%**
Theme 4	71%	62%	80%	71%	**71%**
	83%	**80%**	**87%**	**85%**	**84%**

Services surveyed

46 services were surveyed by the 12 AICCRA Clusters. 43% (20) of them were capacity strengthening, curricula, or training events, 35% (16) were products, tools, technologies, and 22% (10) were technical assistance (Figure 12). Variability in the type of services surveyed was observed among the twelve AICCRA Clusters (Figure 13).

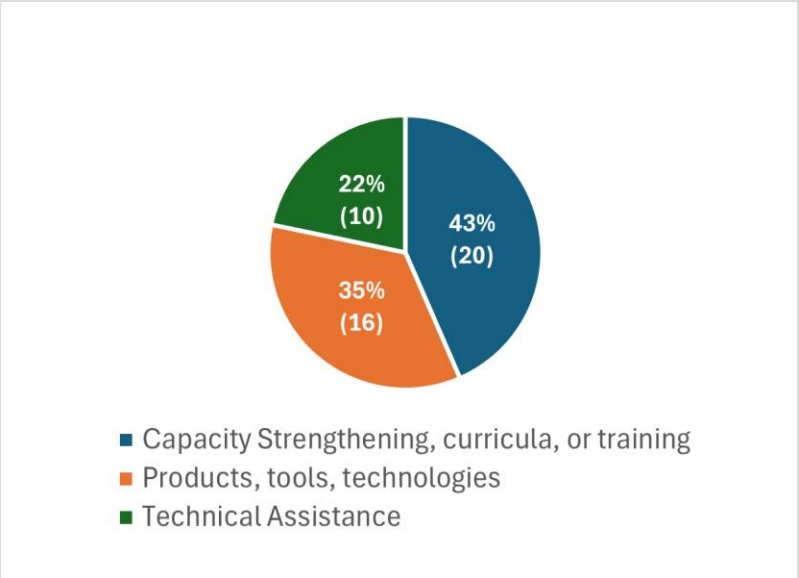

Figure 12. Typology of AICCRA services surveyed

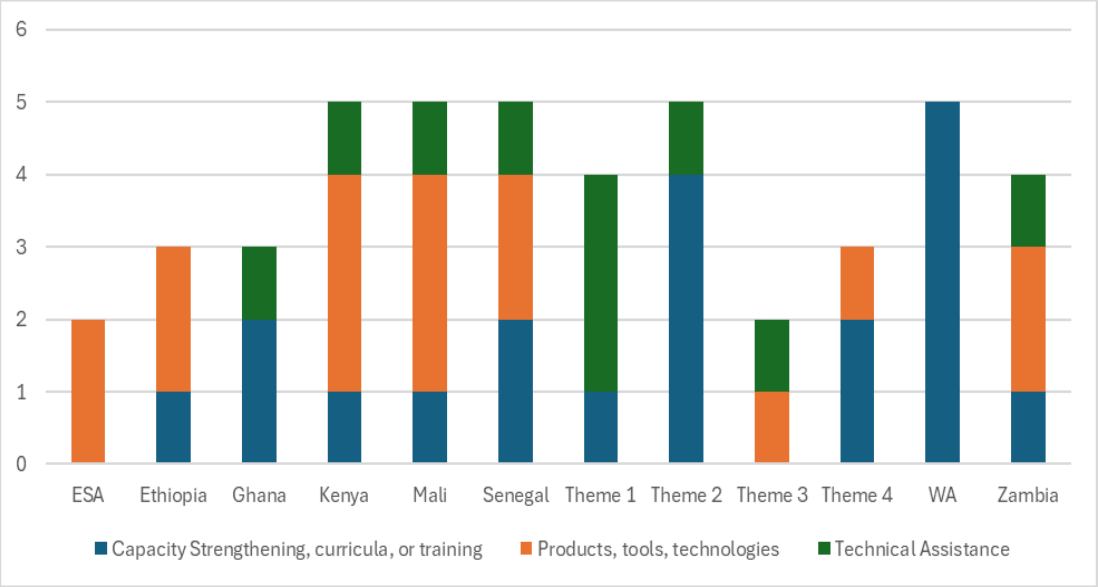

Figure 13. Number and type of services surveyed by each AICCRA cluster

AICCRA capacity strengthening, curricula or training events

43% (20) of the services surveyed by AICCRA were capacity strengthening, curricula or training events. On average, these services were reportedly used by 86% of the partners participating in the survey who were familiar with the capacity strengthening service, and which expressed an average overall satisfaction score of 89% (Table 2). 10 services were reportedly used by all the respondents familiar with the service. 72% of respondents stated that they have used the knowledge acquired to train other people, reaching in total over 70,000 people, of which 42% are estimated to be women.

Table 2 Use, satisfaction and Training of Trainers (ToT) effect of AICCRA capacity strengthening, curricula and training events. ToT refers to the share of respondents who have trained other people.

CLUSTER	SERVICE	RESPONDENTS FAMILIAR WITH SERVICE	USE (%)	OVERALL SATISFACTION (%)	TOT (%)	PEOPLE TRAINED (N)	WOMEN TRAINED (%)
Theme 2	CGIAR Accelerators for Women Agri-Entrepreneurs	5	100%	89%	60%	1743	29%
Theme 4	Climate Basics curriculum (RUFORUM)	2	100%	90%	100%	250	17%
Mali	CRMAE curriculum	26	100%	98%	85%	2805	41%
Ethiopia	CRMAE curriculum	13	100%	91%	100%	565	29%
Ghana	CSA Hub working group	10	100%	84%	80%	1130	55%
Theme 1 (&Theme 4)	Long Term Strategy Planning and Decision Support Tools (AGNES)	4	100%	99%	75%	57	43%
Ghana (&Theme 2)	Ghana Scaling Week	6	100%	88%	100%	252	48%
WA	New Generation of Seasonal Forecasts (Formation-Action)	5	100%	81%	100%	0	0%
Theme 4	Participatory Scenario	5	100%	85%	80%	575	31%

CLUSTER	SERVICE	RESPONDENTS FAMILIAR WITH SERVICE	USE (%)	OVERALL SATISFACTION (%)	TOT (%)	PEOPLE TRAINED (N)	WOMEN TRAINED (%)
	Planning Engagement						
Zambia	WorldFish capacity building on Aquaculture better management practices	5	100%	75%	100%	54480	10%
Theme 2	Training on developing bankable CSA related proposals at subnational level	7	86%	98%	57%	1091	38%
Theme 2	Impact Measurement and Tracking for Agribusinesses in the Rwanda Accelerator	12	83%	93%	33%	180	60%
Theme 2	Learning and Knowledge Exchange event for multi-stakeholders on CSAIP implementation	9	78%	96%	56%	1010	39%
Senegal	CRMAE curriculum	21	76%	90%	62%	288	65%
WA	Regional training on CSV approach	6	67%	86%	67%	45	20%
WA	Regional Workshop on CSA technologies in Rice	3	67%	82%	67%	52	81%
Senegal	Training Programs on best CSA Practices	12	67%	91%	50%	374	50%

CLUSTER	SERVICE	RESPONDENTS FAMILIAR WITH SERVICE	USE (%)	OVERALL SATISFACTION (%)	TOT (%)	PEOPLE TRAINED (N)	WOMEN TRAINED (%)
Kenya	University Curricula	6	67%	84%	50%	5135	62%
WA	Regional Workshop on Gender Accelerator program	5	40%	83%	40%	100	72%
	Total/average		**86%**	**89%**	**72%**	**70132**	**42%**

Respondents provided 140 comments on examples of use of knowledge acquired in capacity strengthening, curricula, and training events. The paragraph below summarizes these, while the detailed comments can be read in Annex 2. The training enabled participants to apply climate-smart agriculture, policy development, and capacity-building strategies. Many trained farmers, extension workers, and students on sustainable practices like drought-resistant crops and composting. Others integrated climate knowledge into curricula, policies, and decision-making. Improved climate information services enhanced forecasting, advisory support, and disaster preparedness. Participants contributed to policy reforms, technical guides, and adaptation strategies. Businesses adopted climate-resilient practices, while AI tools enhanced environmental solutions. Cross-sector collaborations fostered knowledge exchange and community-based initiatives. Overall, the training strengthened sustainability, resilience, and agricultural productivity across institutions, organizations, and local communities.

Respondents provided 20 comments on suggestions for improvement. Survey respondents suggested increasing stakeholder engagement to scale climate-smart agriculture in Ethiopia, ensuring harmonized communication with smallholder farmers. They emphasized the need for more training sessions, broader outreach, and follow-up programs. Some called for integrating climate modules into curricula, while others highlighted the need for resources and capacity strengthening. Plans for gender and youth empowerment initiatives were also noted for 2025.

AICCRA products, tools, technologies

35% (16) of the services surveyed by AICCRA were products, tools, technologies. On average, these services were reportedly used by 81% of the partners participating in the survey who were familiar with the products, tools, technologies, and which expressed an average overall satisfaction score of 87% (Table 3). Two services were reportedly used by all the respondents familiar with the service. 80% of respondents stated that they have used the knowledge acquired to train other people, reaching in total almost 9,000 people, of which 35% are estimated to be women.

Table 3 Use, satisfaction and Training of Trainers (ToT) effect of AICCRA products, tools, technologies. ToT refers to the share of respondents who have trained other people.

CLUSTER	SERVICE	RESPONDENTS FAMILIAR WITH SERVICE	USE (%)	OVERALL SATISFACTION (%)	TOT (%)	PEOPLE TRAINED (N)	WOMEN TRAINED (%)
Theme 4	Crop monitoring training	4	100%	82%	100%	195	32%
Zambia	Needs Assessment for CSA CIS integration into the university curriculum	3	100%	60%	67%	60	0%
Mali	AgDataHub Mali	29	97%	96%	97%	2170	40%
Mali	Impacts/Effects assessment studies on the field using RCT approach	21	95%	98%	90%	536	56%
Senegal	Community of Practices advisories	10	90%	76%	100%	2,477	13%
Ethiopia	Small ruminants innovations (SmaRT Pack)	8	88%	91%	100%	413	56%
Mali	Digital Platforms (What's App Group farmers, Phone call and SMS) for SIC dissenimation	27	85%	95%	89%	2,206	44%
ESA	Sub-Seasonal prediction using PyCPT	11	82%	88%	100%	88	35%
ESA	Soil Health Monitoring and Digital Soil Mapping	16	81%	88%	88%	162	30%

CLUSTER	SERVICE	RESPONDENTS FAMILIAR WITH SERVICE	USE (%)	OVERALL SATISFACTION (%)	TOT (%)	PEOPLE TRAINED (N)	WOMEN TRAINED (%)
Ethiopia	User-centric bundled digital climate agro advisories	5	80%	87%	80%	94	47%
Kenya	Mobile app for KMD's volunteer observers	13	77%	85%	54%	267	63%
Theme 3	Gender and Climate Hotspot Mapping in Botswana, Kenya and Uganda with AGNES	4	75%	92%	50%	0	0%
Kenya	Kaznet	3	67%	93%	67%	121	36%
Kenya	AgDataHub Kenya	6	50%	90%	67%	169	53%
Senegal	AgDataHub Senegal	12	50%	77%	50%	30	21%
			81%	**87%**	**80%**	**8,988**	**35%**

Respondents provided 151 comments on examples of use of products, tools and technologies. The paragraph below summarizes these, while the detailed comments can be read in Annex 2.
Survey respondents highlighted various applications of tools and technologies for advisory development. These included training undergraduate and postgraduate students, integrating early warning systems into disaster preparedness, and promoting gender-inclusive climate-smart agriculture. Genetic improvement tools were used for livestock breeding, while digital platforms facilitated climate information dissemination. Technologies supported soil mapping, seasonal forecasting, and greenhouse gas estimation. Community engagement strategies enhanced farmer participation, and decision-support tools informed agricultural planning. Respondents emphasized the need for broader promotion, scaling up, and continuous capacity-building to maximize impact. The integration of climate data into advisory services helped improve productivity, resilience, and informed decision-making.

Respondents provided 31 comments on reasons why they have not used products, tools and technologies. The main reasons for not using the products and tools include lack of infrastructure, an enabling environment, and awareness among key institutions. Some are awaiting approval or need further training and capacity building. Timing issues, lack of motivation, and unfavorable conditions also hinder adoption, though some plan to use them in the future.

Respondents provided 104 comments on suggestions for improvement or challenges encountered when using products, tools and technologies. The challenges faced in using the tools include infrastructure limitations, budget shortages, data accessibility issues, and lack of training. Users struggle with inconsistent internet connectivity, limited computing capacity, and difficulty in

understanding complex software like R and Python. The absence of localized data and translation into local languages further restricts usability. Political will, lack of awareness, and reluctance from users also hinder adoption. To improve the tools, users suggest increasing training frequency, integrating more accurate weather data, enhancing local support, expanding access to more locations, and ensuring reliable network connections.

AICCRA technical assistance

22% (10) of the services surveyed by AICCRA were instances of technical assistance. On average, these services were reportedly used by 84% of the partners participating in the survey who were familiar with the products, tools, technologies, and which expressed an average overall satisfaction score of 90% (Table 4). Four services were reportedly used by all the respondents familiar with the service.

Table 4. Use and satisfaction of AICCRA technical assistance

CLUSTER	SERVICE	RESPONDENTS FAMILIAR WITH SERVICE	USE (%)	OVERALL SATISFACTION (%)
Theme 1	Support to AUC in the launch of the Great Green Wall initiative 10 year continental strategy at the Africa Soil Health and Fertilizer Summit	2	100%	100%
Theme 1	Technical support for the Africa Soil Health and Fertilizer Summit Action Plan and Nairobi Declaration and its linkages to the AU Climate Resilient Development Strategy with AUDA-NEPAD	6	100%	92%
Theme 1	Technical support to farmer organizations to build capacity for climate negotiations, policy and advocacy	8	100%	94%
Theme 3	Webinars and Community of Practice with CORAF and FSRP gender focal points	2	100%	90%
Mali	Multi-actors community level Platforms	26	96%	97%
Zambia	Open Capital Advisories on Investment Readiness	6	83%	71%
Theme 2	Technical assistance provided to farmers, ecosystem actors and value chain participants on identifying and managing climate risks through various CSA practices.	17	71%	92%
Senegal	iSAT	3	67%	89%
Kenya	Technical capacity support on community seed production for Drought Tolerant Crops	8	63%	92%
Ghana	Accelerator Matchmaking	5	60%	83%
			84%	**90%**

Respondents provided 69 comments on examples of use of knowledge acquired during technical assistance. The paragraph below summarizes these, while the detailed comments can be read in Annex 2.
Technical assistance has been instrumental in various initiatives, including climate negotiations, agroecology, and soil health summits. It has supported organizations in planning major summits, developing climate mitigation strategies, and drafting roadmaps for international climate discussions. Knowledge gained has informed Africa's common position in climate talks, facilitated policy reform, and mobilized significant funding for climate-related projects. Tools such as flood risk modeling and climate risk profiling have enabled practical applications like disaster preparedness planning and tailored insurance solutions for smallholder farmers. Additionally, technical support has enhanced agricultural resilience through training on climate-smart agriculture, improved post-harvest management, and promoted sustainable farming practices such as drought-tolerant crops and bio-digestion. Farmers and cooperatives have leveraged this knowledge for conflict management, gender-inclusive development, and efficient natural resource use. Businesses have also benefited, using climate insights for better financial planning, record-keeping, and credit access, fostering economic sustainability in agricultural communities.

Respondents provided 11 comments on reasons why they have not used the knowledge acquired during technical assistance. The main reasons for not yet applying technical assistance include timing issues, as some knowledge arrived too late for immediate use or is planned for future implementation. Others require additional support, such as training seed producers or engagement with stakeholders. Overall, recipients appreciate the assistance and seek timely delivery.

Overview of performance of AICCRA Clusters

Out of the 46 services surveyed, two services received only one response. These services were excluded from the analysis and not considered in the cluster average scores (Climate- Smart Agriculture Basics: An Introduction to Practices & Technologies, from the WA cluster and Disaster Management and Mitigation Unit (DMMU) Mobile App from the Zambia cluster).

On average, 44 AICCRA services were reportedly used by 84% of the partners participating in the survey who were familiar with each service, and which expressed an average overall satisfaction score of 88% (Table 5, Figure 14). Services surveyed by Theme 1 and Theme 4 were reportedly used by all the respondents familiar with the services. Respondents of the Mali cluster expressed the highest average overall satisfaction (97%), while those in Zambia the lowest (69%). On average, 75% of respondents stated that they have used the knowledge acquired to train other people, reaching in total over 79.000 people, of which 42% are estimated to be women.

Table 5 Average Use, satisfaction and Training of Trainers (ToT) effect of AICCRA services, per cluster. ToT refers to the share of respondents who have trained other people.

CLUSTER	N OF SERVICES SURVEYED	SUM OF RESPONDENTS FAMILIAR WITH SERVICE	AVERAGE USE (%)	AVERAGE OVERALL SATISFACTION (%)	TOT (%)	SUM OF PEOPLE TRAINED (N)	AVERAGE OF WOMEN TRAINED (%)
Theme 1	4	20	100%	96%	75%	57	43%
Theme 4	3	11	100%	85%	93%	1020	26%
Mali	5	129	95%	97%	90%	7717	45%
Zambia	3	14	94%	69%	83%	54540	10%
Ethiopia	3	26	89%	89%	93%	1072	44%
Theme 3	2	6	88%	91%	50%	N/A	N/A
Ghana	3	21	87%	85%	90%	1382	52%
Theme 2	5	50	83%	94%	52%	4024	42%
ESA	2	27	82%	88%	94%	250	33%
Senegal	5	58	70%	85%	65%	3169	37%
WA	4	19	68%	83%	68%	197	58%
Kenya	5	36	65%	89%	59%	5692	53%
	44	**417**	**84%**	**88%**	**75%**	**79120**	**42%**

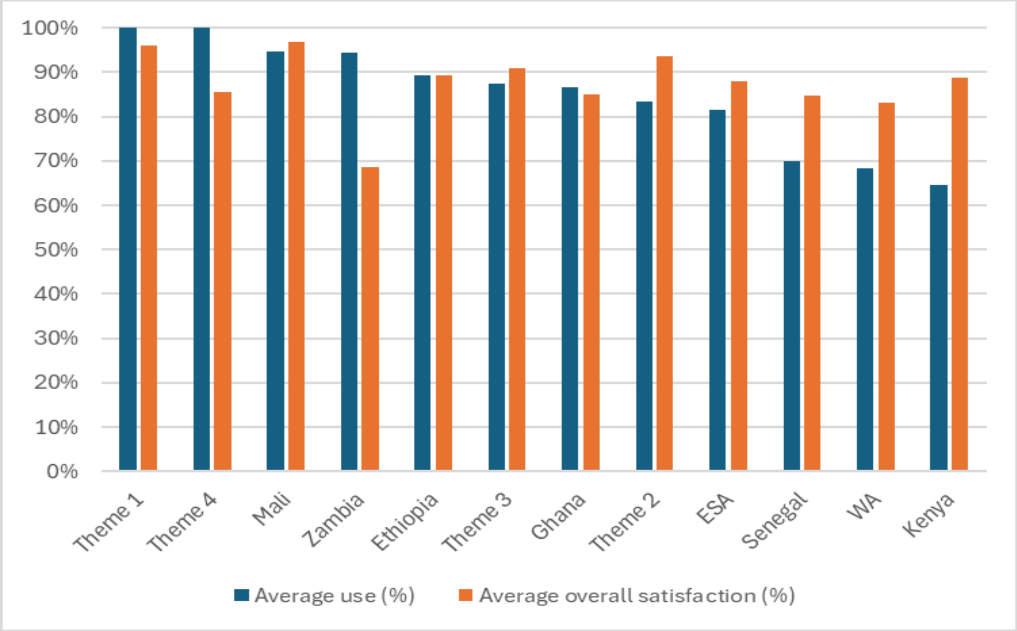

Figure 14. Average use (%) and average overall satisfaction (%) of the services surveyed by each of the 12 AICCRA Clusters (ranked by average use)

Use and Satisfaction of AICCRA Services Over the Years

Use and satisfaction of AICCRA services by next user respondents in 2024 has been the highest reported since the start of AICCRA (Table 6).
This has occurred even as a stricter and more conservative metric was adopted in 2024 to calculate use. In AICCRA (2021-2023) use by cluster was calculated as the percentage of the total respondents, in each cluster, that have used at least one service. In AICCRA AF (2024-2025) use by cluster is calculated as the average use of the AICCRA service surveyed (see more details in the Method summary- Changes from AICCRA to AICCRA AF). The fact that services designed for and with next users, rather than end users, were prioritized in the 2024 surveys might have helped to balance the effect of the application of a stricter use metric.

Table 6 Use and satisfaction of AICCRA services from 2021 to 2024

INDICATOR	AICCRA			AICCRA AF
	RESULT 2021	RESULT 2022	RESULT 2023	RESULT 2024
Satisfaction of services (former IPI 1.3)	80%	82%	83%	88%
Effectiveness of the partnership (former IPI 2.4)	85%	85%	84%	
Use of services (IPI 3.3)	61%	73%	77%	84%

RESULTS BY AICCRA CLUSTERS

Theme 1

Cluster overview

The Climate Smart Policies and Priorities Theme collaborates with continental and regional partners and technical bodies to create an enabling environment for policy and investment decisions influenced by engagement and evidence from AICCRA activities. These policies and investment decisions help ensure country level work can be scaled both within and across countries and regions. National level policies informed by AICCRA evidence help shape investments toward climate-smart options. We also endeavor to create linkages across major thematic areas within our partner institutions, including between climate change, food systems, soil health and more.

Our primary partners include the African Union Development Agency (AUDA-NEPAD), the Sustainable Environment and Blue Economy directorate of the African Union Commission (AUC), the Eastern Africa Farmers Federation (EAFF) and the African Group of Negotiators Expert Support (AGNES). We provide technical inputs related to climate change and agriculture policy processes, strategic guidance on incorporating evidence into policies, implementation and planning and co-creation of knowledge products that aid in capacity building efforts across Africa.

In Theme 1, 4 AICCRA services were surveyed:

- Delivery of Module 6 (Long Term Strategy Planning and Decision Support Tools) as part of the AGNES Climate Leadership Programme: The AGNES Climate Leadership Programme is a 10-week course covering 10 modules ranging from climate physical science, governance, finance, climate security and many others. The Climate Smart Policies and Priorities Theme delivers the module on long-term planning and decision support tools. The course is delivered four times per year to a cohort of approximately 160 participants each time.
- Technical support for the Africa Soil Health and Fertiliser Summit Action Plan and Nairobi Declaration and its linkages to the AU Climate Resilient Development Strategy with AUDA-NEPAD: The theme provided technical support to AUDA-NEPAD by helping develop briefs, preparing presentations and creating other communications materials showcasing the action plan contents.
- Technical support to AUC in the launch of the Great Green Wall Initiative 10-year continental strategy at the Africa Soil Health and Fertiliser Summit: Theme staff attended planning meetings, helped organize the content of the session and prepared technical presentations.
- Technical support to farmer organizations to build capacity for climate negotiations, policy and advocacy: Through collaboration with the Eastern Africa Farmers Federation (EAFF, an umbrella body of national farmer organizations), the theme has helped organize and run several in-person and virtual workshops that bring experts on various climate negotiation and policy

topics to present to EAFF members and build their capacity to advocate for the voice of farmers in climate policy spaces.

The survey was sent to 45 partners, of which 10 responded, for a 22% response rate.

Theme 1 respondents' demographics

80% of the respondents were male, 20% were female. No respondents were younger than 25 years old. Below, a gender disaggregation of different age groups:

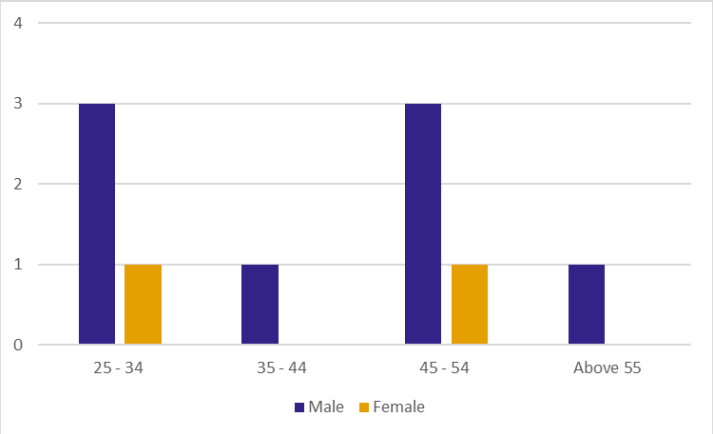

Figure 15. Theme 1 - Age and gender of the respondents

Theme 1 respondents' affiliation

Respondents were affiliated with 4 different partner organizations, with AGNES and EAFF having the most representation with 4 respondents each (Table 7).

Table 7 Theme 1 partner organizations

PARTNER ORGANIZATION	N OF RESPONDENTS
AGNES	4
EAFF	4
AUC	1
AUDA-NEPAD	1

Theme 1 services and their use

On average, the four services surveyed by Theme 1 were used by 100% of the respondents, which expressed an average overall satisfaction of 96%. This score encompasses multiple dimensions of satisfaction such as usefulness, relevance and alignment to one's organization, needs and expectations being met, tailoring of content to needs, relevance for gender and social inclusion, incorporation of interactive elements and presence of feedback mechanisms.

Table 8 Use and satisfaction of Theme 1 services

AICCRA SERVICE	N OF RESPONSES	USE	OVERALL SATISFACTION
Delivery of Module 6 (Long Term Strategy Planning and Decision Support Tools) as part of the AGNES Climate Leadership Programme	4	100%	99%
Technical support for the Africa Soil Health and Fertiliser Summit Action Plan and Nairobi Declaration and its linkages to the AU Climate Resilient Development Strategy with AUDA-NEPAD	6	100%	92%
Support to AUC in the launch of the Great Green Wall Initiative 10 year continental strategy at the Africa Soil Health and Fertiliser Summit	2	100%	100%
Technical support to farmer organizations to build capacity for climate negotiations, policy and advocacy	8	100%	94%
Total/average	**20**	**100%**	**96%**

One of the four AICCRA services surveyed for Theme 1 included questions regarding sharing or application of the knowledge acquired during the AICCRA capacity strengthening activity to train or inform other people. For this service, 75% indicated to do so with a total of 57 people trained or informed (of which 43% are estimated to be women) (Table 9).

Table 9 ToT effect of Theme 1 services

AICCRA SERVICE	TRAINING OR SHARING DONE	N OF PEOPLE TRAINED	% OF WOMEN TRAINED
Delivery of Module 6 (Long Term Strategy Planning and Decision Support Tools) as part of the AGNES Climate Leadership Programme	75%	57	43%

Demand-driven nature of the services

AICCRA services were also rated in terms of demand driven they are:

For the Delivery of Module 6 (Long Term Strategy Planning and Decision Support Tools) as part of the AGNES Climate Leadership Programme, service respondents split equally in rating the capacity strengthening activity with 50% indicating that it was offered by AICCRA and 50% as the provision of the above-mentioned service was in response to the request and needs of their organizations. For the technical support for the Africa Soil Health and Fertiliser Summit Action Plan and Nairobi Declaration and its linkages to the AU Climate Resilient Development Strategy with AUDA-NEPAD, 67% of service respondents indicated that the provision of the technical assistance was in response to a specific request or demand of their organizations to AICCRA. For the support to AUC in the launch of the Great Green Wall Initiative 10-year continental strategy at the Africa Soil Health and Fertiliser Summit, 100% of service respondents indicated their demand for the technical assistance was co-identified through AICCRA's engagement with their organizations. For the technical support to farmer organizations to build capacity for climate negotiations, policy and advocacy, 75% of service respondents indicated their demand was in response to the requests and needs of their organizations.

See Figure 16 for more details below.

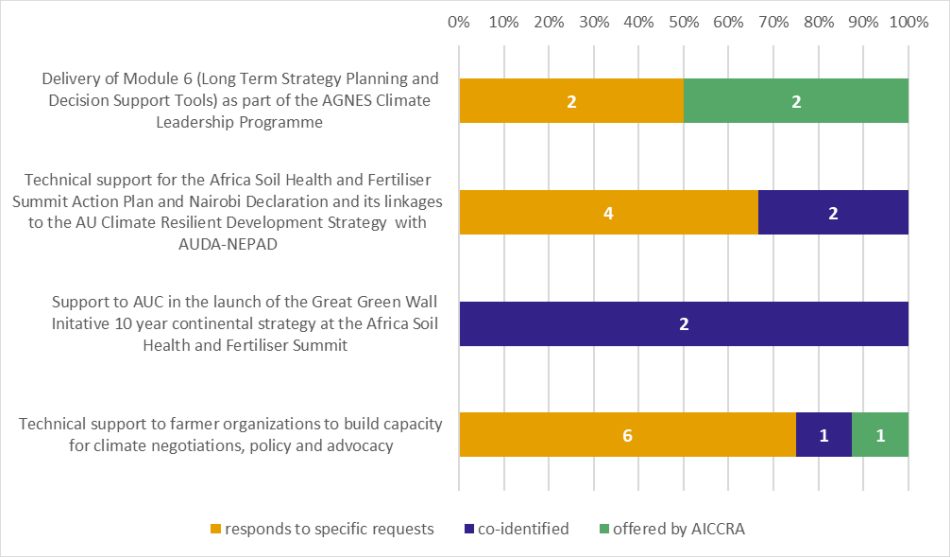

Figure 16. Count and percentage of respondents believing that the AICCRA services surveyed by Theme 1 were offered in response to specific requests, co-identified, or offered by AICCRA

Detailed results by service

Delivery of Module 6 (Long Term Strategy Planning and Decision Support Tools) as part of the AGNES Climate Leadership Programme

This service was co-developed with AICCRA Theme 4 cluster. All of the 4 respondents who said they participated in the Delivery of Module 6 (Long Term Strategy Planning and Decision Support Tools) as part of the AGNES Climate

Leadership Programme said that they used this service. Moreover, 75% of them said that they used the knowledge acquired to train or inform 57 people (of which 43% were estimated to be women). 50% of the respondents attended this capacity strengthening activity in 2024, while the other 50% had done so more than a year before.

Respondents said that they used the knowledge acquired during the capacity strengthening activity to:

- *Contribute to the development of a technical guide on the development and implementation of LT-LEDS in Africa (Dr. George Wamukoya, OGW);*
- *Apply foresight tools (visioning, scenario planning, pathway development, trade-offs) in a community project that addresses unpaid care work for women (Tino Chikwanha, AGNES);*
- *Present long-term strategies in workshops;*
- *Integrate what they've learned into their work at the nexus of science, policy and practice.*

Service respondents expressed a 99% score of satisfaction, with 100% satisfaction for criteria such as meeting their expectations, training content tailored to their needs, feedback mechanisms, training usefulness and alignment to their organizations' plans and activities. There were no specific improvement suggestions for the service. See Figure 17 below for more details on the satisfaction.

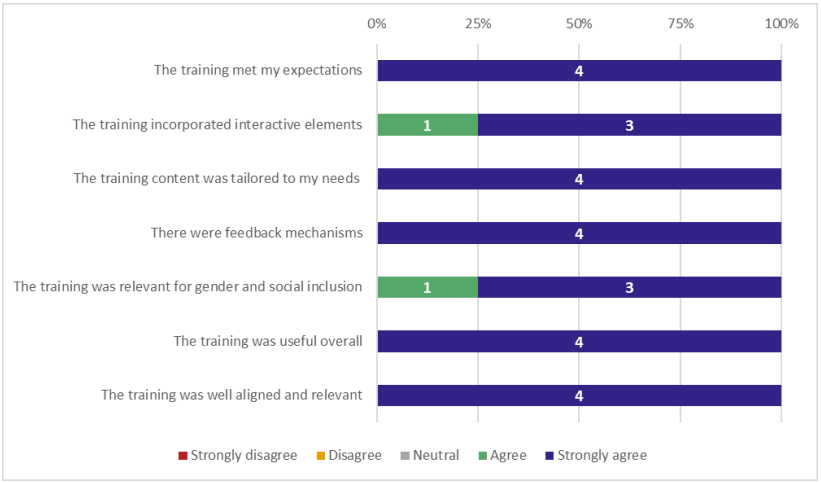

Figure 17. Satisfaction on the Delivery of Module 6 (Long Term Strategy Planning and Decision Support Tools) as part of the AGNES Climate Leadership Programme

Technical support for the Africa Soil Health and Fertilizer Summit Action Plan and Nairobi Declaration and its linkages to the AU Climate Resilient Development Strategy with AUDA-NEPAD

All of the 6 respondents who said they received technical support for the Africa Soil Health and Fertiliser Summit Action Plan and Nairobi Declaration and its linkages to the AU Climate Resilient Development Strategy with AUDA-NEPAD, said that they used this service.

Respondents said that they used the insights or analysis provided through the technical assistance to:

- *Engage in key events such as the Soil Health Summit, Agroecology Summit, and climate negotiations (Norbert Tuyishime, EAFF);*
- *Support the Climate Action Innovation Hub and the development of the AU Climate Change Strategy*
- *Identify intervention needs and ensure farmer inclusion in decision-making;*
- *Inform discussions at COP and shape internal programs and projects (Stephen Muchiri, EAFF CEO);*
- *Integrate climate change, women, and young farmers into 2025 planning;*
- *Raise awareness and prioritize soil health, strengthen stakeholder capacity, foster continental coordination, support soil information systems, and improve soil health monitoring (Manyewu Mutamba, AUDA-NEPAD).*

Service respondents expressed a 92% score of satisfaction, with usefulness (97%) and meeting their needs (93%) being the most satisfied criteria. There were no specific improvement suggestions for the service. See Figure 18 below for more details on the satisfaction.

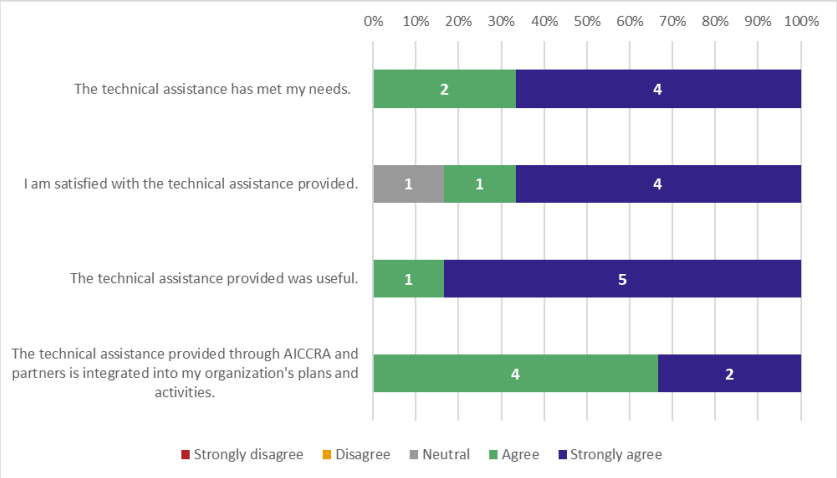

Figure 18. Satisfaction on the technical support for the Africa Soil Health and Fertiliser Summit Action Plan and Nairobi Declaration and its linkages to the AU Climate Resilient Development Strategy with AUDA-NEPAD

Support to AUC in the launch of the Great Green Wall Initiative 10 year continental strategy at the Africa Soil Health and Fertilizer Summit

Both respondents who said they received support to AUC in the launch of the Great Green Wall Initiative 10-year continental strategy at the Africa Soil Health and Fertiliser Summit, reported using this service.

Respondents said that the technical assistance provided contributed to:

- *Support organizational planning for the Summit (Norbert Tuyishime, EAFF);*
- *Facilitate workshop sessions for the development of the Great Green Wall strategy.*

Service respondents expressed a 100% score of satisfaction against all the criteria. There were no specific improvement suggestions for the service. See Figure 19 below for more details on the satisfaction.

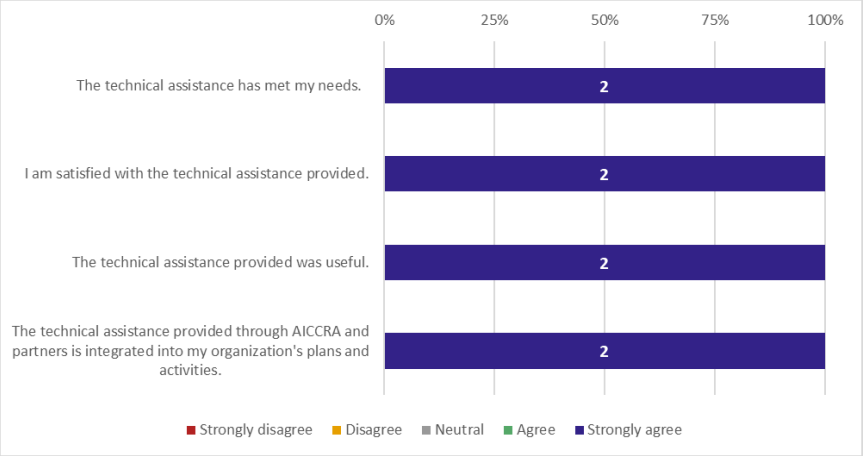

Figure 19: Satisfaction on support to AUC in the launch of the Great Green Wall Initiative 10 year continental strategy at the Africa Soil Health and Fertilizer Summit

Technical support to farmer organizations to build capacity for climate negotiations, policy and advocacy

All of the 8 respondents who said they received technical support to farmer organizations to build capacity for climate negotiations, policy and advocacy, said that they used this service.

Respondents said that they used the insights or analysis provided through the technical assistance to:

- *Engage in AGNES meetings and COP 29 (Norbert Tuyishime, EAFF);*
- *Serve as evidence to inform common African position (Dr. George Wamukoya, OGW)*
- *Draft a climate mitigation strategy and framework;*
- *Engage with different stakeholders to gather supporting evidence to influence policy reform (Tino Chikwanha, AGNES)*
- *Develop 3 annual road maps for the last 3 COPs, compile work on the adaptation agenda in Sharm El Sheikh decisions, organize consultations on national-level climate change positions and mobilize USD 700,000 for climate-related work (Stephen Muchiri, EAFF CEO)*
- *Use different decision support tools, such as the adaptation atlas, to obtain data*
- *Contribute to the 2025 planning process, focusing on deepening awareness, understanding trends, and strengthening technical submissions by AU member states within the UNFCCC process (Manyewu Mutamba, AUDA-NEPAD)*

Service respondents expressed a 94% score of satisfaction, with usefulness (95%) and integration (95%) being the criteria with the best satisfaction. There were no specific improvement suggestions for the service. See Figure 20 below for more details on the satisfaction.

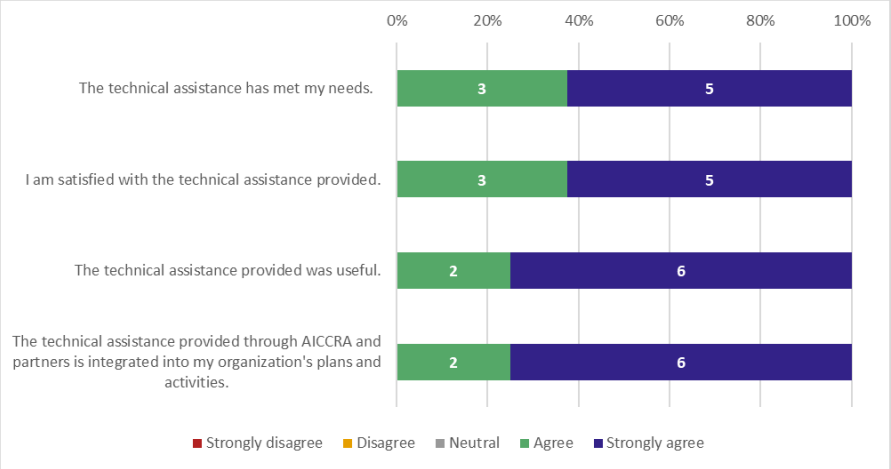

Figure 20: Satisfaction on technical support to farmer organizations to build capacity for climate negotiations, policy and advocacy

Take aways

Partnership feedback

- *The partnership has helped EAFF in preparing for climate change policy meetings, allowing the articulation of issues affecting farmers we represent (Norbert Tuyishime, EAFF);*
- *The partnership is mutually valued and helps address the science-policy-practice-nexus (Dr. George Wamukoya, OGW);*
- *Support has been timely and of high quality, despite challenges in organizational bureaucracy;*

Issues, improvement suggestions, recommendations for cluster Lead

Verbatim suggestions from partners regarding the partnership are indicated in Table 10, along with the cluster answer and actions taken in response to those comments and to the service-specific suggestions.

Table 10 Feedback for Theme 1

COMMENT	CLUSTER LEAD RESPONSE
[]..request for more funding since climate change is a big challenge and require combined effort for better and tangible results;	We are working to develop joint funding proposals that can bring more financial resources to our partners for addressing the challenges of climate change.
[]…we hope that we can finalize the documentation of the adaptation case studies that we are working together on and we also hope for more support in the coming year(s) especially on analytics, information, partnerships and resource mobilization (Stephen Muchiri, EAFF CEO)	The first report on adaptation case studies was finalized and is available now. We plan to build on this and generate more in 2025. We are also working with EAFF on joint funding proposals.

We wish this partnership to sustain and reach members of the federation as it was the case for INGABO	We will continue engaging with EAFF to interact directly with their member organizations like in the case of INGABO.

Significance of the results for AICCRA scaling pathways and work in Theme 1

The results indicate that providing technical support to continental and regional partners to help integrate CSA and CIS approaches into policies and strategies is one scaling pathway that AICCRA should continue pursuing. Building capacity of these institutions as well as farmer organizations helps in guiding planning, program design and investment decisions. The feedback from survey respondents will help shape the plans of Theme 1 heading into 2025 because we will put more emphasis on mobilizing resources to help with implementation of the existing plans and strategies. We will also continue to interact closely with our partners to understand their needs for technical support and broaden our networks to understand where we might be able to have a wider reach with some of our services.

Theme 2

Cluster overview

Theme 2 supports the scaling of bundled climate-smart agriculture (CSA) technologies, services, and practices across AICCRA's focus countries by strengthening partnerships, accelerating agribusiness innovation, and aligning investment pathways with science-based CSA/CIS solutions. The cluster operates across AICCRA's three components, Knowledge and Services, Strengthening Partnerships, and Validating Innovations, focusing on practical support to agribusinesses, SMEs, financial institutions, and public-sector actors.

To deliver these, Theme 2 works work with a rich mix of partners involving government partners such ministries of agriculture; Agricultural Transformation Institute, Ethiopia, subnational bodies etc., Basque Centre for Climate Change (BC3); private sector partners (ACRE Africa, Shalem Investment Ltd., DigiFarm (Safaricom), Mercy Corps Agrifin, Kuza Biashara, Usiku Games, Brighter Bridges etc.); investment partners (ClimateShot Investor Coalition, Global Impact Investment Network, GIZ Private Adaptation Investment Bootcamp etc.) and coordination partners (AUDA-NEPAD, African Group of Negotiators Expert Support, Pan African Climate Justice Alliance, Adaptation of African Agriculture Initiative). Through partnerships with these actors, Theme 2 delivers targeted support to strengthen SME capacity, gender inclusion, and climate resilience.

Activities include technical assistance for strengthening climate-smart agribusiness, proposal development for climate finance, CSA investment planning, and use of climate adaptation metrics to track performance. Theme 2 also pilots scalable business models through rural network agents, digital platforms, and agripreneurs, while working with financial institutions and impact investors to unlock financing for CSA/CIS adoption. Services offered by Theme 2 are demand-driven and characterized by strong and intentional engagement of women and youth.

In Theme 2, 5 AICCRA services were surveyed:

- Impact Measurement and Tracking for Agribusinesses in the Rwanda Accelerator Program. This capacity strengthening activity was delivered as part of the Rwanda Adaptation Accelerator Program. The training supported agribusinesses to integrate impact tracking tools, improve gender-responsive business operations, and apply climate adaptation metrics. Participants used the insights to strengthen their systems, inform decisions with data, and promote inclusive business practices.
- CGIAR Accelerators for Women Agri-Entrepreneurs. This initiative supported women-led agribusinesses to scale climate-smart agriculture solutions and enhance gender inclusion within their enterprises. Participants received technical guidance on CSA practices, business management, and peer learning. The accelerator also promoted adoption of food safety standards and inclusive workplace policies such as lactation spaces.
- Learning and Knowledge Exchange event for multi stakeholders on CSAIP implementation. This event convened public and private actors to exchange knowledge and experiences on CSAIP rollout and integration. The activity contributed to implementation in Kenya and Ethiopia, informed county-level planning, and facilitated training of extension staff and local farmers on CSA techniques and gender-responsive approaches.

- Training on developing bankable CSA related proposals at subnational level. This training supported local government officials, development actors, and SMEs to develop investment-ready CSA proposals. It contributed to the revision of county climate action plans, integration of gender-responsive solutions, and mobilization of finance through stronger proposal design and alignment with national and donor priorities.
- Technical assistance provided to farmers, ecosystem actors and value chain participants on identifying and managing climate risks through various CSA practices. The cluster delivered tailored technical assistance to partners across multiple countries to support risk identification, planning, and CSA implementation. Participants applied the support to strengthen early warning systems, improve farm-level decision-making, and enhance resilience in production systems using tools such as insurance, digital platforms, and climate data.
- Theme 2 co-led the Ghana Scaling Week with the Ghana cluster. For findings on this service, please refer to the Ghana section of the report.

The survey was sent to 27 partners, of which 24 responded, for an 89% response rate.

Theme 2 respondents' demographics

58% of the respondents were male, 42% were female. Below, a gender disaggregation of different age groups:

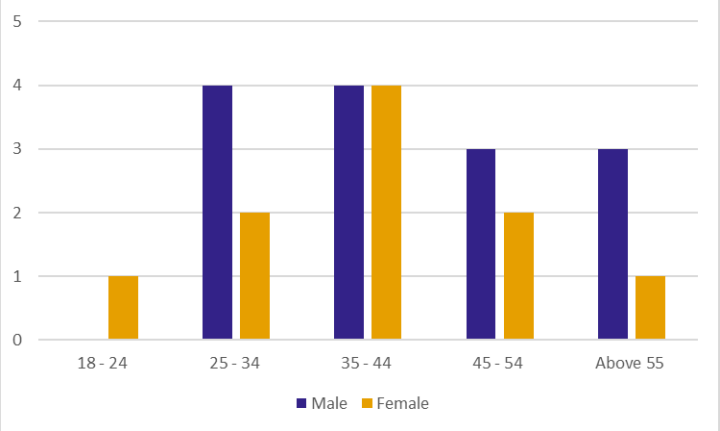

Figure 21: Theme 2 - Age and gender of the respondents

Theme 2 Respondents' affiliation

Respondents were affiliated with 23 different partner organizations, with AgroEnable Ltd being the organization with 2 respondents (Table 11).

Table 11 Theme 2 partner organizations

PARTNER ORGANIZATION	N OF RESPONDENTS
AgroEnable Ltd	2
Acre Africa, Agribusiness for African Markets, B.G.K.A. Green Company Ltd, Bana bags, County Government of Siaya, Golden Insect Ltd, HIHSA	1 each

Ltd, IHUMURE Center, MakoBu Enterpreises PLC, Ministry of Agriculture (Ethiopia), Ministry of Agriculture (Kenya), Ministry of Agriculture (Zambia), Mubuga Bio-Coffees, Nyota Limited, Nyurwa Chicken, Prodev Kayonza Ltd, Sand to Green, Shalem Investment Ltd, Spiderbit Ltd, Ubuntu Women Farmers Ltd, Yalla Yalla Group, Yellow Start Produce & Food Processors	

Theme 2 services and their use

On average, the five services surveyed by Theme 2 were used by 83% of the respondents, which expressed an average overall satisfaction of 95% (Table 12). This score includes multiple dimensions of satisfaction such as usefulness, relevance and alignment to one's organization, needs and expectations being met, tailoring of content to needs, relevance for gender and social inclusion, incorporation of interactive elements and presence of feedback mechanisms.

Table 12 Use and satisfaction of Theme 2 services

AICCRA SERVICE	N OF RESPONSES	USE	OVERALL SATISFACTION
Impact Measurement and Tracking for Agribusinesses in the Rwanda Accelerator Program	12	83%	93%
CGIAR Accelerators for Women Agri-Entrepreneurs	5	100%	89%
Learning and Knowledge Exchange event for multistakeholders on CSAIP implementation	9	78%	96%
Training on developing bankable CSA related proposals at subnational level	7	86%	98%
Technical assistance provided to farmers, ecosystem actors and value chain participants on identifying and managing climate risks through various CSA practices.	17	71%	92%
Total/average	**50**	**83%**	**95%**

Four of the five AICCRA services surveyed for Theme 2 included questions regarding sharing or application of the knowledge acquired during the AICCRA capacity strengthening activities to train or inform other people. An average of 52% of respondents from these 4 services indicated to do so with a total of 4024 people trained or informed (of which 42% are estimated to be women).

Table 13 ToT effect of Theme 2 services

AICCRA SERVICE	TRAINING OR SHARING DONE	N OF PEOPLE TRAINED	% OF WOMEN TRAINED
Impact Measurement and Tracking for Agribusinesses in the Rwanda Accelerator Program	33%	180	60%
CGIAR Accelerators for Women Agri-Entrepreneurs	60%	1743	29%
Learning and Knowledge Exchange event for multi-stakeholders on CSAIP implementation	56%	1010	39%
Training on developing bankable CSA related proposals at subnational level	57%	1091	38%
Total/average	**52%**	**4024**	**42%**

Demand-driven nature of the services

AICCRA services were also rated in terms of how demand driven they are:

For the Impact Measurement and Tracking for Agribusinesses in the Rwanda Accelerator program, 33% of service respondents indicated the provision of the service was in response to the request and needs of their organizations, 33% indicated that their demand was co-identified through AICCRA's engagement with their organizations and the remaining 25% that the service was offered by AICCRA. For the CGIAR Accelerators for Women Agri-Entrepreneurs, 40% of the service respondents indicated that their demand was co-identified through AICCRA's engagement with their organizations. For the Learning and Knowledge Exchange event for multi-stakeholders on CSAIP implementation, more than 44%of the service respondents indicated that the provision of the service was in response to the request and needs of their organizations. For the training on developing bankable CSA related proposals at subnational level, 57% of service respondents indicated that their demand was in response to the request and needs of their organizations. For the technical assistance provided to farmers, ecosystem actors and value chain participants on identifying and managing climate risks through various CSA practices, almost 53% of the service respondents indicated their demand was co-identified through AICCRA's engagement with their organizations.

See Figure 22 for more details below.

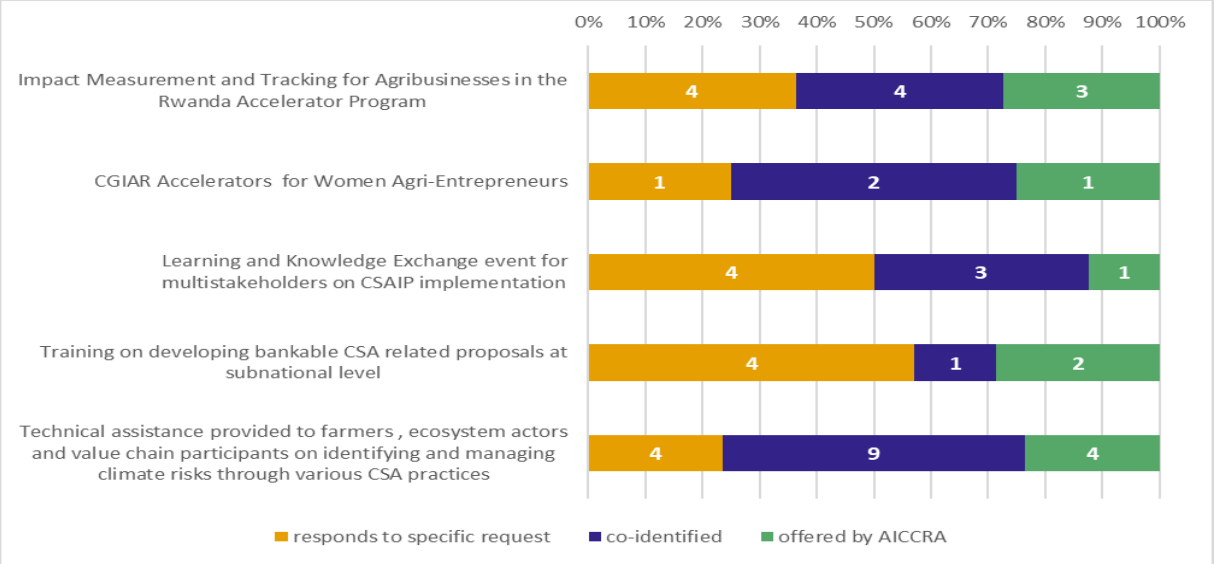

Figure 22. Count and percentage of respondents believing that the AICCRA services surveyed by Theme 2 were offered in response to specific requests, co-identified, or offered by AICCRA

Detailed results by service

Impact measurement and tracking for agribusinesses in the Rwanda accelerator program

The impact measurement and tracking for agribusinesses in the Rwanda accelerator program was used by 83% of the service respondents (10 of 12). 33% of them said that they used the knowledge acquired to train or inform 180 people (of which 60% were estimated to be women). All the service respondents (12) attended this capacity strengthening activity in the past 6 months.

Respondents said that they used the knowledge acquired during the capacity strengthening activity to:

- *Strengthen company policies;*
- *Improve HR Policies and M&E tools (Isaac, HIHSA Ltd);*
- *Increase female participation in beekeeping training and business (Martine Uwase, AgroEnable Ltd);*
- *Integrate climate adaptation in greenhouses;*
- *Introduce drought-resistant crop varieties to farmers in my community, leading to a 20% yield improvement (Teta Gisele, Bana bags);*
- *Revise hiring strategies, promoting gender inclusion in recruitment (Emmanuel Rurazi, Mubuga Bio-Coffees);*
- *Improve decision-making using data to reduce climate effects on my business (Benoit Abijuru, Ihumure Center);*
- *Our management and production meetings (Fidele Nshimiyimana, Prodev Kayonza Ltd).*

Service respondents expressed a 93% score of satisfaction, with 97% satisfaction for the Gender and Social Inclusion criteria. There were no specific improvement suggestions for the service. See Figure 23 below for more details on the satisfaction.

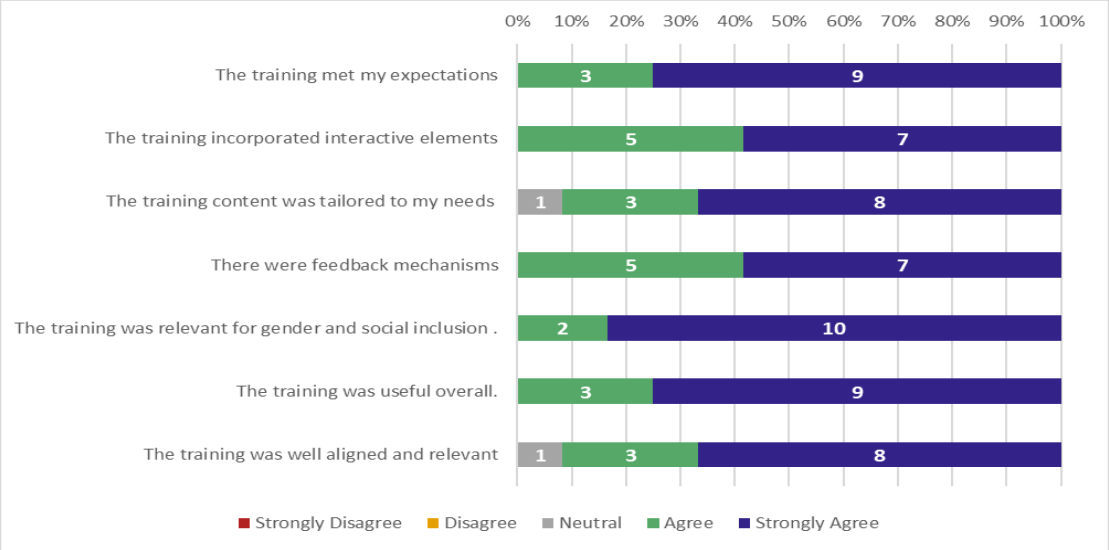

Figure 23. Satisfaction on the Impact Measurement and Tracking for Agribusinesses training in the Rwanda Accelerator Program

CGIAR accelerators for women agri-entrepreneurs

All the 5 respondents who said they were familiar with the CGIAR accelerators for women agri-entrepreneurs used the service. Three of them (60%) said that they used the knowledge acquired to train or inform more than 1700 people (of which 29% were estimated to be women). All of the service respondents (5) attended this capacity strengthening activity in the past 6 months.

Respondents said that they used the knowledge acquired during the capacity strengthening activity to:

- *Train staff to improve their knowledge of products, enhancing the working space;*
- *Support farmers;*
- *Adopt climate-smart agriculture practices, such as crop diversification with drought-resistant varieties, improving food security and inspiring other cooperative to adopt similar practices (Teta Gisele, Bana bags);*
- *Improve data capture of production indicators, increase awareness of food safety and focus on providing a gender inclusive workplace, including plans for a lactation room (Florence Mogere, Nyota Limited).*

Service respondents expressed 89% satisfaction, with 92% satisfaction reached for Gender and Social Inclusion and usefulness criteria. There were no specific improvement suggestions for the service. See Figure 24 below for more details on the satisfaction.

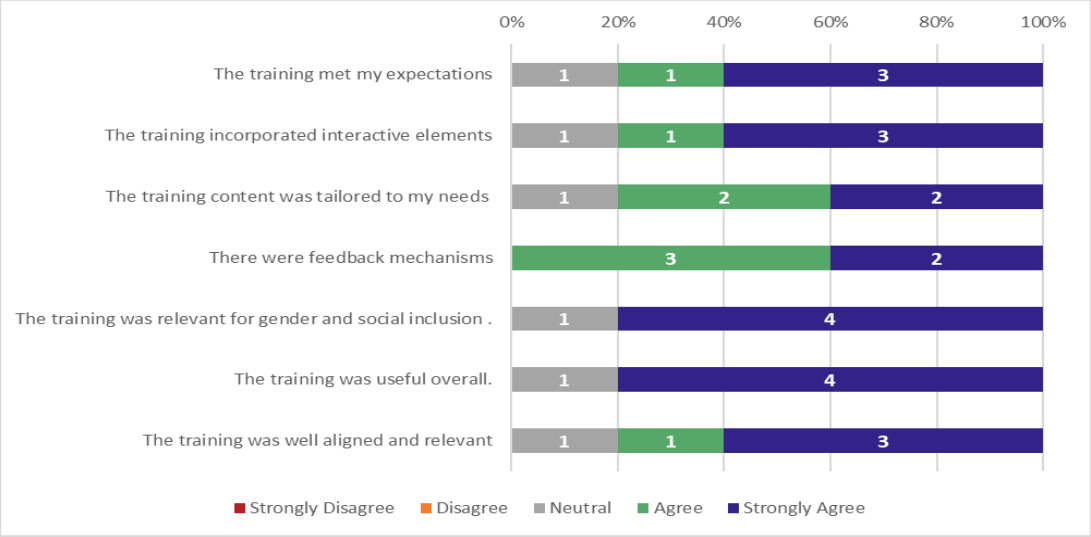

Figure 24. Satisfaction on the CGIAR accelerators for women agri-entrepreneurs

Learning and knowledge exchange event for multi-stakeholders on csaip implementation

78% of the respondents who said they were familiar with the learning and knowledge exchange event for multi-stakeholders on CSAIP implementation used the service. Notably, 56% of them said that they used the knowledge acquired to train or inform over 1000 people (of which 39% were estimated to be women). 89% of service respondents (8) attended this capacity strengthening activity in the past 6 months, while one respondent attended more than a year ago.

The learning and knowledge exchange event for multi-stakeholders on CSAIP implementation led to:

- *Conducting training of trainers for extensions staff on CSA technologies prioritized in the CSAIP;*
- *Implementation in agricultural projects;*
- *Training 50 local farmers on composting techniques to enhance soil fertility, reducing chemical fertilizer use and promoting sustainability, with a gender-inclusive approach (45% male, 55% female) (Teta Gisele, Bana bags)*
- *Application of the skills acquired in the pilot roll out of the CSAIP at county level (Lydia Kimani, Agribusiness for African Markets)*
- *Leveraging Kenya's CSA Forum experience to improve Ethiopia's emerging CSA forum;*
- *Highlighting gender inclusion in presentations, including tracking the proportion of meeting time used by women in a World Bank visit (Gabriel Oduong, County Government of Siaya);*
- *Applying CSA knowledge in farm planning meetings (Fidele Nshimiyimana, Prodev Kayonza Ltd)*

Service respondents expressed an overall satisfaction score of 96%, with 98% satisfaction specifically in terms of expectations, interactivity, usefulness and alignment.

One improvement suggestion highlighted how crucial is continuing to engage a broad range of stakeholders, both governmental and non-governmental, in Ethiopia

to build consensus on scaling CSA. This would help harmonize communication to smallholder farmers (Seble Makonnen, MakoBu Enterprises *PLC*). See Figure 25 below for more details on the satisfaction.

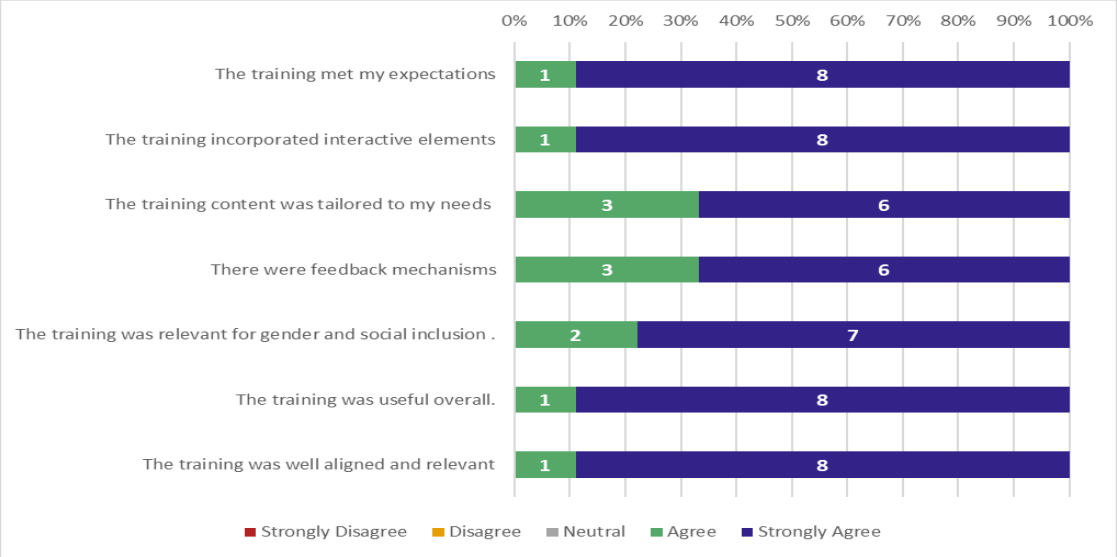

Figure 25: Satisfaction on the Learning and Knowledge Exchange event for multi-stakeholders on CSAIP implementation

Training on developing bankable CSA related proposals at subnational level

86% of the respondents who said they were familiar with the training on developing bankable CSA related proposals at subnational level used the service. 57% of them said that they used the knowledge acquired to train or inform 1091 people (of which 38% were estimated to be women). 71% of the service respondents (5) attended this capacity strengthening activity in the past 6 months, one respondent attended the training between 6 months and a year ago, and another one more than a year ago.

The training on developing bankable CSA related proposals at subnational level led to:

- *Integration of learned skills into projects;*
- *Implementation at the sub-national level (Lydia Kimani, Agribusiness for African Markets);*
- *Development of a concept note for scaling-up gender responsive transformative climate actions at community level;*
- *Review of the Siaya County Climate Change Action Plan, with the incorporation of bankability aspects of proposals such as the integration of borehole drilling for water provision with fishponds establishment for increased agricultural productivity (Gabriel Oduong, County Government of Siaya).*

Service respondents expressed 98% satisfaction, with 100% satisfaction with regards to gender and social inclusion and alignment. There was an improvement suggestion in relation to the addition of more training sessions and an increase in the number of people trained (Fidele Nshimiyimana, Prodev Kayonza Ltd). See Figure 26 below for more details on the satisfaction.

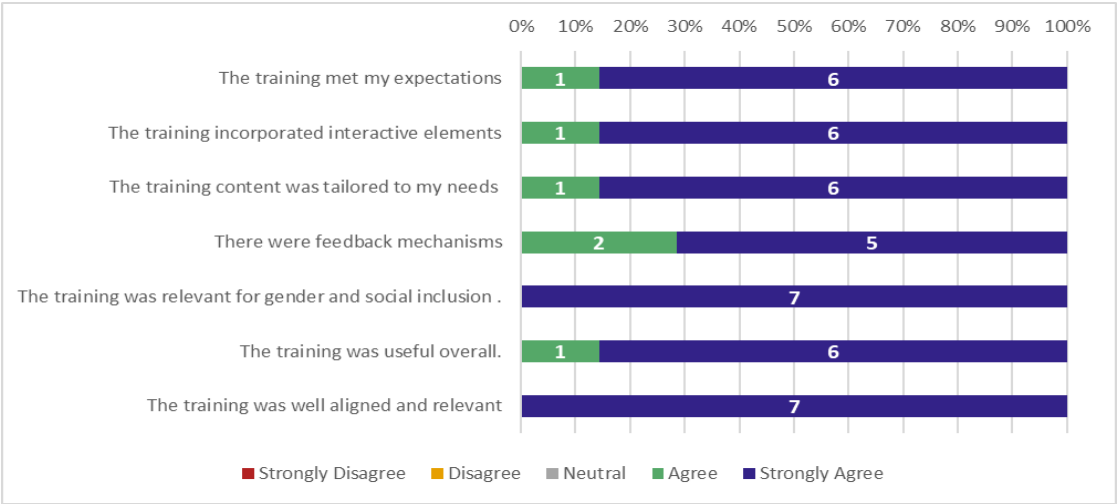

Figure 26: Satisfaction on the training on developing bankable CSA related proposals at subnational level

Technical assistance provided to farmers, ecosystem actors and value chain participants on identifying and managing climate risks through various CSA practices

71% of the respondents who said they received technical assistance provided to farmers, ecosystem actors and value chain participants on identifying and managing climate risks through various CSA practices, said that they used this service.

Respondents said that they used the insights or analysis provided through the technical assistance to:

- *Develop a CSA roadmap for Zambia;*
- *Identify vulnerable areas in the communities with the use of the flood risk modeling tools. This enabled the collaboration with local authorities to create a flood preparedness plan, which included strategic placement of early warning signs and evacuation routes. This proactive approach reduced property damage and loss of life (Teta Gisele, Bana bags);*
- *Promote the Hass Avocado farming project in East Ugenya Ward (Gabriel Oduong, County Government of Siaya);*
- *Plan GAP trainings for smallholder farmers (Florence Mogere, Nyota Limited);*
- *Make decisions for coffee farms during the rainy season (Emmanuel Rurazi, Mubuga Bio-Coffees);*
- *Enhance insights when designing programmes for specific counties (Patrick Kibaya, Ministry of Agriculture Kenya);*
- *Train group leaders as trainers of trainers on CSA practices, cascading knowledge to more farmers and improving post-harvest management of grain, especially sorghum (Ruth Kinoti, Shalem Investment Ltd);*
- *Use data and climate and weather information to minimize risks (Benoit Abijuru, Ihumure Center);*
- *Optimize the bio-digestion process for kidney beans, ensuring efficient water use during soaking and air-drying stages (Florence Olga Okot, Yellow Star Produce & Food Processors);*

- *Inform partnerships with women-led farmer groups in Northern Uganda, ensuring a stable supply of agro-produce despite seasonal variability (Florence Olga Okot, Yellow Star Produce & Food Processors);*
- *Use solar-powered drying techniques, reducing reliance on non-renewable energy sources and improving sustainability in production processes (Florence Olga Okot, Yellow Star Produce & Food Processors);*
- *Customize insurance solutions and suit smallholder farmers' specific needs;*
- *Apply the insights or analysis in the organic farming planning (Fidele Nshimiyimana, Prodev Kayonza Ltd).*

Service respondents expressed a 92% score of satisfaction, especially with regards to integration into respondent organizations' plans and activities, and technical assistance satisfaction (both 93%).

Some people highlighted that they did not use the insights of the technical assistance due to timeliness or because they will do it soon (Isaac, HIHSA Ltd). See Figure 27 for more details on satisfaction.

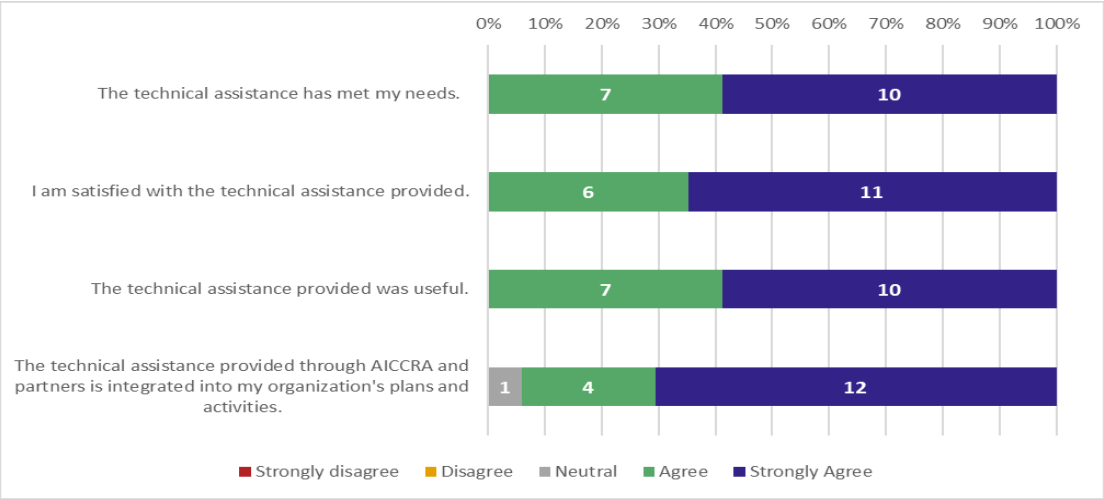

Figure 27: Satisfaction on the technical assistance provided to farmers, ecosystem actors and value chain participants on identifying and managing climate risks through various CSA practices

Take aways

Partnership feedback

The partnership with AICCRA has been widely appreciated, with several partners highlighting the positive impact of the services provided, including:

- *Gratitude for the training received, noting that it increased their skills and knowledge, especially in climate adaptation strategies, gender inclusion in agribusiness, and climate-smart agriculture;*
- *Strong appreciation for the collaborative nature of the partnership, thanks to the exchange of knowledge, advice, and support in overcoming local challenges;*
- *Empowerment to provide more sustainable solutions to the communities, enhancing production efficiency, improving knowledge and boosting resilience;*

Issues, improvement suggestions, recommendations for cluster Lead

Verbatim suggestions from partners regarding the partnership are indicated in Table 14, along with the cluster answer and actions taken in response to those comments and to the service-specific suggestions.

Table 14 Feedback for Theme 2

COMMENT	CLUSTER LEAD RESPONSE
What are the next steps? Unfortunately, this was not clearly communicated, leaving us uncertain about how to proceed (Florence Mogere, Nyota Limited);	We will follow up with additional resources and learning opportunities expanding the content of the technical assistance delivered through the accelerator.
There is a need of deep trainings on gender, especially women inclusion in agribusiness, as it is a new concept in Rwanda agricultural sector and Rwanda land ownership culture (Emmanuel Rurazi)	We continued the one-on-one coaching with them on how to integrate Gender in their businesses through the Reach Benefit Empower Transform framework and recently worked with them to develop individual gender action plans for their businesses.
Desire for more financial support for specific projects, such as bees protection	While this is a valid recommendation, it is beyond the scope of AICCRA activities.
I kindly request the AICCRA team to visit the field and provide tailored advice based on their observations of the area and its specific conditions [] (Benoit Abijuru, Ihumure Center)	This business is in Kigali, Rwanda outside of the scope of AICCRA operations so we cannot go in the field. We conducted the trainings virtually to create awareness on Climate Change CSA and CIS and build their capacity on mitigation and adaptation measures
Comments and suggestions on Developing bankable CSA related proposal at subnational level	The T2 team received this feedback post-training evaluation, and we will continue with more training sessions in close collaboration with the national and sub national government, assessing the needs and priorities that are in line with our activities.

Comments and suggestions on Learning and Knowledge Exchange event for multi-stakeholders on CSAIP implementation	We take note that the MSPs are expanding on their membership for instance in Ethiopia they are planning to roll out registrations to allow more stakeholders. AICCRA will still extend support in the processes based on country needs.

Significance of the results for AICCRA scaling pathways and work in Theme 2

The results reinforce Theme 2's role in scaling CSA/CIS innovations by strengthening agribusiness capacity, enabling investment readiness, and driving demand-responsive service delivery. The results demonstrate that Theme 2 is effectively reaching diverse actors, with 83% average service use and 95% satisfaction across five services. Respondents widely applied insights in planning, policy, and business operations, validating the relevance of the cluster's technical support. The results confirm that scaling CSA/CIS innovations requires investing in local capacity, co-creating solutions with partners, and linking technical support to financing. The cluster will continue to prioritize operationalizing the scaling framework, supporting bankable CSA proposals, and improving communication of next steps with partners. With over 4,000 people reached through knowledge sharing (42% of them women), the cluster will build on this momentum to deepen gender-responsive delivery and expand its reach.

Theme 3

Cluster overview

Theme 3 works on empowering women, youth and other minority groups (social inclusion). Women and Youth are importance agents of innovation when it comes to scaling of climate-smart technologies and information services through AICCRA activities. Gender and Social Inclusion is cross-cutting, therefore, works across all the Clusters by working in collaboration with a diverse range of partners that constitute Regional, National and community-based institutions such as CORAF, CCARDESA, FSRP and AGNES.

Activities under Theme 3 are delivered through gender and social inclusion focal point officers who are based in all the 6 AICCRA focus countries. Furthermore, Theme 3 works with Women-led organizations and or groups, promoting access to and use of bundled CIS and CSA technologies, that enhance the livelihoods of women and the youth and promoting women's participation in decision making with a focus on technologies that they have control over.

In Theme 3, two AICCRA services were surveyed:

- Gender and Climate Hotspot Mapping in Botswana, Kenya and Uganda with AGNES Hotspot mapping, a tool for spatial priority setting and targeting in policy/program design and implementation that combines existing quantitative data with qualitative research methods to identify and map "hotspots" of climate risk combined with gender equality. Intended for decision makers to plan programs and action. Theme 3 in collaboration with AGNES applied the tool in Botswana, Kenya and Uganda to identify where climate change impacts hit women the hardest.

- Webinars and Community of Practice with CORAF and FSRP gender focal points. In order to enhance productivity and resilience of women and other underserved people in agriculture value chains amidst the effects of climate change in line with United Nations targets of zero hunger (SDG 2), gender equality (SDG 5) and climate action (SDG 13), AICCRA, and the Food Systems Resilient Program (FSRP) through CORAF delivered a joint Webinar, where implementing countries for FSRP and AICCRA were sharing experiences by presenting success stories on the outcomes of mainstreaming gender while considering the minority groups through social inclusion. The outcome of this webinar was a report.

The survey was sent to 14 partners, of which 6 responded, for a 43% response rate.

Theme 3 respondents' demographics

Respondents split equally between male and female, with 50% each. No respondents were younger than 25 years old. Below, a gender disaggregation of different age groups:

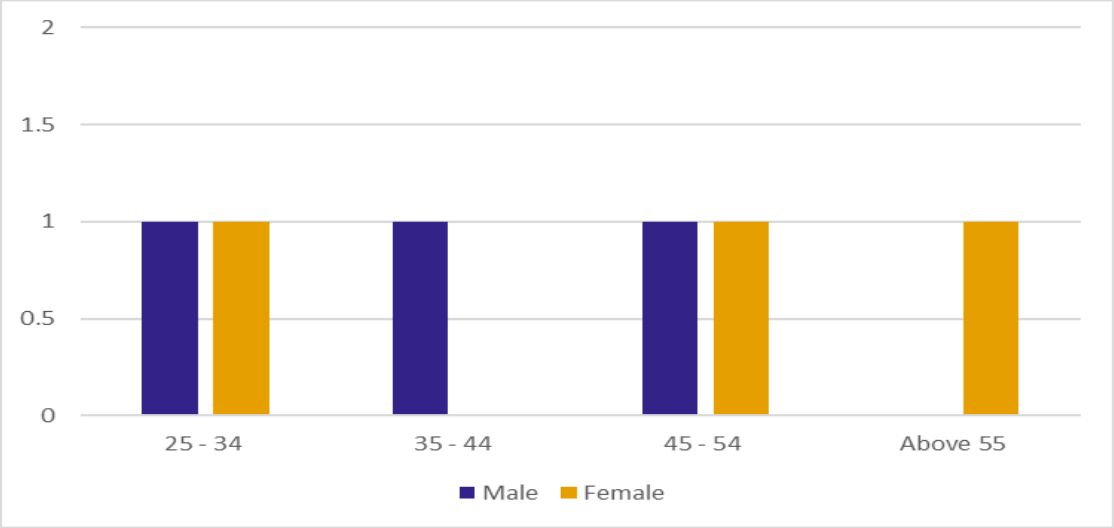

Figure 28: Theme 3 - Age and gender of the respondents

Theme 3 respondents' affiliation

Respondents were affiliated with 2 partner organizations, AGNES (4 individuals) and CORAF (2).

Table 15 Theme 3 partner organizations

PARTNER ORGANIZATION	N OF RESPONDENTS
AGNES	4
CORAF	2

Theme 3 services and their use

On average, the two services surveyed by Theme 3 were used by 88% of the respondents, which expressed an average overall satisfaction of 91%. This score encompasses multiple dimensions of satisfaction such as usefulness, relevance and alignment to one's organization, needs and expectations being met, tailoring of content to needs, relevance for gender and social inclusion, incorporation of interactive elements and presence of feedback mechanisms.

Table 16 Use and Satisfaction of Theme 3 services

AICCRA SERVICE	N OF RESPONSES	USE	OVERALL SATISFACTION
Gender and Climate Hotspot Mapping in Botswana, Kenya and Uganda with AGNES	4	75%	92%

Webinars and Community of Practice with CORAF and FSRP gender focal points	2	100%	90%
Total/average	**6**	**88%**	**91%**

One of the two AICCRA services surveyed for Theme 3 included questions regarding sharing of the AICCRA tool/technology with other people. For this service, 50% indicated to do so, but information on how many people were trained was not provided.

Table 17 ToT effect of Theme 3 services

AICCRA SERVICE	TRAINING OR SHARING DONE	N OF PEOPLE TRAINED	% OF WOMEN TRAINED
Gender and Climate Hotspot Mapping in Botswana, Kenya and Uganda with AGNES	50%	Not available	Not available

Demand-driven nature of the services

AICCRA services were also rated in terms of how demand driven they are:

For the Gender and Climate Hotspot Mapping in Botswana, Kenya and Uganda with AGNES, 50% of service respondents indicated their demand was co-identified through AICCRA's engagement with their organization, for one respondent was in response to the request and needs of their organization, and for another respondent it was offered by AICCRA. For the Webinars and Community of Practice with CORAF and FSRP gender focal points, the two respondents split equally between a demand in response to the request of their organization and an offer by AICCRA. See Figure 29 for more details below.

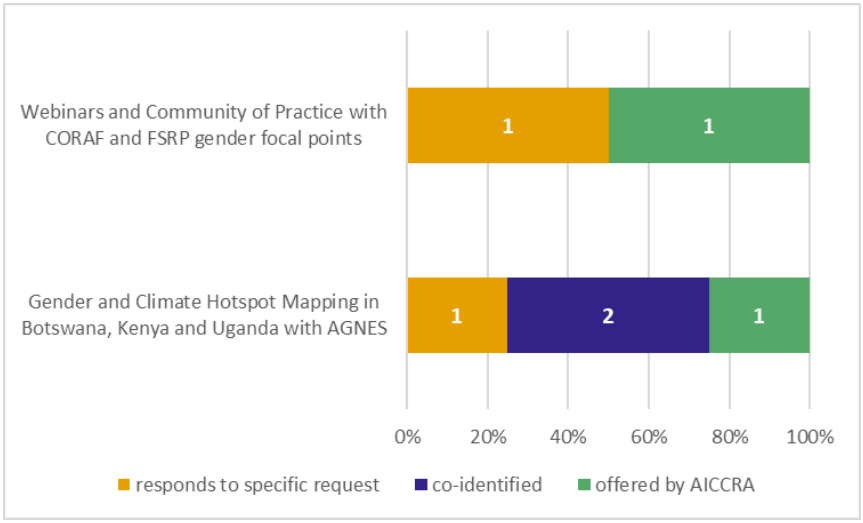

Figure 29: Count and percentage of respondents believing that the AICCRA services surveyed by Theme 3 were offered in response to specific requests, co-identified, or offered by AICCRA

Detailed results by service

Gender and climate hotspot mapping in Botswana, Kenya and Uganda

75% of the service respondents who said they were familiar with the Gender and Climate Hotspot Mapping in Botswana, Kenya and Uganda, said that they used this service. Moreover, 50% of them said that they shared the tool with other people, without specifying any number.

Respondents said that they used the knowledge acquired during the capacity strengthening activity to:

- *Guide the team in the field, during the implementation of the study;*
- *Reshape and program policy development with gender considerations, including better planning and budgeting;*
- *Inform the development of the National Gender and Climate Change Action Plan to promote integration of gender into climate change actions across all the sectors (Baldwin Anyiga, AGNES)*

Service respondents expressed a 92% score of overall satisfaction, with 95% against the tool satisfaction criteria. However, a respondent did not use the tool due to "limitations in terms of awareness among different government Ministries, Departments and Agencies (MDAs) which are best positioned to utilize the tool (*Hillary Byakwaga, AGNES*). See Figure 30 below for more details on the satisfaction.

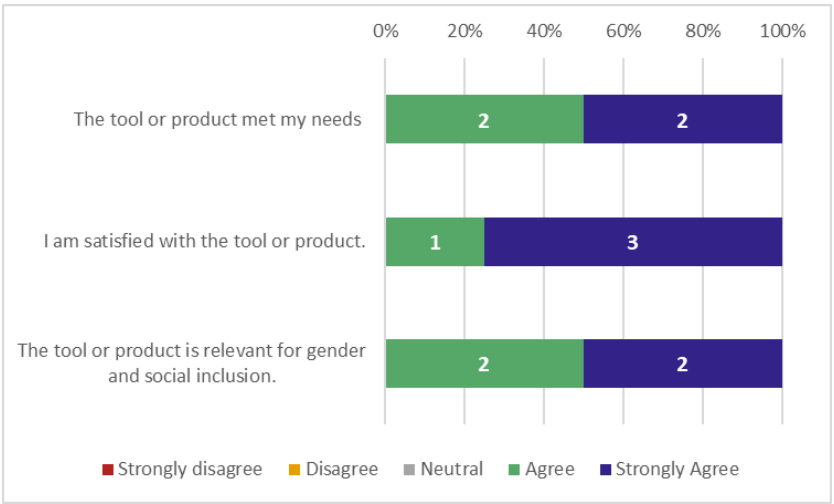

Figure 30: Satisfaction on the Gender and Climate Hotspot Mapping in Botswana, Kenya and Uganda

Several challenges in the use of the tool or suggestions for improvement were reported:

- *When there is no data, it's difficult to use the tool.*
- *Collection of prompt data is still a challenge to inform periodic update of hotspot areas in Kenya (Baldwin Anyiga, AGNES)*

Webinars and Community of Practice with CORAF and FSRP gender focal points

Both two respondents who said they received technical assistance for Webinars and Community of Practice with CORAF and FSRP gender focal points, said that they used this service.

One of the respondents said that they used the insights or analysis provided through the technical assistance to:

- *Target women for sustainable development, through gender budgeting and gender- and nutrition-smart climate interventions (Finda Bandor Joseph, CORAF);*

Service respondents expressed a 90% score of satisfaction, equally distributed among needs, tool satisfaction, usefulness and integration criteria. There were no specific improvement suggestions for the service. See Figure 31 below for more details on the satisfaction.

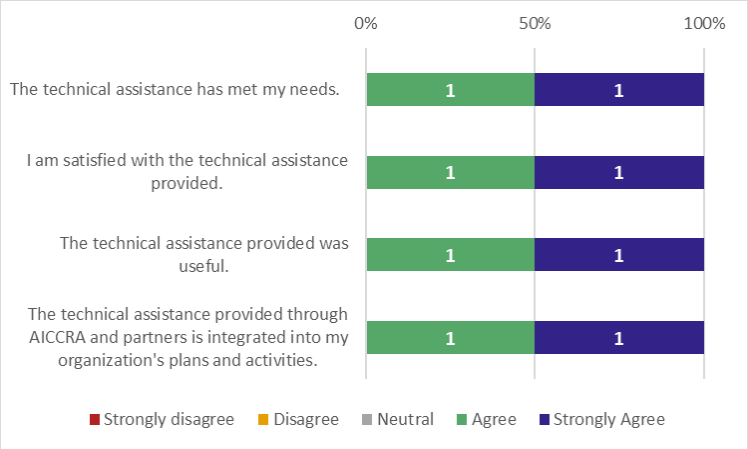

Figure 31: Satisfaction on the technical assistance for Webinars and Community of Practice with CORAF and FSRP gender focal points

Take aways

Partnership feedback

The partnership with AICCRA has been widely appreciated, especially in the development and implementation of tools and strategies to support gender and climate action. The partnership led to:

- *Facilitation for the development of a critical tool to support better planning for gender and climate activities (Hillary Byakwaga, AGNES)*
- *Support gender mainstreaming in climate actions within the State Department for Gender and Affirmative Action (Baldwin Anyiga, AGNES)*

Issues, improvement suggestions, recommendations for cluster Lead

Verbatim suggestions from partners regarding the partnership are indicated in Table 18, along with the cluster answer and actions taken in response to those comments and to the service-specific suggestions.

Table 18 Feedback for Theme 3 cluster

Comment	**Cluster Lead Response**
There should be a follow up program on ensuring that the different relevant MDAs receive the necessary awareness and capacity to effectively utilize the tool (Hillary Byakwaga, AGNES)	Agreed, this will be integrated into AICCRA III planning.
Thinka about working in Sierra Leone, where climate change has had sever impacts, with massive flooding over weeks on rice farms of vulnerable groups: women, youths and the aged. (Finda Bandor Joseph, CORAF)	AICCRA's collaboration with FSRP is helping spill over countries that are directly reached by FSRP such as Sierra Leone from Gendered Climate smart innovations
Suggestions and comments listed in the section above for Gender and Climate Hotspot Mapping in Botswana, Kenya and Uganda with AGNES	This has been a well-received tool by partners, and the methodology that has evolved with both quantitative and qualitative aspects provide in-depth information in the national context. The translation of the hotspot mapping into policy and investment decisions at the national level requires some further support. AICCRA should discuss this further with AGNES for AICCRA III as partnerships are key to this.

Significance of the results for AICCRA scaling pathways and work in Theme 3

Gender and social inclusion under AICCRA are crucial elements of the project and very much linked to scaling pathways. This is done by ensuring that scaling-out efforts are equitable and inclusive, benefiting all individuals, including those from marginalized groups. By addressing gender and social disparities within the scaling pathways the results are impactful to all, including women, youth and the marginalized communities. Lessons learnt while implementing AICCRA have shown that taking into consideration gender and social inclusion in scaling pathways such as Agricultural extension system ensures that climate information services and climate related innovations reach diverse farmers, including those from marginalized groups.

Theme 4

Cluster overview

Climate information services (CIS) form the backbone of climate-smart agriculture. Whether it is a farmer needing to make key agricultural decisions for a season, a humanitarian worker who needs to anticipate and respond to climate extremes like droughts and floods, or a policymaker who must plan and arrange for agricultural inputs and investments, climate information services are a crucial part of building resilience.

AICCRA's thematic team for CIS (Theme 4) works across all AICCRA focus countries and regions connecting those who generate climate data and information products including Africa's national and regional meteorological centers, those who tailor it such as national and local research institutes, and those who are on the frontlines interfacing with agricultural communities to advance the tools, capacity building approaches, and policies that meet the needs of those whom they are intended to serve.

Some of key outcomes have been capacitating meteorological services to harness real-time weather data for decision-making in agriculture, spearheading new foundational curricula for higher education and agricultural extension to manage climate risk, and bringing to partners and data together advance innovative AgData Hubs, CIS frameworks, and grassroots approaches underpinning climate services.

Strategic partnerships for impact include national meteorological agencies and regional climate services centres such as ICPAC and AGRHYMET, continental leaders in education such as RUFORUM, national research institutes and ministries of agriculture, development partners such as the World Meteorological Organization (WMO) and Food and Agriculture Organization (FAO) of the United Nations, grassroots organizations and farmers' and pastoral associations, private sector organizations, and communities themselves.

In Theme 4, three AICCRA services were surveyed:

- Climate Basics curriculum (RUFORUM):The 6-module Climate Basics curriculum introduces the fundamentals of climate science, including distinctions between weather and climate, physical processes, observational data, climate variability, and forecasting methods. Designed as a foundational course for the RUFORUM regional e-Learning Platform, it aims to enhance understanding and application of Climate Information Services across African institutions.

- Participatory Scenario Planning Engagement: Participatory Scenario Planning (PSP) engagement refers to enhanced PSP processes by AICCRA via a coordination meeting with more than 10 PSP implementers in Kenya establishing a national working group and aligning implementation standards, and the PSP workshops themselves which were supported in nine counties for climate-informed planning, which built local capacity, integrated indigenous knowledge, and reached over 328,000 people directly, improving access to actionable, inclusive climate information services.

- Crop monitoring training: The Crop Monitor training in Zambia focused on building national capacity in using Earth Observation data, remote sensing

tools, and Crop Decision Trees (CDT) for accurate, timely crop condition assessments. Participants learned to analyze satellite imagery, integrate field data, and produce objective agricultural reports. The CDT was a central component, guiding participants through structured crop assessments and harmonizing input from multiple institutions. Its use aims to ensure consistent, transparent data reporting—vital for Zambia's drought response. By equipping stakeholders with these tools, the training enhanced early warning capabilities, supported evidence-based decision-making, and strengthened the country's food security framework during a climate crisis.

- Theme 4 co-led with Theme 1 the module on the Long-Term Strategy Planning and Decision Support Tools as part of the AGNES Climate Leadership Programme. For findings on this service, please refer to the Theme 1 cluster section of the report.

The survey was sent to 21 partners, of which 9 responded, for a 43% response rate.

Theme 4 respondents' demographics

67% of the respondents were male, 33% were female. No respondents were younger than 35 years old. Below, a gender disaggregation of different age groups:

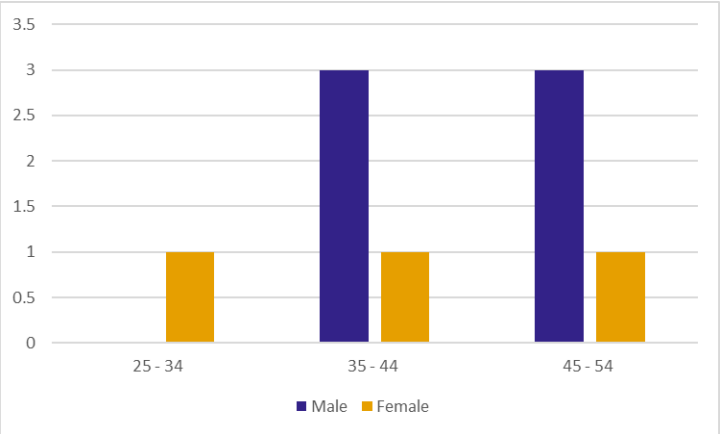

Figure 32: Theme 4 - Age and gender of the respondents

Theme 4 respondents' affiliation

Respondents were affiliated with 8 partner organizations, and Kenya Meteorology Department was the one with more than one respondent.

Table 19 Theme 4 partner organization

PARTNER ORGANIZATION	N OF RESPONDENTS
Kenya Meteorological Department (KMD)	2
Ethiopian Meteorological Institute, iShamba, Laikipia University (Kenya), MeteoRwanda, Office of the Prime Minister (Uganda), Tanzania Meteorological Agency, The Mediae Company	1 each

Theme 4 services and their use

On average, the three services surveyed by Theme 4 were used by 100% of the respondents, which expressed an average overall satisfaction of 85%. This score encompasses multiple dimensions of satisfaction such as usefulness, relevance and alignment to one's organization, needs and expectations being met, tailoring of content to needs, relevance for gender and social inclusion, incorporation of interactive elements and presence of feedback mechanisms.

Table 20 Use and Satisfaction of Theme 4 services

AICCRA SERVICE	N OF RESPONSES	USE	OVERALL SATISFACTION
Climate Basics curriculum (RUFORUM)	2	100%	90%
Participatory Scenario Planning Engagement	5	100%	85%
Crop monitoring training	4	100%	82%
Total/average	**11**	**100%**	**85%**

The three AICCRA services surveyed for Theme 4 included questions regarding sharing of knowledge acquired during the training to train or inform other people and sharing of the AICCRA tool/technology with others. 93% of the survey respondents indicated to do so, with over 1000 people trained or informed (of which 26% are estimated to be women).

Table 21 ToT effect in Theme 4 services

AICCRA SERVICE	TRAINING OR SHARING DONE	N OF PEOPLE TRAINED	% OF WOMEN TRAINED
Climate Basics curriculum (RUFORUM)	100%	250	17%
Participatory Scenario Planning Engagement	80%	575	31%
Crop monitoring training	100%	195	32%
Total/average	**85%**	**1020**	**26%**

Demand-driven nature of the Services

AICCRA services were also rated in terms of how demand driven they are:

For the Climate Basics curriculum (RUFORUM), 50% of service respondents indicated their demand was co-identified through AICCRA's engagement with their organization, while for the other 50% it was offered by AICCRA. For the Participatory Scenario Planning Engagement, 40% of service respondents indicated their demand was co-identified through AICCRA's engagement with their organization, another 40% that it was offered by AICCRA, and the remaining 20 that was in response to the request of their organization. For the Crop Monitoring training, 50% of service respondents indicated their demand was co-identified, while the other 50% that it was offered by AICCRA. See Figure 33 for more details below.

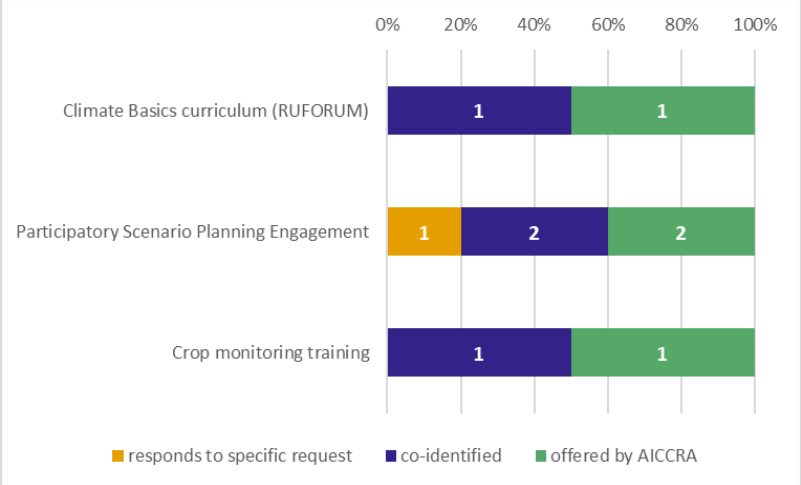

Figure 33: Count and percentage of respondents believing that the AICCRA services surveyed by Theme 4 were offered in response to specific requests, co-identified, or offered by AICCRA

Detailed results by service

Climate Basics curriculum (RUFORUM)

Both survey respondents who said they participated in the Climate Basics curriculum (RUFORUM), indicated that they used this service. Moreover, both of them said that they used the knowledge acquired to train or inform 250 people, of which 17% are estimated to be women. Additionally, the two survey respondents participated in the past six months and between 6 months and a year ago.

Respondents said that they used the knowledge acquired during the capacity strengthening activity to:

- *Prepare the Climate Basics curriculum for DAs and colleagues (Yimer, Ethiopian Meteorological Institute);*
- *Integrate climate-smart agriculture into daily work (Mathieu Mbati Mugunga, Senior Forecaster at Meteo Rwanda)*

Survey respondents expressed a 90% score of overall satisfaction, with 100% score in areas such as usefulness and being tailored to partners' needs. There were no improvement suggestions. See Figure 34 below for more details on the satisfaction.

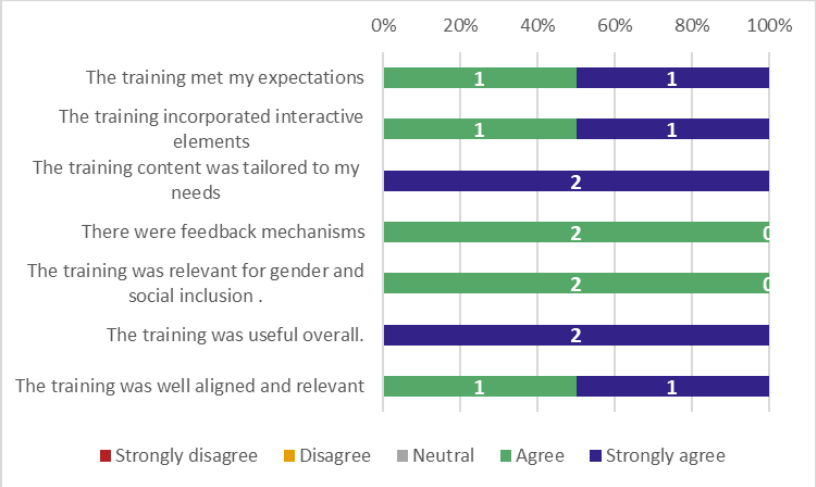

Figure 34: Satisfaction on the Climate Basics curriculum (RUFORUM)

Participatory Scenario Planning engagement

All five respondents who said they participated in the Participatory Scenario Planning engagement used the service. 80% of them said that they used the knowledge acquired to train or inform 575 people (of which 31% are estimated to be women). 40% of the service respondents (2) attended this capacity strengthening activity in the past 6 months, another 40% more than a year ago, and the remaining 20% (1) attended the training between 6 months and a year ago.

The Participatory Scenario Planning Engagement led to:

- *Attract funding and offer a chance to collet feedback from the CIS stakeholders (Paul Murage, Kenya Meteorology Department);*
- *Improve design and content of the Agrometeorology bulletin*
- *Apply the knowledge during the PICSA implementation training (Mathieu Mbati Mugunga Senior Forecaster at Meteo Rwanda)*

Service respondents expressed 85% score of satisfaction, with 92% satisfaction with regards to usefulness and alignment. There were no improvement suggestions. See Figure 35 below for more details on the satisfaction.

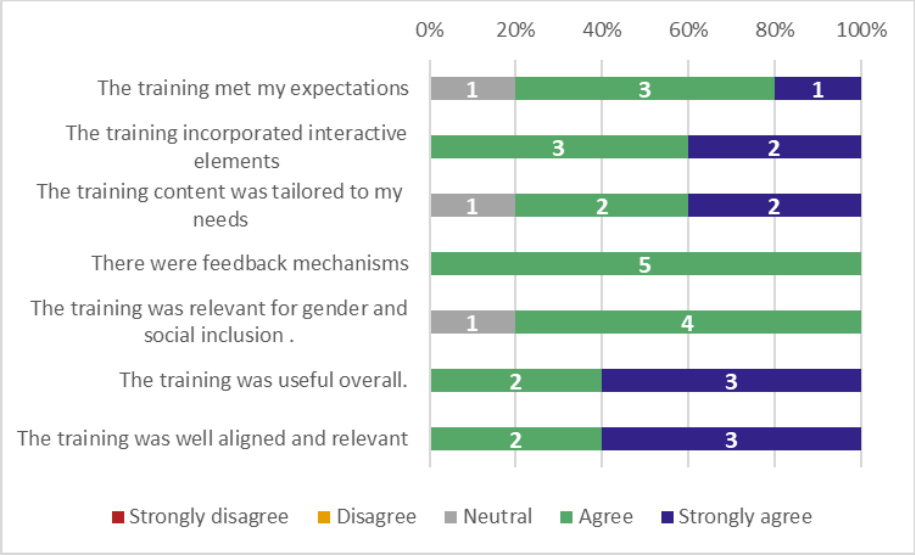

Figure 35: Satisfaction on the Participatory Scenario Planning Engagement

Crop monitoring training

All four respondents who said they were familiar with the Crop Monitoring training used this service. All of them said that they shared the tool with 195 people (of which 32% are estimated to be women).

Respondents said that they used the tool to:

- *Analyze crop performance and prepare the bulletin (Yimer, Ethiopian Meteorological Institute);*
- *Gather information that contribute to the bulletin preparation;*
- *Use early warning explored and related sites to monitor crops in Uganda and generate bulletin for advisories (Emmanuel Okecho, Office of the Prime Minister - Uganda);*
- *Inform decision-making (Mathieu Mbati Mugunga Senior Forecaster at Meteo Rwanda);*

Service respondents expressed a 82% score of satisfaction, with a 95% score for meeting partners' needs but 65% with regards to relevance with gender and social inclusion. Challenges were encountered for:

- *Data sharing, especially ground observed data (Yimer, Ethiopian Meteorological Institute);*
- *Manipulation of several tool aspects due to limited capacity (Emmanuel Okecho, Office of the Prime Minister – Uganda)*
- *Getting field information (Mathieu Mbati Mugunga Senior Forecaster at Meteo Rwanda).*
- *It doesn't provide specific information*

See Figure 36 below for more details on the satisfaction.

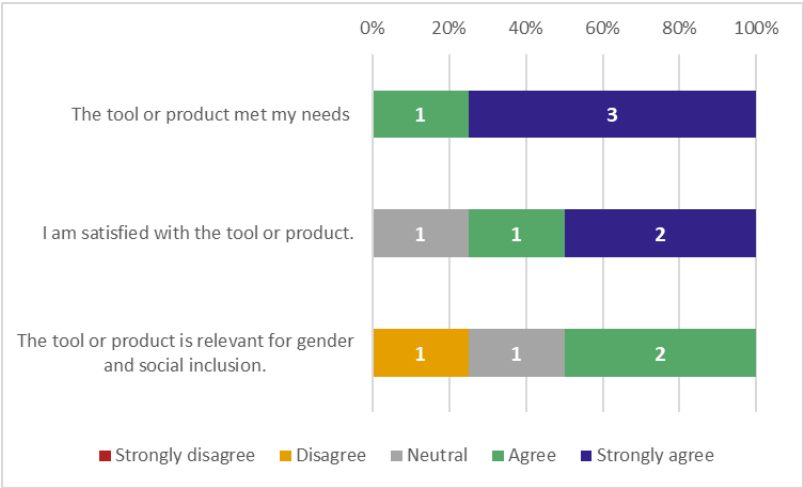

Figure 36: Satisfaction on the crop monitoring training

Take aways

Partnership feedback

The partnership with AICCRA has been appreciated, and there's demand for future collaboration opportunities. However, there were comments that emphasized the need for tailored programs, stronger capacity-building efforts, and a focus on gender and social inclusion in future initiatives.

Issues, improvement suggestions, recommendations for cluster lead

Verbatim suggestions from partners regarding the partnership are indicated in the Table below, along with the cluster answer and actions taken in response to those comments and to the service-specific suggestions.

Table 22 Feedback for Theme 4

COMMENT	**CLUSTER LEAD RESPONSE**
More collaboration to enhance delivery of KMD decentralized CIS with a GESI lens (Paul Murage, Kenya Meteorology Department)	Theme 4 recognizes the importance of increased and focused collaborations and towards this end has finalized a Memorandum of Understanding with the Kenya Meteorological Department's Institute for Meteorological Training and Research (IMTR) to advance areas of work including subnational (decentralized) CIS initiatives such as Participatory Scenario Planning (PSP), joint research and capacity development initiatives including the improvement of Gender Equality and Social Inclusion (GESI) such as through cost-benefit analysis of resilience interventions with a gender lens, and the co-development of teaching and learning materials to improve the availability, access, and use of climate

	information in Kenya, the wider region, and continent.
Design the program for specific organizations or countries	Theme 4 as a cross-cutting (Africa-wide) cluster endeavors to partner with key Africa-wide organizations in the availability, access, and use of CIS. Towards this end, it does collaborate with and complement country level activities, especially in Kenya, Zambia, and Senegal for tailored CIS and generation of evidence for scaling to other contexts.
Capacity strengthening through periodic follow-ups, experience sharing sessions, and inclusion of more departmental staff (Emmanuel Okecho, Office of the Prime Minister - Uganda)	Theme 4 acknowledges the importance of regular follow-ups, knowledge sharing, and inclusion across all activities and has integrated more knowledge sharing activities (including workshops, webinars, and knowledge products) and MELIA across activities for improved adaptive learning and planning.
Looking forward to make a difference in smallholder farmers in Kenya and the African content (Lilian, iShamba)	Theme 4 has smallholder farmers at the center of its activities, including a specific new collaboration with iShamba for a joint initiative to explore the use of Artificial Intelligence (AI) for gender-sensitive and gender-responsive advisories.
Challenge with data sharing, especially for the ground observed data (Yimer, Ethiopian Meteorological Institute)	Theme 4 recognizes this challenge that meteorological agencies across Africa confront and is continuing to support the implementation of Climate Data Tool (CDT) and the Automatic Weather Station Data Tool (ADT) for improved and streamlined data collection, analysis, sharing, and visualization. To ensure benefits of these tools extend to the wider region and continent, a video tutorial series on CDT is being developed in 2025 by the IMTR, the WMO Regional Training Center serving English-speaking Africa.
Comments and suggestions listed for Crop monitoring training	Theme 4 is working closely with the Zambia cluster to advance and actualize the recommendations surrounding the Crop Monitoring training.

Significance of the results for AICCRA scaling pathways and work in Theme 4

The AICCRA partnership survey results reveal high satisfaction with Climate Basics curricular efforts, Participatory Scenario Planning (PSP) interventions, and technical assistance and capacity development via the Crop Monitor training in Zambia. The

thematic cluster's strategic emphasis on working with and through a range of partners to enhance the development, co-production, and delivery of climate services that are not only freely accessible but also useful is reflected in the fact that the three services surveyed were used by 100% of respondents with overall satisfaction of 85%. The results also confirm the importance of the cluster's cascading training of trainers approaches increasing reach and scale of activities, since almost all (93%) of survey respondents indicated sharing of knowledge acquired during the training to further train or inform other people, amplifying the reach of knowledge, skills, and attitudes, targeting during activities. Alongside successes, the survey represents an indicative snapshot highlighting key areas for improvement, notably the need for stronger and more consistent integration of gender and social inclusion across all services.

Eastern and Southern Africa (ESA)

Cluster overview

AICCRA East and Southern Africa is dedicated to enhancing the resilience of smallholder farmers and livestock keepers by promoting climate-smart agriculture (CSA) and climate information services (CIS). With agriculture in the region largely dependent on rainfall, climate variability poses a growing threat to food security, particularly for women and youth. In response, AICCRA collaborates with key regional organizations to drive climate-smart solutions and strengthen agricultural systems.

One of its major partners, the Association for Strengthening Agricultural Research in Eastern and Central Africa (ASARECA), works closely with AICCRA, Ministries of Agriculture and the National Agricultural Research Systems (NARS). Their joint efforts focus on developing policy recommendations, mobilizing and utilizing resources effectively while ensuring that climate-smart policies and practices are widely adopted. In Southern Africa, the Centre for Coordination of Agricultural Research and Development for Southern Africa (CCARDESA) plays a coordinating role in CSA activities by strengthening collaboration within NARS and AICCRA in advancing digital crop intelligence technologies, which are key to enhancing food system resilience.

AICCRA ESA also partners with the IGAD Climate Prediction and Applications Centre (ICPAC), with partnership focuses on improving seasonal and sub-seasonal weather forecasting, flash flood forecasting, supporting the technical capacities of National Hydro-Meteorological Services (NHMS) in the IGAD region. Furthermore, in the IGAD and SADC regions, AICCRA is engaging with the Food Systems Resilience Project (FSRP) for Eastern and Southern Africa.

Through these strategic partnerships, AICCRA is paving the way for a more resilient and food-secure future in East and Southern Africa.

In ESA, two AICCRA services were surveyed:

- Soil Health Monitoring and Digital Soil Mapping (DSM) help optimize soil management using data-driven approaches. improve soil management through data-driven methods. DSM delivers essential data on soil properties like nutrient levels, organic matter content, and microbial activity. By integrating this information, DSM visualizes soil characteristics across landscapes using field observations, lab analyses, and spatial modeling. These maps provide valuable insights that support informed decision-making and help tackle environmental challenges like climate change.

- Sub-seasonal prediction using the Python Climate Predictability Tool (PyCPT) involves statistical modeling to forecast climate conditions weeks to months in advance. The tool combines Machine Learning with climate models, utilizing historical data and predictor variables such as sea surface temperatures. PyCPT enhances decision-making in agriculture, water management, and disaster preparedness by improving the accuracy and reliability of forecasts.

The survey was sent to 26 partners, and all of them responded, resulting in a 100% response rate.

ESA respondents' demographics

81% of the respondents were male, 19% were female. No respondents were younger than 25 years old. Below, a gender disaggregation of different age groups:

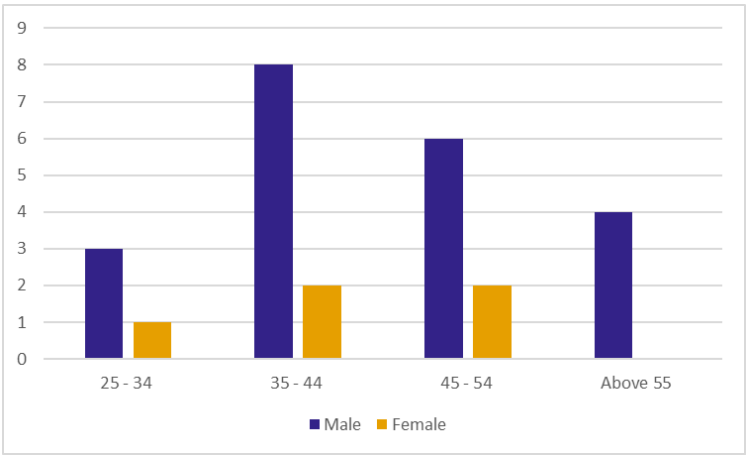

Figure 7: ESA - Age and gender of the respondents

ESA Respondents' affiliation

Respondents were affiliated with 10 partner organizations, and CCARDESA was the most represented with 3 respondents.

Table 23 ESA partner organizations

PARTNER ORGANIZATION	N OF RESPONDENTS
CCARDESA	3
EIAR, ISABU, TARI	2 each
AAU, ACPC, DCCMS, Djibouti MET, Ethiopia Meteorology Institute, ICPAC, INAM, IRAD, KALRO, KMD, Meteorological Service of South Sudan, Meteorological Services Department of Zimbabwe, Ministry of Agriculture and Food Security, NARO, RAB, Uganda National Meteorological Authority	1 each

ESA services and their use

On average, the two services surveyed by ESA were used by 81% of the respondents, which expressed an average overall satisfaction of 88%. This score encompasses multiple dimensions of satisfaction such as usefulness, relevance and alignment to one's organization, needs and expectations being met, tailoring of content to needs, relevance for gender and social inclusion, incorporation of interactive elements and presence of feedback mechanisms.

Table 24 Use and Satisfaction of ESA services

AICCRA SERVICE	N OF RESPONSES	USE	OVERALL SATISFACTION
Soil Health Monitoring and Digital Soil Mapping	16	81%	88%
Sub-Seasonal prediction using PyCPT	11	82%	88%
Total/average	**22**	**82%**	**88%**

Both the AICCRA services surveyed for ESA included questions regarding sharing of the AICCRA tool/technology with other people. 94% of the service respondents indicated to do so, with a total of 250 people reached (of which 33% are estimated to be women).

Table 25 ToT effect in ESA services

AICCRA SERVICE	TRAINING OR SHARING DONE	N OF PEOPLE TRAINED	% OF WOMEN TRAINED
Soil Health Monitoring and Digital Soil Mapping	88%	162	30%
Sub-Seasonal prediction using PyCPT	100%	88	35%
	94%	250	33%

Demand-driven nature of the services

AICCRA services were also rated in terms of how demand driven they are:

For the Soil Health Monitoring and Digital Soil Mapping, 38% of service respondents indicated their demand was co-identified through AICCRA's engagement with their organization, another 38% that it was offered by AICCRA,and the remaining 18% that it was in response to the request of their organizations. For the Sub-Seasonal prediction using PyCPT, 45% of service respondents indicated the provision of the tool was offered by AICCRA, 36% co-identified through AICCRA's engagement with their organization, and 19% that it was in response to the request of their organization;

See Figure 38 for more details below.

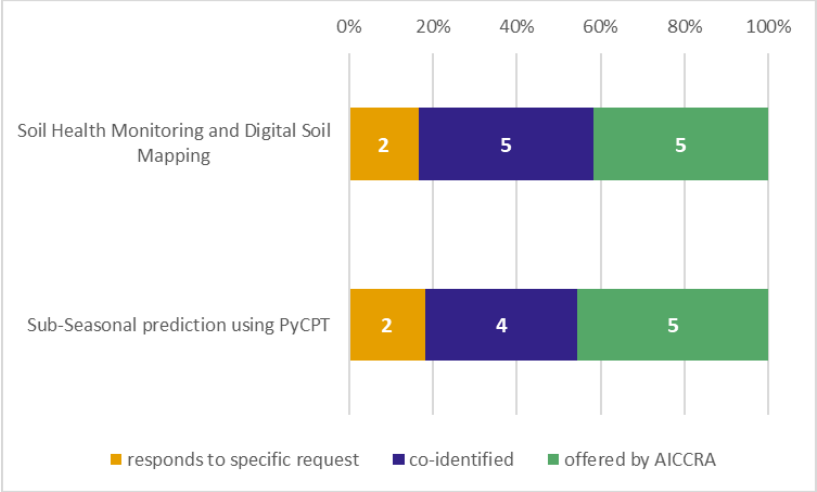

Figure 38: Count and percentage of respondents believing that the AICCRA services surveyed in ESA were offered in response to specific requests, co-identified, or offered by AICCRA

Detailed results by service

Soil health monitoring and digital soil mapping

81% of respondents who said they were familiar with the soil health monitoring and digital soil mapping used this service. 88% of them said that they shared the tool with 162 people (of which 30% are estimated to be women).

Respondents said that they used the tool to:

- *Teach students how to use it;*
- *Improve research related with soil fertility management;*
- *Create soil survey maps, analyze soil data and recommend strategies for soil management especially in integrated soil fertility management in cocoa production (Lawrence Tatanah Nanganoa, IRAD);*
- *Inform decision-making and strategic planning for investments in soil resources.*
- *Develop functional maps that could help show existing land and soil management effects and the impact of improved land and soil managements;*
- *Map different soil fertility parameters;*
- *Provide more insights through research with farmers and extension officers (Emmanuel Leku, CCARDESA)*

Service respondents expressed a 88% score of satisfaction, with a 91% score for tool satisfaction. The tool was not used by some respondents because they needed more capacity strengthening activities, they were not encouraged, or it hasn't been integrated in organizations' plans yet. Challenges were encountered for:

- *Installation and use of specific R programming packages;*
- *Lack of capacity;*
- *Low soil sampling density and unavailability of appropriate covariates (Lawrence Tatanah Nanganoa, IRAD);*
- *Inadequate knowledge of DSM, soil data information systems, lack of long-term possibilities for soil monitoring;*

- *Gap between training content and real applicability;*
- *The statistical package R;*
- *Mobilizing more tools for local distribution;*

See Figure 39 below for more details on the satisfaction.

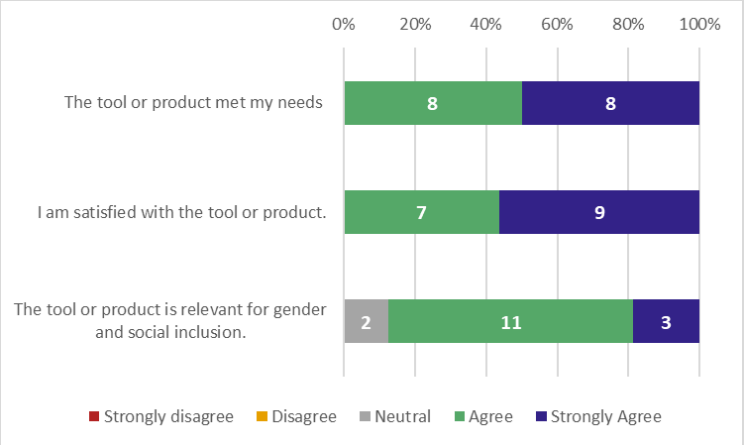

Figure 39: Satisfaction on Soil Health Monitoring and Digital Soil Mapping

Sub-seasonal prediction using PyCPT

82% of respondents who said they were familiar with the Sub-Seasonal prediction using PyCPT, used this service. All of them said that they shared the tool with 88 people (of which 35% are estimated to be women).

Respondents said that they used the tool to:

- *Do seasonal and sub-seasonal forecasting;*
- *Teach sub-seasonal and seasonal climate predictions;*

Service respondents expressed a 88% score of satisfaction, with 100% score for meeting partners' needs. Two respondents said that the absence of infrastructures was the reason for not using the tool.

Challenges were encountered for:

- *Requirement for Python programming and pre-configured packages. Data sharing, especially ground observed data (Yimer, Ethiopian Meteorological Institute);*
- *Limitation of sub-seasonal PyCPT;*
- *Data access, limited computing capacity, and variability in results from different climate drivers (Chris Ngetich, KMD)*
- *The continuous forecasts inconsistency within a week time frame, the download of data from the IRI library when running a forecast, the use of only one model (GEFSv12).*

See Figure 40 below for more details on the satisfaction.

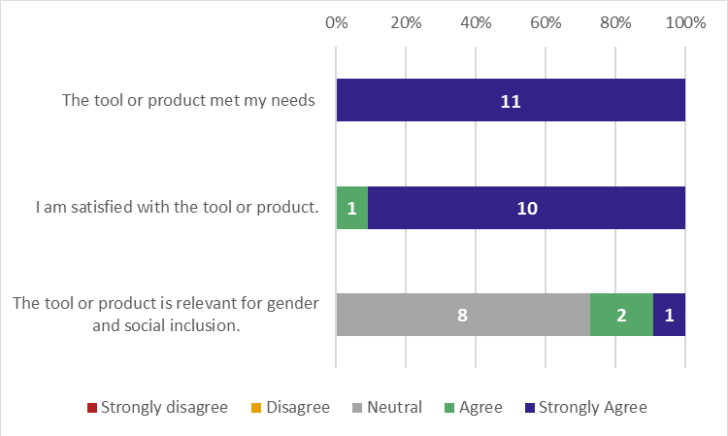

Figure 40: satisfaction on Sub-seasonal prediction using PyCPT

Take aways

Partnership feedback

The partnership with AICCRA has been viewed positively, particularly in its role in enhancing capacity and strengthening knowledge in climate resilience and climate-smart agriculture technologies. However, there was a demand for further collaboration in areas such as DSM and data collection.

Issues, improvement suggestions, recommendations for cluster lead

Verbatim suggestions from partners regarding the partnership are indicated in Table 26, along with the cluster answer and actions taken in response to those comments and to the service-specific suggestions.

Table 26 Feedback for the ESA cluster

COMMENT	**CLUSTER LEAD RESPONSE**
Challenges in implementing PyCPT for sub-seasonal forecasting. Use Anaconda platform during training.	The cluster will consult with ICPAC for future training activities
Offer training sessions on statistical data analysis	The cluster acknowledges the importance of statistical data analysis and will consider for the future
Include networking to promote peer-to-peer learning and collaboration (Lawrence Tatanah Nanganoa, IRAD)	The cluster recognizes the value of networking and will explore opportunities to facilitate peer-to-peer learning and collaboration in upcoming initiatives.
Partner with ISABU to focus on capacity strengthening and practical use of DSM tools	This is noted for the future
Work closely with national research and development	The cluster has been working with national research and development organizations. The

organizations to increase reach and impact	collaboration will be strengthened for wider reach and impact
Include more practical sessions for digital soil mapping	This will be considered to incorporate more hands-on practical sessions to improve the effectiveness of digital soil mapping training.
Strengthen the existing partnership with KALRO	The cluster acknowledges the importance of the partnership with KALRO and will work closely to strengthen this collaboration.
Fertilizer recommendation tool target different crop varieties for increased crop production (Emmanuel Leku, CCARDESA)	This is noted
Increase partnership with ANM to reduce gaps	This is noted
Extend these training opportunities to more staff from KMD. Ensure forecasts effectively reach end-users, by improving communication channels (Chris Ngetich, KMD)	The cluster will work to include more trainees in future training activities
Strengthen south to south collaboration and organize more cross-regional meetings	The cluster supports enhanced south-to-south collaboration and will explore ways to facilitate more cross-regional meetings for knowledge exchange.

Significance of the results for AICCRA scaling pathways and work in ESA

The AICCRA partnership survey results indicate high satisfaction with Soil Health Monitoring, Digital Soil Mapping, and Sub-seasonal Prediction using the Python Climate Predictability Tool. These findings reaffirm the positive impact of our initiatives and offer valuable insights to enhance access, adoption, and practical application. This feedback is instrumental in refining our strategies, scaling innovations effectively, and strengthening their real-world impact. By leveraging these insights, we can optimize our interventions, broaden our outreach, and ensure sustainable and meaningful engagement with stakeholders.

Western Africa (WA)

Cluster overview

The West Africa cluster aims to build multi-actor partnerships of existing scientific & educational networks & centers to achieve outcomes that cannot be achieved easily by engaging with individual partners at country level. It supports and enhances the capacity of regional public institutions and private firms (e.g., input providers, ICT companies, media) to develop delivery models for climate services and for CSA knowledge, approaches and tools to support effective intra-regional and south-south adoption in various value chains. It also generates training products and set up agritech innovation platforms for sustained regional promotion of climate services and climate-smart agriculture. The key partners of WA cluster include the West Africa Regional Climate Centre AGRHYMET (Centre Regional de Formation et d'Application en Agrométéorologie et Hydrologie Opérationnelle), West and Central African Council for Agricultural Research and Development (CORAF), Regional Universities Forum for Capacity Building in Agriculture (RUFORUM) and West African Science Service Centre on Climate Change and Adapted Land Use (WASCAL).

The cluster works to build and expand the engagement and partnerships with the regional organizations though capacity building, technical assistance, knowledge exchange, participatory co-development and co-creation of CIS/CSA innovations, knowledge, approaches, and tools that are demand-driven and need-responsive.

In WA, five AICCRA services were surveyed:

- Regional Workshop on Gender Accelerator program: The cluster organized a regional capacity building workshop on the Gender-Smart Accelerator Program, an SMEs accelerator program for women-led and women-focused businesses developed by AICCRA. The event aimed to identify entry points for scaling the program in FSRP countries in West Africa.
- Regional Workshop on Climate-Smart Agriculture (CSA) technologies in Rice value chains (e.g., RiceAdvice, Smart-Valleys, AWD, Integrated Rice-Fish, Climate-Smart rice varieties, solar-powered irrigation): The workshop introduced FSRP stakeholders from seven countries to climate-smart technologies for rice value chains and identified actionable steps to enhance the adoption and use of these technologies in FSRP countries.
- Regional training on Climate-Smart Village (CSV) approach: The workshop aims at strengthening the capacities of researchers from the National Agricultural Research Systems (NARS), experts from the National Meteorological and Hydrological Services (NMHS) and representatives of NGOs on the CSV approach and tools and their implementation in the FSRP intervention areas in the beneficiary countries.
- New Generation of Seasonal Forecasts (Formation-Action): The on-the-job training is a one-month capacity-building program to participants from West African and Sahel countries on the full range of seasonal and sub-seasonal forecasting methodologies. It provided participants with practical experience in using WAS_S2S tools, while it also introduced them to AI-based approaches.
- Climate- Smart Agriculture Basics: An Introduction to Practices & Technologies: The training of trainers' (ToT) workshop on Climate-Smart Agriculture Basics course module introduced the concept of Climate-Smart Agriculture, the various CSA practices in Africa, the approach and tools for implementation and scaling

of CSA practices, and discusses the barriers and enablers of adoption and scaling of CSA.

The survey was sent to 30 partners, of which 14 responded, for a 47% response rate.

WA respondents' demographics

64% of the respondents were male, 36% were female. No respondents were younger than 25 years old. Below, a gender disaggregation of different age groups:

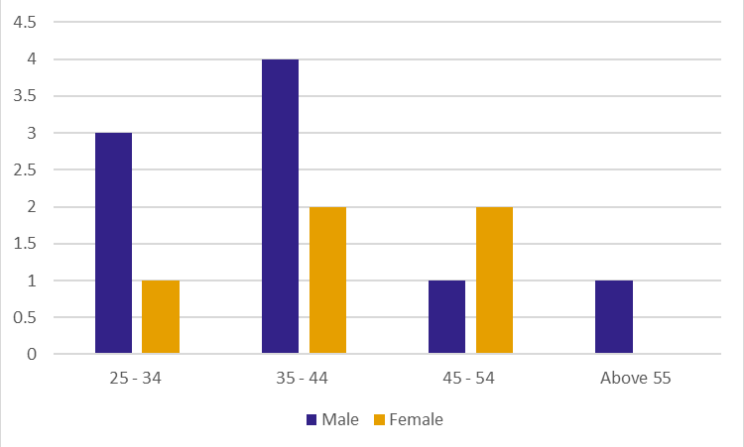

Figure 41: WA - Age and gender of the respondents

WA respondents' affiliation

Respondents were affiliated with 11 different partner organizations, with ANAM, CORAF and IER being the organization with 2 respondents.

Table 27 WA partner organizations

PARTNER ORGANIZATION	N OF RESPONDENTS
ANAM, CORAF, IER	2 each
AGRHYMET, ANACIM, Department of Water Resources, DGESS Ministry of Agriculture (Burkina Faso), MALI-METEO, METEO-BENIN, Nigerian Meteorological Agency, RUFORUM	1 each

WA services and their use

On average, the five services surveyed by WA were used by 75% of the respondents, which expressed an average overall satisfaction of 86%. This score encompasses multiple dimensions of satisfaction such as usefulness, relevance and alignment to one's organization, needs and expectations being met, tailoring of content to needs, relevance for gender and social inclusion, incorporation of interactive elements and presence of feedback mechanisms

Table 28 Use and Satisfaction of WA services

AICCRA SERVICE	N OF RESPONSES	USE	OVERALL SATISFACTION
Regional Workshop on Gender Accelerator program	5	40%	83%
Regional Workshop on Climate-Smart Agriculture (CSA) technologies in Rice value chains (e.g., RiceAdvice, Smart-Valleys, AWD, Integrated Rice-Fish, Climate-Smart rice varieties, solar-powered irrigation)	3	67%	82%
Regional training on Climate-Smart Village (CSV) approach	6	67%	86%
New Generation of Seasonal Forecasts (Formation-Action)	5	100%	81%
Climate- Smart Agriculture Basics: An Introduction to Practices & Technologies	1	100%	97%
Total/average	**20**	**75%**	**86%**

All five AICCRA services surveyed for WA included questions regarding sharing or application of the knowledge acquired during the AICCRA capacity strengthening activities to train or inform other people. An average of 75% respondents from these 5 services indicated to do so with a total of 197 people trained or informed (of which 58% are estimated to be women).

Table 29 ToT effect in WA services

AICCRA SERVICE	TRAINING OR SHARING DONE	N OF PEOPLE TRAINED	% OF WOMEN TRAINED
Regional Workshop on Gender Accelerator program	40%	100	72%
Regional Workshop on Climate-Smart Agriculture (CSA) technologies in Rice value chains (e.g., RiceAdvice, Smart-Valleys, AWD, Integrated Rice-Fish, Climate-Smart rice varieties, solar-powered irrigation)	67%	52	81%

Regional training on Climate-Smart Village (CSV) approach	67%	45	20%
New Generation of Seasonal Forecasts (Formation-Action)	100%	Not available	Not available
Climate- Smart Agriculture Basics: An Introduction to Practices & Technologies	100%	Not available	Not available
Total/average	**75%**	**197**	**58%**

Demand-driven nature of the Services

AICCRA services were also rated in terms of how demand driven they are:

For the Regional Workshop on Gender Accelerator program, 40% of service respondents indicated the provision of the service was in response to the request and needs of their organizations, 40% indicated that the service was offered by AICCRA. For the Regional Workshop on Climate-Smart Agriculture (CSA) technologies in Rice value chains, 67% of the service respondents indicated that the provision of the service was in response to the request and needs of their organizations, 33% that it was offered by AICCRA. For the Regional training on Climate-Smart Village (CSV) approach, 50% of service respondents indicated that the provision of the service was in response to the request and needs of their organizations, 17% that it was offered by AICCRA. For the New Generation of Seasonal Forecasts (Formation-Action), 60% of service respondents indicated that their demand was in response to the request and needs of their organizations, 40% that it was offered by AICCRA. For the Climate- Smart Agriculture Basics: An Introduction to Practices & Technologies, the only respondent indicated their demand was co-identified through AICCRA's engagement with their organization.

See Figure 42 for more details below.

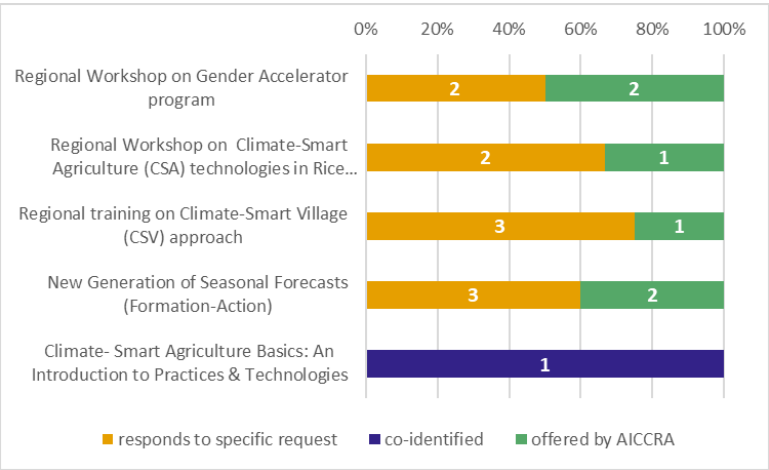

Figure 42: Count and percentage of respondents believing that the AICCRA services surveyed in WA were offered in response to specific requests, co-identified, or offered by AICCRA

Detailed results by service

Regional workshop on gender accelerator program

The Regional Workshop on Gender Accelerator program was used by 40% of service respondents. Moreover, 40% of them said that they used the knowledge acquired to train or inform 100 people (of which 72% are estimated to be women). All the service respondents (5) attended this capacity strengthening activity in the past 6 months.

Respondents said that they used the knowledge acquired during the capacity strengthening activity to:

- *Develop the transfer of competencies related to AI integration in seasonal and sub-seasonal forecasting;*

Service respondents expressed a 93% score of satisfaction, with 97% satisfaction for the Gender and Social Inclusion criteria. Respondents also provided some reasons for no use, and these include support needs, lack of enabling environments, and that the acquired skills will be used in the near future.

See Figure 43 below for more details on the satisfaction.

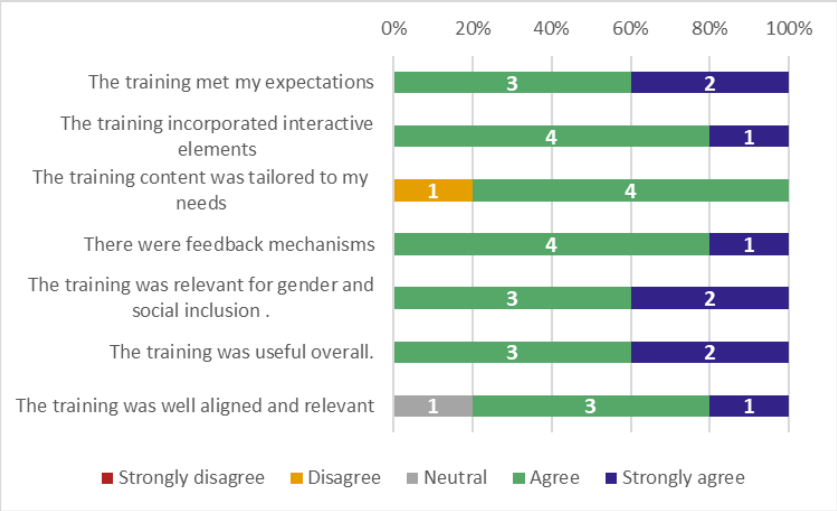

Figure 43: Satisfaction on Regional Workshop on Gender Accelerator program

Regional workshop on Climate-Smart Agriculture (CSA) technologies in rice value chains

Two of the three respondents who said they were familiar with the regional workshop on Climate-Smart Agriculture (CSA) technologies in rice value chains used the service. Moreover, 2 of them said that they used the knowledge acquired to train or inform more than 50 people (of which 81% were reported to be women). All of the service respondents (3) attended this Capacity Strengthening activity in the past 6 months.

Respondents said that they used the knowledge acquired during the capacity strengthening activity:

- *In VIC stakeholders' trainings (Komla Ganyo, CORAF);*

- *With AWD and Rice Advice (Mohamed Dicko, IER);*

Service respondents expressed 82% score of satisfaction, with a low score with regards to the gender and social inclusion criteria (67%). Timeliness was the reason for not use, expressed by the remaining respondent. See Figure 44 below for more details on the satisfaction.

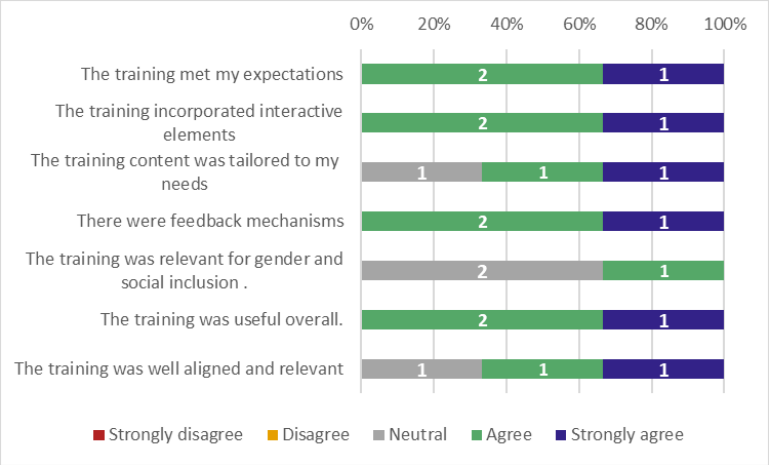

Figure 44: Satisfaction on Regional Workshop on Climate-Smart Agriculture (CSA) technologies in Rice value chains

Regional training on Climate-Smart Village (CSV) approach

67% of the respondents who said they were familiar with the regional training on Climate-Smart Village (CSV) approach used the service. Moreover, 67% of them said that they used the knowledge acquired to train or inform 45 people (of which 20% are estimated to be women). 67% of service respondents attended this capacity strengthening activity in the past 6 months, one respondent between 6 months and a year ago, and the remaining one attended more than a year ago.

The Regional training on Climate-Smart Village (CSV) approach led to:

- *Application with Agdatahub;*
- *Development of the action plan, implementation and scaling-up of climate-smart villages in Mali (Aminata Samba Sidibe, IER);*
- *Propose an action plan for setting up a climate-smart village with a budget and implementation schedule;*

Service respondents expressed an overall satisfaction score of 86%, with 90% in terms of meeting organizations' expectations. Respondents highlighted that they did not use the knowledge acquired due to lack of support, timeliness, and other will use it in 2025, with the implementation of VIC in trained FSRP countries (Komla Ganyo, CORAF).

See Figure 45 below for more details on the satisfaction.

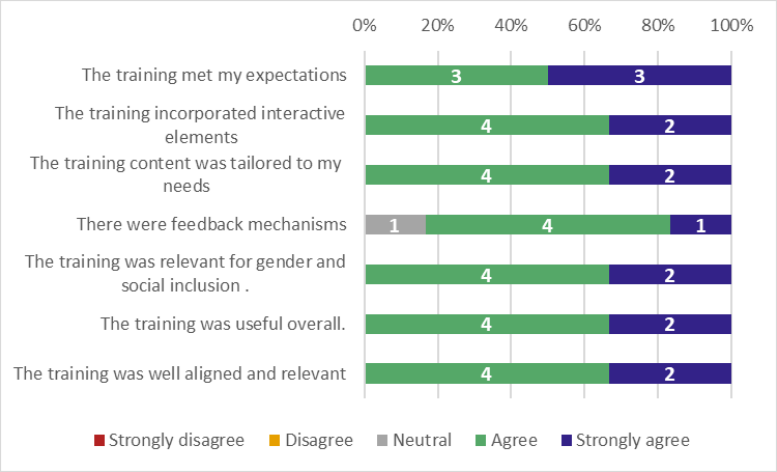

Figure 45: Satisfaction on Regional training on Climate-Smart Village (CSV) approach

New generation of seasonal forecasts (Formation-Action)

All the respondents who said they were familiar with the training on the new generation of seasonal forecasts used the service. All of them said that they used the knowledge acquired to train or inform other people, but numbers were not specified. All 5 service respondents attended this capacity strengthening activity in the past 6 months.

The New Generation of Seasonal Forecasts (Formation-Action) led to:

- *Application with Agdatahub;*
- *Use of seasonal forecasts codes to automate tasks, in particular the interpolation and production of climate maps;*
- *Run the e-learning machine method with Lasso regression over a target period from April to May;*
- *Use of Python for meteorology;*
- *Integration with the production of countries' seasonal climate predictions.*

Service respondents expressed 81% score of satisfaction, with 72% score in relation to the gender and social inclusion criteria. There were no improvement suggestions.

See Figure 46 below for more details on the satisfaction.

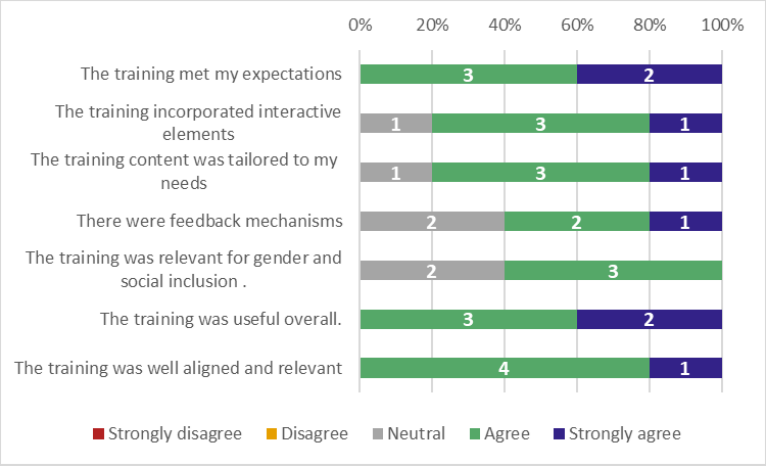

Figure 46: Satisfaction on new generation of seasonal forecasts (Formation-Action)

Climate- Smart Agriculture Basics: An Introduction to Practices & Technologies

The Climate-Smart Agriculture Basics: An Introduction to Practices & Technologies service had one respondent, who said that they used this service.

The respondent said that the knowledge acquired stimulated their organisation to incorporate climate-smart agriculture and green transitions in their programmes (David Ekepu, RUFORUM)

He expressed a 97% score of satisfaction, with gender and social inclusion being the only criteria rated 80%; all the others were rated with 100%.

Take aways

Partnership feedback

The partnership with AICCRA has been appreciated, with a strong demand for continued training, concerns about inclusion and selection criteria, and recognition of the program's positive impact.

Issues, improvement suggestions, recommendations for cluster lead

Verbatim suggestions from partners regarding the partnership are indicated in Table 30 along with the cluster answer and actions taken in response to those comments and to the service-specific suggestions.

Table 30 Feedback for WA cluster

COMMENT	**CLUSTER LEAD RESPONSE**
[]..request continued support to rollout CSA/CIS curricula in African universities (David Ekepu, RUFORUM)	We will continue working our partners RUFORUM and WASCAL to rollout CSA/CIS curricula in Africa universities
My organization is not sufficiently involved in AICCRA (Mohamed Dicko, IER)	IER is a partner of AICCRA Mali. Perhaps, the person is not sufficiently involved in AICCRA activities at IER.
Capacity strengthening in Statistical Analysis in R (Aminata Samba Sidibe, IER)	We take note of this request.
Capacity strengthening activities on CSA (Assétou Kabore, AGRHYMET)	We take note of this request. We have planned with CORAF a practical capacity building activity on CSA prioritization in 2025. We will also involve AGRHYMET in the training.
Nous associer quand y a des renforcements de capacité de ce genre (Bengaly-Compaore Placide,	We take note of this request. While Burkina Faso is not an AICCRA country, we will continue to make CSA/CIS innovations and technologies available

DGESS Ministry of Agriculture in Burkina Faso)	through our regional partners to benefit spillover countries.

Significance of the results for AICCRA scaling pathways and work in WA

The AICCRA partnership survey results indicate that 75% of the respondents have used services of the cluster with an average overall satisfaction of 86%. These findings reinforce the effectiveness of the cluster approach to engaging and strengthening capacities and partnerships with regional institutions to achieve outcomes that cannot be achieved easily by engaging with individual partners at country level. We continue refining our strategies and approaches for continuous improvement of delivery of CSA/CIS innovations, services and products tailored to user needs to benefit spillover countries in West Africa.

Ethiopia

Cluster overview

AICCRA Ethiopia is supporting partners who are increasing smallholder farmers' and livestock keepers' access, uptake, and use of bundled climate information services and validated climate-smart agriculture technologies and innovations that are responsive to the needs of all, including women and youth. The cluster also reaches other end-mile users, including extension and development agents, meteorologists, hydrologists, and tertiary-level students, ensuring climate-smart solutions reach various stakeholders.

Through strategic partnerships with national stakeholders—including the Ministry of Agriculture, Ministry of Education, Ethiopian Agricultural Transformation Institute, Ethiopian Institute of Agricultural Research, Ethiopian Meteorological Institute, and the National Disaster Risk Management Commission—AICCRA Ethiopia strengthens national initiatives aimed at improving the livelihoods of smallholder farmers, agro-pastoralists, and livestock keepers. Collaborations with private sector actors and non-governmental organizations ensure that climate-smart innovations are effectively delivered to end users.

AICCRA Ethiopia collaborates closely with CGIAR Research Centers to advance agricultural innovations. It partners with the Alliance of Bioversity–CIAT to develop site-specific fertilizer recommendations, establish an integrated national agricultural data hub, and promote climate-smart technologies for restoring degraded landscapes. With the International Maize and Wheat Improvement Center (CIMMYT), AICCRA facilitates the dissemination of user-centric bundled digital climate agro-advisories. Collaboration with the International Center for Agricultural Research in the Dry Areas (ICARDA) focuses on gender-responsive climate-smart bundled livestock innovations (SmaRT-Pack). At the same time, the work with the International Livestock Research Institute (ILRI) supports climate information services and climate-smart feed and forage innovations. Additionally, AICCRA Ethiopia partners with the International Research Institute for Climate and Society at Columbia University, a non-CGIAR organization, to enhance climate information services and the CRMAE curriculum.

In Ethiopia, three AICCRA services were surveyed:

- Gender-responsive Climate-smart Bundled Livestock Innovations (SmaRT-Pack) encompasses innovations such as improved rams, feed and forage development, animal health interventions, innovative market outlets, capacity building, and credit. The SmaRT-Pack led by ICARDA under the AICCRA project is scaled by partners such as research centers, universities, and the Ministry of Agriculture.

- User-centric bundled digital climate agro advisories from EDACaP provide timely and tailored information on weather patterns, rainfall projections, and climate-related risks, enabling farmers to make informed decisions about farming practices through public-private partnerships. Decision-relevant agro-climate advisories are communicated through LERSHA platform via short messages, voice-blast, development agents, and a call center.

- Climate Risk Management in Agricultural Extension (CRMAE) builds foundational knowledge and skills for extension workers to help farmers better plan for, manage, and respond to climate risk. The collaborative effort by MoA, universities, NGOs, and other partners saw the curriculum reach farmers and integrate the concepts of climate information services, climate risk management, and climate-smart agriculture in climate-related courses in Ethiopia.

The survey was sent to 35 partner contacts, of which 26 responded, for a 74% response rate.

Ethiopia respondents' demographics

80% of the respondents were male between the age of 25 and 44 years, and 19% were women. 46% of the respondents were below 35 years, and only one respondent was younger than 25 years. Below, a gender disaggregation of different age groups:

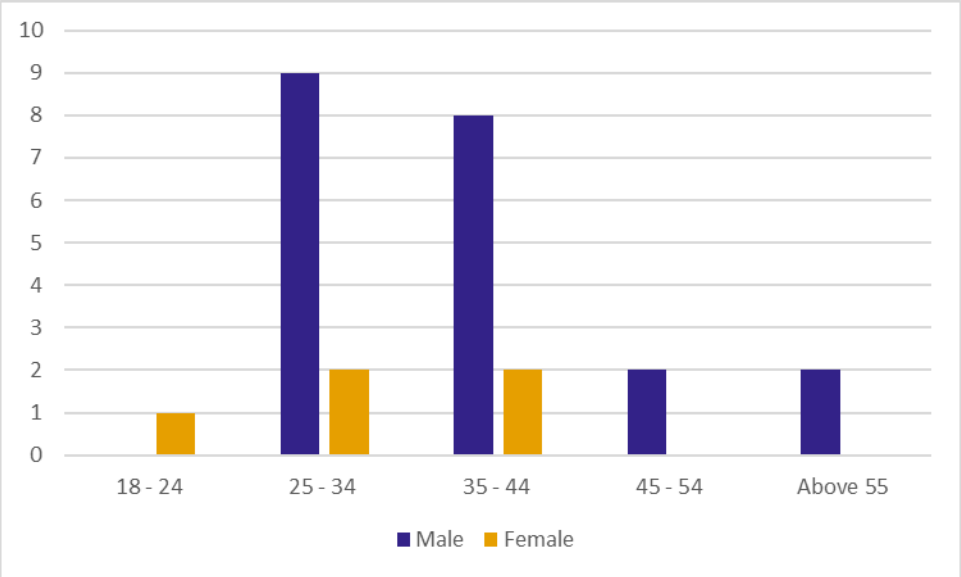

Figure 47 Ethiopia- Age and gender of the respondents

Ethiopia's respondents' affiliation

Respondents were affiliated with 15 partner organizations, notably the Mekidela University (4 respondents), ARARI, and Debre Berhan University (3 respondents each).

Table 31 Ethiopia partner organizations

PARTNER ORGANIZATION	N OF RESPONDENTS
Mekidela University	4
ARARI	3

Debre Berhan University	3
Injibara University	2
Jimma University	2
Melkassa Agricultural Research Center	2
Worabie Agricultural Research Center	2
Arba Minch Agricultural Research Center Bahir Dar University, Bonga Research Center, Debre Zeit Agricultural Research Center, Haremaya University, Hawassa University, Kulumsa Agricultural Research Center, Mizan Tepi University	 1 each

Ethiopia services and their use

On average, the three services surveyed by Ethiopia were used by 89% of the respondents, which expressed an average overall satisfaction of 89%. This score encompasses multiple dimensions of satisfaction such as usefulness, relevance and alignment to one's organization, needs and expectations being met, tailoring of content to needs, relevance for gender and social inclusion, incorporation of interactive elements and presence of feedback mechanisms.

Table 32 Use and Satisfaction of Ethiopia's services

AICCRA SERVICE	N OF RESPONSES	USE	OVERALL SATISFACTION
CRMAE curriculum	13	100%	91%
User-Centric CIS from EDACaP	5	80%	87%
Small ruminants innovations (SmaRT Pack)	8	88%	91%
Total/average	**26**	**89%**	**89%**

On average, 93% of respondents said that they used the knowledge acquired in capacity strengthening events to train other people or that they had shared the tool with people within and beyond their organization, reaching over 1000 people in total (of which 44% re estimated to be women).

Table 33 ToT effect in Ethiopia's services

AICCRA SERVICE	TRAINING OR SHARING DONE	N OF PEOPLE TRAINED	% OF WOMEN TRAINED

CRMAE curriculum	100%	565	29%
User-centric bundled digital climate agro advisories	80%	94	47%
Small ruminants innovations (SmaRT Pack)	100%	413	56%
Total/average	**93%**	**1072**	**44%**

Demand-driven nature of the services

The capacity strengthening on the CRMAE curriculum was perceived by most of the respondents (69%) as offered by AICCRA, while the remaining believed it was co-identified (23%), and offered in response to specific requests (8%). The user-centric CIS platform was perceived by most respondents as offered in response to specific requests (60%), while 40% of the respondents believed it was offered by AICCRA. The SmaRT Pack innovations were equally perceived as having been offered by AICCRA (38%) or co-identified (38%), while the remaining felt they were developed in response to specific request (25%).

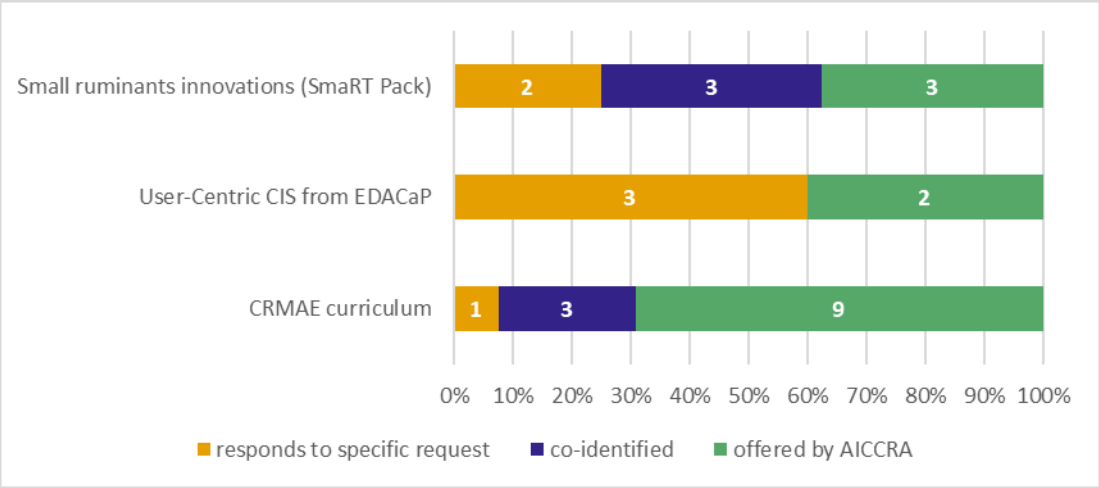

Figure 48 Count and percentage of respondents believing that the AICCRA services surveyed in Ethiopia were offered in response to specific requests, co-identified, or offered by AICCRA

Detailed results by service

CRMAE curriculum

All of the 13 respondents who said they were familiar with the CRMAE curriculum said that they used this service. Moreover, all of them said that they used the knowledge acquired to train, in total, about 570 people (of which 29% are estimated be women). 30% of the respondents attended the course in 2024, while 60% had done so more than a year before. Respondents reported using the knowledge acquired in the following circumstances:

- *I have applied some of the skills and knowledge acquired from the capacity strengthening, particularly from the course offerings related to climate.*

- *I gave training for development agent through GIZ and shared the skills and knowledge among the agricultural experts (Solomon Addisu Legesse , Bahir Dar University)*
- *From training, I applied coaching techniques learned to mentor junior colleagues. This resulted in one team member successfully taking on greater responsibilities, which contributed to improved team efficiency and a smoother climate data analysis.*
- *I trained subject specialists from different organizations)*
- *Kulumsa Agricultural Research center*
- *I trained my staffs and all colleges.*
- *The training help me to improve and update my knowledge about the current global environmental issue: climate change: and specific issues of climate smart agriculture: I used this in delivering the course climate change and environmental economics for graduating class of agricultural economics of the university. The CDT training specially was so interesting, it adds to me one specific skill of software , important in relation to climate and agriculture. Although we did not accomplished the second mission to work with some Woreda agricultural development agents (DAs) to work on selected water shades due to political instability of the area.... (Shewanesh Abrham , Mekidela University)*
- *On my research work like write proposal, research paper; on other training events like training of post graduate students, woreda agricultural experts*
- *Provided ToT to zonal/woreda/kebele agricultural extension SAE, Field facilitators and experts (Dr.Kefelegn Getahun , Jimma University)*
- *Agro-weather advisory, Early warning and Monitoring*
- *CDT, CIS, CRMA (Sintayehu Eshetu , Mekidela University)*
- *I applied the skills and knowledge I acquired from the capacity strengthening events by AICCRA in my academic works as I'm a course owner of Economics of climate change, and also in the trainings of staffs after I attended the TOT by AICCRA.*
- *I applied the skills and knowledge acquired from the training to prepare problem-solving research for climate-smart agricultural practices.*

Respondents expressed an average of 91% satisfaction over the different satisfaction criteria, especially due to the usefulness of the course (95%), its alignment to their organization (94%), and the `incorporation of interactive elements (94%). Improvements could be achieved by including feedback mechanisms (85%) and by further tailoring of the content to partner needs (88%). No specific suggestions were reported. See Figure 49 below for more details on the satisfaction

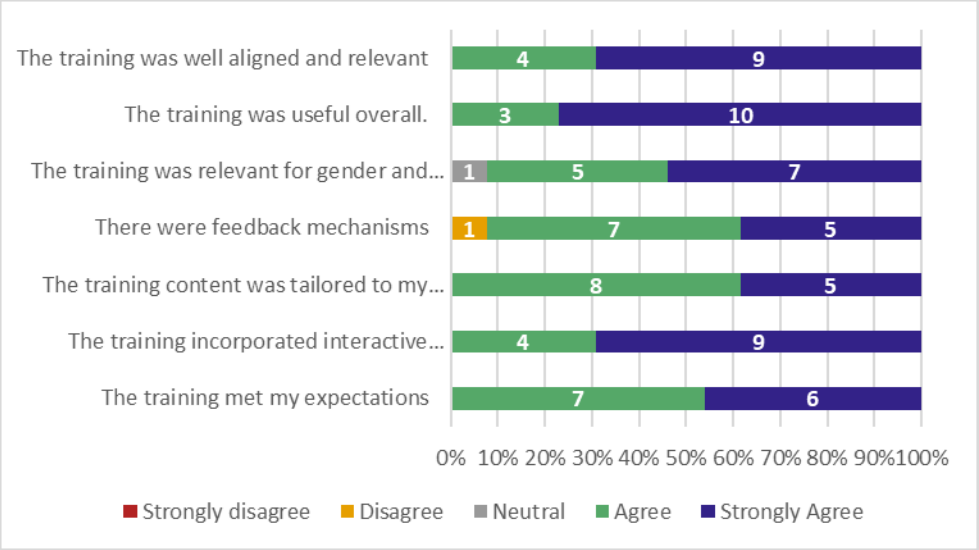

Figure 49 Satisfaction on the CRMAE Curriculum

User-centric bundled digital climate agro advisories

The User-centric bundled digital climate agro advisories was used by 80% (4 out of the 5) respondents who said they were familiar with this service. One user reported not using the service due to it not being functional. All of the respondents that used this product also shared it with people within (2) and also beyond (2) their organization, reaching in total over 90 people (of which 47% are estimated be women). Respondents are using the product in the following circumstances:

- *For advisory development.*
- *I am using it for my under and post graduate students (Solomon Addisu Legesse , Bahir Dar University)*
- *As a partner involved in the CBBP (Community-Based Breeding Program) project in the South Omo and Bench Sheko zones, we are actively utilizing various products and tools provided through our collaboration with AICCRA. Here are three key ways we are implementing these resources:*
- *1. Genetic Improvement of Livestock: We are leveraging the genetic breeding tools to enhance the quality of our sheep population. With access to 20 selected sire rams, we are implementing a systematic breeding program aimed at improving the production traits of our 1,000 ewes. This is expected to boost the productivity and resilience of the flock in the challenging climate of southwestern Ethiopia.*
- *2. Training and Capacity Building: The training modules offered by AICCRA have been instrumental in educating our team and the local farmers. We conduct regular workshops focusing on best practices in animal husbandry, breeding strategies, and nutrition management, ensuring that the participants are well-equipped to implement the learned skills effectively.*
- *3. Technology Transfer We are also utilizing technological tools for record-keeping and monitoring livestock health. The enumeration tools provided have helped us maintain accurate data on births (313 lambs born), health status, and other critical metrics that are essential for decision-making and improving breeding outcomes.*
- *4. Data-Driven Decision Making:The information gathered from our activities is analyzed to track the project's progress. By monitoring the rate of twinning (80*

occurrences) and lamb survival, we are able to adjust our strategies in real-time, ensuring that we are maximizing gains from the resources available to us.

- *5. Community Engagement: We are using tools for community engagement to promote awareness and encourage participation among the 1,000 households involved. This helps in creating a sense of ownership and fostering collaboration among farmers, which is crucial for the long-term sustainability of the breeding program.*
- *Generating climate forecast and agro-weather advisory*

Respondents expressed an overall satisfaction of 87%, with all respondents agreeing or strongly agreeing that their 'needs were met' and that they were satisfied with the product. 60% of the respondents also strongly agreed that this product was 'relevant for gender and social inclusion'. See Figure 50 below for more details on the satisfaction.

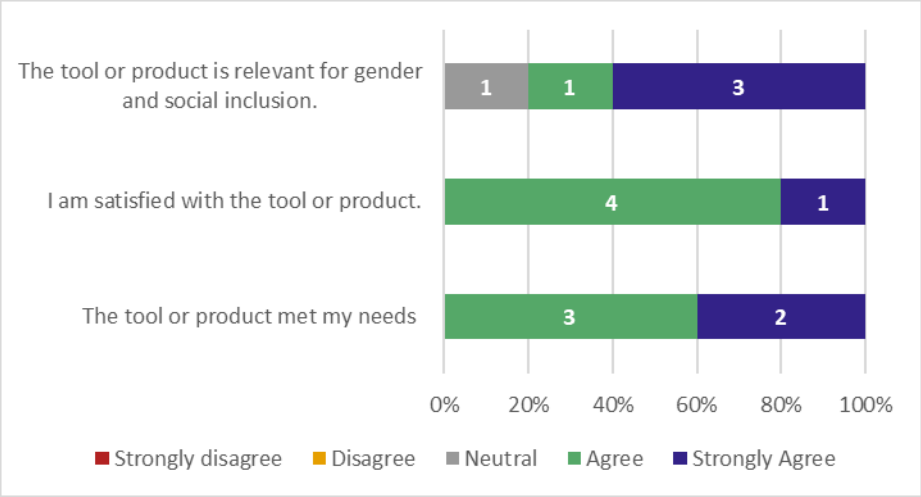

Figure 50 Satisfaction on the user-centric CIS from EDACaP

A number of challenges related to the use of this product were reported:

- *It needs improvement and it should also include other location*
- *Resources limitation can be mentioned as a challenge (Solomon Addisu Legesse , Bahir Dar University)*
- *As part of our ongoing collaboration with the AICCRA project, we are seeking your valuable feedback regarding the tools and technologies that have been deployed in our initiatives, specifically those related to the CBBP project in the South Omo and Bench Sheko zones.*
- *Your Insights Needed: We will need the future the support and resources provided, including the AI equipment and tablets for our activities. To help strengthen our efforts and the user experience of these tools, we would like to hear about any challenges you may have encountered. We are particularly interested in your thoughts on the following questions.*
- *Lack of information to generate full information of soil, crop, climate and generating alternative crop management strategies for decision making*

Small ruminants innovations (SmaRT Pack)

The small ruminants innovation pack was used by 80% (7 out of the 8) respondents who said they were familiar with this service. All of the respondents that were familiar with the product shared it with people within (6) and also beyond (2%) their organization, reaching in total over 400 people (of which 56% are estimated be women). One respondent did not use the product due to the absence of an enabling environment, but nevertheless shared the product with about 100 people. Respondents reported using the product in the following circumstances:

- *The tool or the products are very important and useful for my organization and the community. So, I suggest it should be promote and scale up in a wide scope our country, Ethiopia.*
- *In the capacity development program (Solomon Addisu Legesse , Bahir Dar University)*
- *We used it as a practical toolkit to enhance the management of small ruminants, particularly goats. We provided training for farmers and animal health professionals, and they used this product/tool to improve productivity, manage diseases, and ensure the overall health of the animals.*
- *Goat AI tools (Ultrasound for PD diagnosis, Spectrophotometer for semen quality and concentration evaluation, AV for semen collection, etc)*
- *To promote improved small ruminant production technologies*
- *To estimate the greenhouse gas emission from small ruminants*
- *We use inovations through participatory approach such as sheep genetics improvement, gender capacity development and transformation ,herd health packages . (Habtamu Ergicho Sulito , Worabie Agricultural Research Center)*

Respondents expressed an overall satisfaction of 91%, scoring most positively the fact that this product was relevant for gender and social inclusion (93%). See Figure 51 below for more details on the satisfaction.

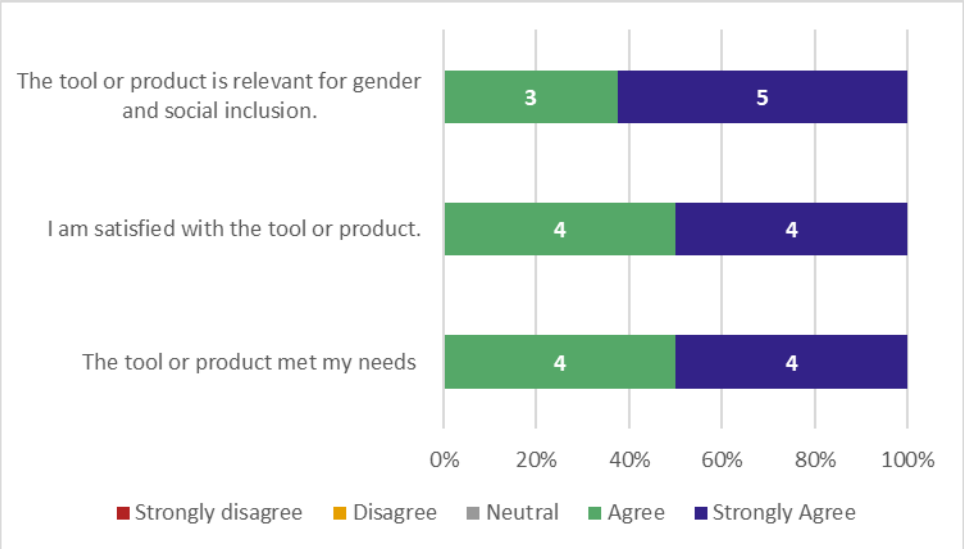

Figure 51 Satisfaction on the small ruminants innovations

Challenges related to the use of this product included:

- *Resources limitation (Solomon Addisu Legesse , Bahir Dar University)*
- *Lack of budget to fulfill all the SmaRT Pack requirements*

- *Budget shortage*
- *Lack of measuring materials is a big challenge*

Take aways

Partnership feedback

Overall, respondents expressed willingness to continue and strengthen their partnership with AICCRA, with the aim, for example, to strengthen small ruminant genetic improvement to support the livelihood of farmers.

"I appreciate our continued collaboration with AICCRA, which has given us excellent chances to build capacity. Our knowledge and skills have greatly increased as a result of the training and assistance, particularly in areas pertaining to climate resilience. Our cooperation with AICCRA has been crucial in assisting us in tackling certain issues and achieving our climate-related objectives. We're excited to keep collaborating and looking for other ways to improve our efforts in this crucial area." Anonymous respondent

"Through our partnership with AICCRA, we have experienced significant advancements in livestock management and sustainable agriculture practices within the CBBP project in South Omo and Bench Sheko zones. The training programs and technology transfer initiatives have empowered over 1,000 households, enhancing their capabilities in animal husbandry and resource management. The support from AICCRA has fostered a collaborative environment, allowing us to effectively address challenges and implement innovative solutions. We appreciate the ongoing guidance and resources provided by AICCRA, which are vital for the success of our initiatives." Anonymous respondent

"Our partnership with AICCRA has been instrumental in driving impactful climate-resilient solutions. Collaborating with AICCRA has allowed us to leverage cutting-edge research, innovative approaches, and a strong network of experts to address the challenges posed by climate change. Together, we've been able to strengthen our efforts to support sustainable development and improve resilience for communities most affected by these challenges. We value this partnership greatly and look forward to continuing our work to create a more sustainable and climate-resilient future." Anonymous respondent

Issues, improvement suggestions, recommendations for cluster lead

Verbatim suggestions from partners regarding the partnership are indicated in Table 34, along with the cluster answer and actions taken in response to those comments and to the service-specific suggestions.

Table 34 Feedback for the Ethiopia cluster

Partners' feedback	**Cluster response**
Including monitoring and evaluation of the success of the training (achievement of the ultimate goal of the training/technology transfer is required)	The M&E team at AICCRA consistently strives to capture changes in knowledge, attitudes, skills, practices, and collaboration through surveys at the end of training events. The overall impact

	of training events within the cluster will be evaluated in the future.
capacity building scholarship phd or msc. for climate courses	Since 2021, AICCRA Ethiopia has supported numerous PhD and MSc students in their research. The cluster remains committed to continuing this support in the future.
I wish if AICCRA could support and initiate the work on animal production and high land fruits in this area. (Shewanesh Abrham, Mekidela University)	The Ethiopia cluster works with ICARDA on small ruminants.
Continuation of your technical (training) and financial support need for the further goat technologies verification and scaling-up especially in lowland areas (pastoral and agro-pastoral)	AICCRA Ethiopia collaborates with ICARDA on small ruminants (goats and sheep), in both the highlands and lowlands of Ethiopia. This work is carried out with the Ministry of Agriculture (MoA), Regional Agricultural Research Institutes (RARIs), universities, and other key stakeholders.
It is important to strengthen our existing partnership and work on our shared ideas. a capacity building training on climate-smart small ruminants innovations (smart pack) and Ethiopian digital Agro-climate advisory platform is important as an applied university. so it is better to work on this issue.	Accepted
There is a big change at the smallholder level intervention due to the intervention of AICCRA. This needs to go ahead with knowledge transfer and capacitate smallholder farmers.	The cluster enhances smallholder farmers' livelihoods by facilitating CSA and CIS access, uptake, and use. Knowledge transfer and capacity building are major components of the project, and the cluster remains committed to advancing these efforts in the future.
I would like to see AICCRA accelerate its capacity-building efforts beyond what it is currently doing. (Metsafe Mamiru, Bonga Research Center)	This is noted

still climate analysis would be continue and improved (Sintayehu Eshetu, Mekidela University)	This is noted
It will be good if AICCRA proceed working with as and woreda agricultural office workers on water shade development; with the intention of seeing tangible changes on selected water shades. (Anonymous, Mekidela University)	The cluster works with CIAT on the implementation of CSA for the rehabilitation of degraded landscapes in central Ethiopia and Amhara regions.

Significance of the results for AICCRA scaling pathways and work in Ethiopia

The AICCRA partnership survey results show high satisfaction with small ruminant innovations (SmaRT Pack), user-centric bundled digital climate agro-advisories through the Ethiopian Digital AgroClimate Advisory Platform, and the CRMAE curriculum fostering public-private partnerships. The survey results reaffirm the positive impact and provide valuable insights to improve access, uptake, and use. This feedback is critical for refining our approaches and strengthening the scaling of the innovations in Ethiopia. By analyzing these insights, we can enhance the effectiveness of our interventions, expand our outreach, and ensure that smallholder farmers and livestock keepers benefit from climate-smart solutions tailored to their needs.

Ghana

Cluster overview

In 2024 AICCRA Ghana developed 2-tier CSA hubs (district and community level) which brought together all the scaling partners (radio, digital services provider, department of agriculture) to define and scale site-specific CSA-CIS-SAM bundles for men, women, and female farmers. Members of the CSA working groups at the district level engaged in environmental and social safety standards and gender smart-scaling capacity-building activities. Four bundled innovations; smart production and soils, smart seeds and markets, climate-smart integrated pest and disease management, and water-smart solutions were scaled. Three bundles for groundnut, cowpea and sweet potato were customized for women. These innovations reached 261,000 farmers, of which 40% were women. Evaluation studies from scaling partners indicated that about 117,000 farmers (34.7% female) were using the innovations to make adaptive decisions. AICCRA forged relationships among stakeholders to create avenues for efficient upscaling of innovations, increasing the reach and improving the understanding of the information and innovations. AICCRA Ghana and partners also participated in the scaling week where the cluster critically reflected on prioritized innovations and scaling efforts through the lens of AICCRA's scaling framework. These reflections provided critical insights into the activities of the cluster for the subsequent months and especially for 2025. For further scaling, the cluster formulated four consortia from private businesses to provide sustainable scaling of innovations starting from 2025.

In Ghana, three AICCRA services were surveyed:

- The participatory Ghana Scaling Week were participated by 24 people, 18 from Ghana cluster and 6 Theme 2 members. AICCRA staff and partners capacity built on the state of the art in delivery and scaling, process initiated for developing scaling solution profiles for AICCRA Ghana bundles and developing road map for operationalization of the AICCRA scaling framework in the Ghana cluster with support from Theme 2.
- CSA Hub working group workshop was held to elaborate the Terms of Reference (TOR) for various roles within the Hubs, link the Hubs with relevant partner (inputs and policy), build their capacity in environmental and social safety standards, and gender smart scaling approaches. This approach kept the district department of agriculture in the forefront of scaling AICCRA innovations to ensure sustainability.
- Accelerator Matchmaking which brought together private businesses to develop proposals for the scaling the four bundled solutions. To this end, two matchmaking events, one virtual and one in-person were organised for SMEs to meet and interact with the AICCRA and partners and identify other SMEs to form consortia for collaborative proposal writing.

The survey was sent to 19 partners, of which 17 responded, for an 89.47% response rate.

Ghana respondents' demographics

60% of the respondents were male between the age of 35 and 54, and 29% were women. 18% of the respondents were below 35 years old, and no respondents

were younger than 25 years old. Below, a gender disaggregation of different age groups:

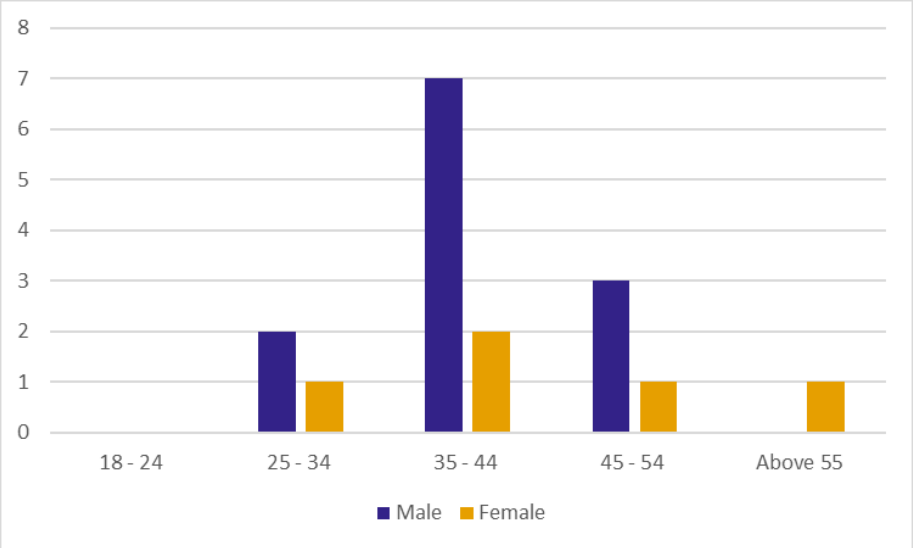

Figure 52 Ghana- Age and gender distribution of the respondents

Ghana respondents' affiliation

Respondents were affiliated with 6 partner organizations, notably the Council for Scientific and Industrial Research – Crop Research Institute CSIR-CRI (7 respondents), the Ministry of Food and Agriculture (5 respondents), Ghana Meteorological services (2 respondents), Farm Radio International, M&D seeds, and Wamiagro (1 respondent each). Total 17 respondents were surveyed.

Table 35 Ghana partner organizations

PARTNER ORGANIZATION	N OF RESPONDENTS
CSIR-CRI	7
Ministry of Food and Agriculture, Ghana	5
GMet	2
Farm Radio International, M&D seeds, WamiAgro	1 each
Total	17

Ghana services and their use

On average, the three services surveyed by Ghana were used by 87% of the partners, which expressed an overall average satisfaction of 85%. This score includes multiple dimensions of satisfaction such as usefulness, relevance and alignment to one's organization, needs and expectations being met, tailoring of

content to needs, relevance for gender and social inclusion, incorporation of interactive elements and presence of feedback mechanisms.

Table 36 Use and Satisfaction of Ghana's services

AICCRA SERVICE	N OF RESPONSES	USE	OVERALL SATISFACTION
Ghana Scaling Week	6	100%	88%
CSA Hub working group workshop	10	100%	84%
Accelerator Matchmaking	5	60%	83%
Total/Average	**21**	**87%**	**85%**

Two of the AICCRA services surveyed for Ghana included questions regarding sharing of knowledge acquired during the training to train or inform other people and sharing of the AICCRA tool/technology with others. On average, 90% of respondents used the knowledge acquired to train other people, reaching over 1300 people in total (of which 52% are estimated to be women).

Table 37 ToT effect in Ghana's services

AICCRA SERVICE	TRAINING OR SHARING DONE (%)	N OF PEOPLE TRAINED	% OF WOMEN TRAINED
Ghana Scaling Week	100%	252	48%
CSA Hub working group workshop	80%	1130	55%
Total/Average	**90%**	**1382**	**52%**

Demand driven nature of the services

The Ghana Scaling week was equally perceived as having been co-identified (50%) and being offered by AICCRA (50%). Most respondents (60%) felt that the opportunity to set up CSA Hub working group workshops was co-identified, while the rest believed it was offered by AICCRA. One respondent (20%) felt that technical assistance on Accelerator Matchmaking responded to specific requests, another one believed the opportunity had been co-identified, while the remaining 40% believed it was offered by AICCRA.

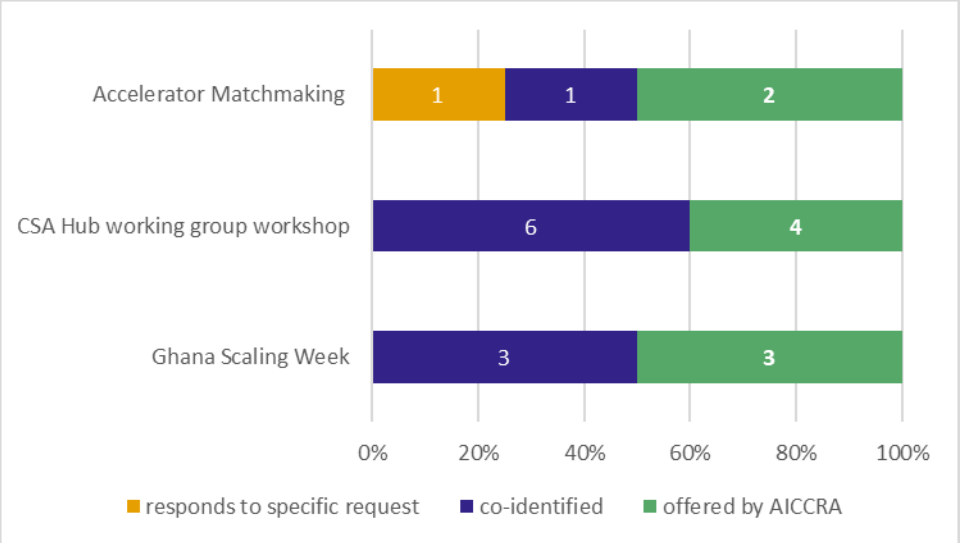

Figure 53 Count and percentage of respondents believing that the AICCRA services surveyed in Ghana were offered in response to specific requests, co-identified, or offered by AICCRA

Detailed results by service

Ghana Scaling week

This service was co-developed with AICCRA Theme 2 cluster. The insights acquired in the Ghana Scaling week reportedly used by all the 6 respondents who said they were familiar with this service. Moreover, all of them reported using the knowledge acquired to train, in total, about 250 people (of which 48% are estimated be women). 33% of the respondents attended only the in-person scaling week on the 16th to 19th September 2024, while 67% of the participant attended both Ghana scaling week CD virtual kick-off on 2nd August 2024 and the in-person. Respondents reported using the knowledge acquired in the following circumstances:

- *The design and implementation gender responsive programming (Benjamin Kojo Fiafor , Farm Radio International)*
- *During my engagement with farmer-based organizations, sensitization (Augustine Bichamabor, Ministry of Food and Agriculture, Ghana)*
- *The use of improved and stress tolerance seeds. The use of Bundling to reduce production cost. Intercropping cereal and legumes. Weather smart awareness (Tanya Martin , Ministry of Food and Agriculture, Ghana)*
- *Immense training of agriculture extension agents and farmers in the Cape Coast municipality, Kintampo south district, Kintampo north district, Techiman north district and Komenda-Elmina-Eguafo-Abrem municipality to be able to understand climate information and forecast produce by my organization without support from an officer from my organization. (Francisca Martey. Ghana Meteorological Agency (GMET.)*
- *In extension of technologies to farmers*
- *Developing gender and social inclusion products (Dr Stephen Yeboah, CSIR-CRI)*

Respondents expressed an average overall satisfaction of 88%, especially due to the usefulness of the course (93%) and the presence of interactive elements (93%). Improvements could be achieved by further tailoring of the content to partner needs (83%). No specific suggestions were reported. See Figure 54 for more details on the satisfaction of this service.

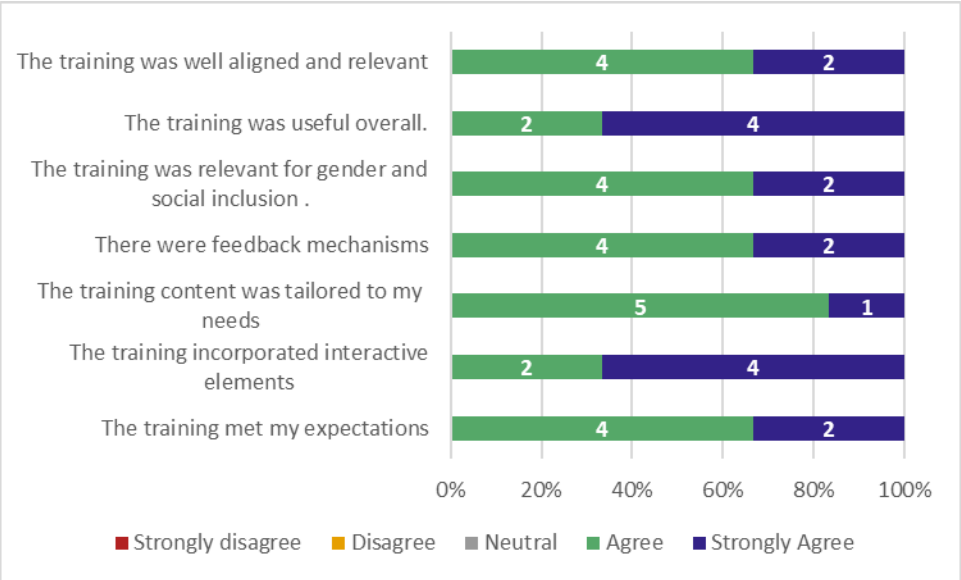

Figure 54 Satisfaction on the Ghana scaling week

CSA Hub working group workshop

The CSA Hub working group workshop was reportedly used by all the 10 respondents who said they were familiar with this service. Moreover, 80% of the respondents reported using the knowledge acquired to train, in total, over 1100 people (of which 55% are estimated be women). Respondents reported using the knowledge acquired in the following circumstances:

- *Designing and production of the content of our current radio programs with the 8 radio stations (Benjamin Kojo Fiafor , Farm Radio International)*
- *During trainings and demonstration at Mempeasem, Dehia, Akotokyir and Efutu I included more than 50% female*
- *In the selection of CSA hub members for demonstration on climate smart agriculture interventions I included more than 50% females (Ernestina Assan, Ministry of Food and Agriculture, Ghana)"*
- *The use of improved and stress tolerance seeds to improve yield. (Tanya Martin, Ministry of Food and Agriculture, Ghana)*
- *On the field training programs with farmers*
- *Field demonstration*
- *Integration of CSA and CIS technologies (Dr Stephen Yeboah, CSIR-CRI)*
- *Skills used in RELC meetings and with farmer engagements*
- *In my field of works and researcher*
- *On other projects to improve technology uptake*
- *Weather forecast training given to me was communicated to my field offices and as well trained 600 farmers. These farmers planted base on the education*

given and were able to overcome the dry spell. (Cosmos Yeboah, Ministry of Food and Agriculture, Ghana)

Respondents expressed an average overall satisfaction of 84%, especially due to the alignment of the service to the respondents' organization (90%), and the incorporation of interactive elements (88%). Improvements could be made by integrating feedback mechanisms (80%). No specific suggestions were reported. See Figure 55 for more details on the satisfaction of this service.

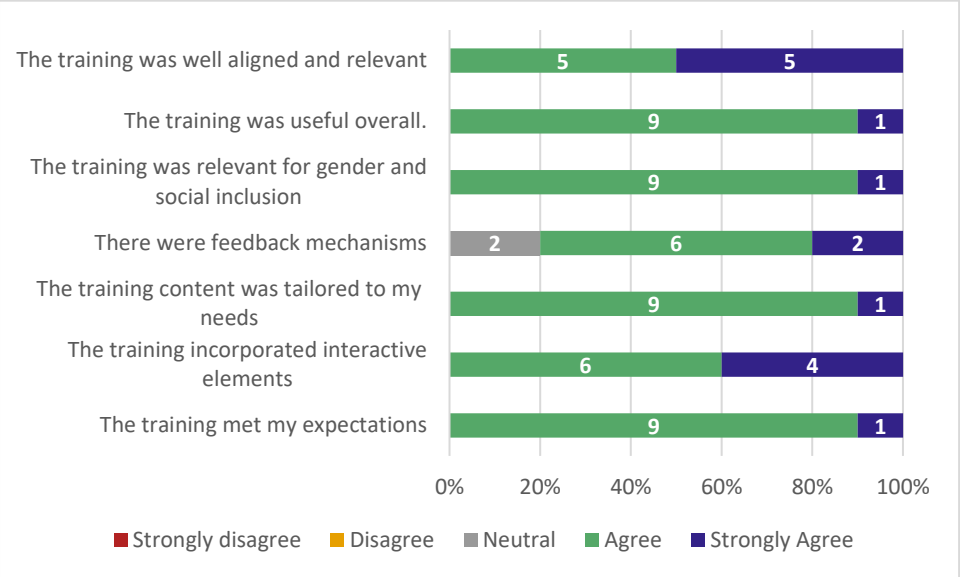

Figure 55 Satisfaction on the CSA Hub working group workshops

Accelerator Matchmaking

The knowledge acquired through the Accelerator Matchmaking technical assistance was reportedly used by 60% (3) of the five respondents who said they were familiar with this service. Two respondents did not use the knowledge acquired, with one not providing comments, and the other reporting "*engagements/ having several engagements*" as a reason for not making use of the accelerator. Respondents reported using the knowledge acquired in the following circumstances:

- *Mapping of stakeholders (Dr Stephen Yeboah, CSIR-CRI)*
- *In all our demonstrations*
- *In climate smart training and also provision of mechanization material to help farmers. (Cosmos Yeboah, Ministry of Food and Agriculture, Ghana)*

Respondents expressed an overall satisfaction of 83%, positively scoring their satisfaction with the service (84%), the usefulness of the Accelerator matchmaking (84%), and the fact that their needs were met (84%). Improvements could be achieved by better integrating the service in the organizations' plans and activities (80%). No specific suggestions were reported. See Figure 56 for more details on the satisfaction of this service.

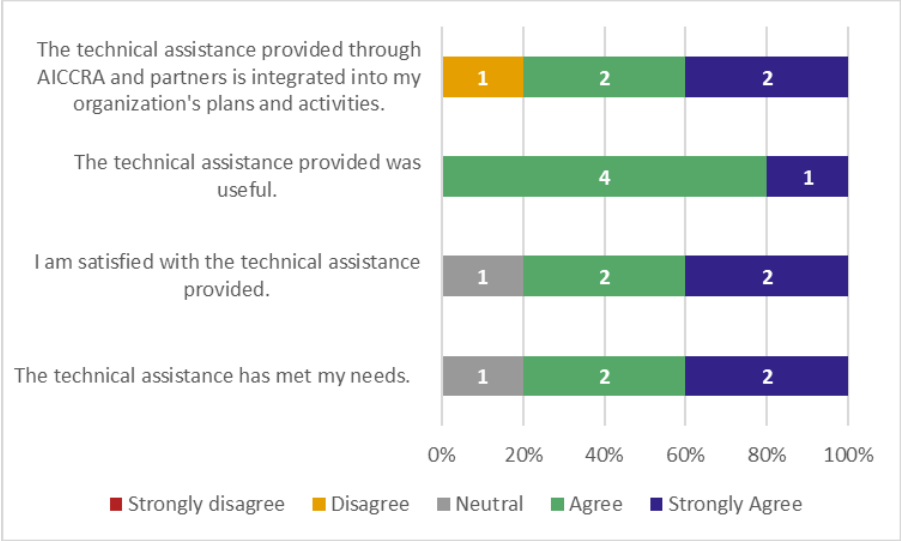

Figure 56 Satisfaction on the Accelerator Matchmaking

Take aways

Partnership feedback

Overall, respondents expressed satisfaction with the partnership, mentioning fruitful and collaborative relationships.

"It's been a very collaborative relationship with much learning for the team. The team accommodate new and innovative ideas and willing to practical feedback that's works. They give credit to reward for such innovative ideas contributed by others." Benjamin Kojo Fiafor, Farm Radio International

"*AICCRA has trained officers in my department numerous useful interventions very relevant to our field of work such as production and use of neem powder for soil pathogens eg nematode, control of sweet potato cylas weevil with onion boundary, introduction of smart maize seed and drought tolerant varieties of cowpea, DACA app for accessing information on crop production, Syecomp among others. They have made accessible weather information to officers and farmers in my district through engagement and trainings with GMET*". Ernestina Assan, Ministry of Food and Agriculture, Ghana

"*The capacity strengthening component enhances the ability of many staff of my organization to deploy CSA and CIS technologies*" Dr Stephen Yeboah, CSIR-CRI

Issues, improvement suggestions, recommendations for cluster lead

Verbatim suggestions from partners regarding the partnership are indicated in Table 38, along with the cluster answer and actions taken in response to those comments and to the service-specific suggestions.

Table 38 Feedback for the Ghana cluster

PARTNERS' FEEDBACK	**CLUSTER RESPONSE**

As an Agriculture Extension Agent, I need more training on innovations and data collection to manage these Climate Change problems for yield improvement. *The tools and materials for credible data collection.* *Timely release of fuel allowances for effective work delivery. Other motivation. (Tanya Martin, Ministry of Food and Agriculture, Ghana)*	This is noted and effort will be made for more training on data collection. The credibility of data lies in how they are collected, and effort will made for quality check and validation before analysis.
AICCRA should support field staff with fuel in the demonstrations and training for farmers	This is already being done and will further engage with field officers to adjust fuel allowances based on the estimated number of trips made to the communities to cover farmer trainings.
Capacity building on post -harvest loss is needed. - (Cosmos Yeboah, Ministry of Food and Agriculture, Ghana)	Post harvest issues will be considered in the future.

Significance of the results for AICCRA scaling pathways and work in Ghana

The scaling pathways and work in Ghana kept the institutions responsible for enhancing the agriculture sector at the forefront of scaling innovations by enhancing their capacities. It brought together stakeholders that supplement each other in getting information and innovations to be understandable, easily accessible, and usable by farmers. The pathways also introduced joint actions from public and private businesses to provide sustainable bundle solutions for farmers. The Ghana scaling pathway was strongly anchored on the district and community CSA Hubs allowing for full ownership and customization of AICCRA innovations to the local context at all intervention communities.

Kenya

Cluster overview

In Kenya, AICCRA focuses on ASAL areas to build resilience in dryland systems through institutional capacity strengthening. We contribute to all three of the components and each of the sub-activities. The project focuses on improving the quality of climate information services for climate-smart agriculture in Kenya, increasing access to and use of CIS, especially by women. We also seek to improve awareness and uptake of selected climate-smart agriculture practices, again with a focus on women. Bundled CIS and CSA will help the GoK achieve its adaptation, rural development and food security targets in the drylands by improving food production and market functions under conditions of increasing climate variability.

In the AF phase, the Kenya cluster builds upon our existing products, partnerships and networks. We are adding features to the AgData Hub that allow it to better generate advisories for livestock systems (both pastoral and mixed crop-livestock). Across the cluster activities, we focus on strategies that interlink scaling-up (institutionalising) with scaling-out (geographical expansion). This involves embedding our curricula in training institutions through high level validation and certification, as well as training of trainers to implement key CSA and CIS activities in an expanded number of target counties. In the AF phase, we will much more effectively leverage WB networks and activities to improve our scaling.

In Kenya, five AICCRA services were surveyed:

- AgDataHub: AICCRA Kenya's focus has enhanced CIS and CSA's in Kenya's arid and semi-arid regions. AICCRA supported creation of an AgDataHub under the Kenya Agricultural Observatory Platform, jointly managed by the Kenya Meteorological Department (KMD) and the Kenya Agricultural and Livestock Research Organization (KALRO). The AgDataHub is a digital platform which enhances the availability and access to agrometeorological data. It delivers precise, data-driven recommendations for both crop and livestock management, empowering farmers to adapt to climate variability and improve productivity.

- Mobile app for KMD's volunteer observers: To address the gap of inadequate automated weather stations in the country, AICCRA is supporting KMD in capacity building by developing a mobile app to enable the climate volunteers to better collect and relay weather information to KMD within the shortest time possible. This upgrade from manual paper recording to digital, has improved timeliness and effectiveness of weather predictions, improved quality of agrometeorological data and significantly expanded the data points.

- Kaznet: KAZNET leverages citizen science principles to collect real-time data on market performance, rangeland conditions, and household food security from sentinel sites monitored weekly by citizen volunteers. This data is summarized in user-friendly dashboards and disseminated to agro-pastoralists to support decision-making at both household and institutional levels. It also informs the National Drought Management Authority's monthly bulletins.

- University Curricula: AICCRA's ongoing partnership with four universities- Taita Taveta University, Chuka University, Laikipia University, and Murang'a

University- led to development and approval of CSA curricula, focusing on dryland ecosystems and climate-smart practices. The PhD in CSA, MSc and short courses from three of the four universities have been reviewed approved by the Commission for University Education (CUE), students enrolled and first cohorts advancing to the research phase.

- Technical capacity support on community seed production for Drought Tolerant Crops. In Kenya's arid and semi-arid lands (ASALs), drought tolerant crops (DTC) seeds are not readily available through the commercial seeds systems. Community seed production, multiplication, and banking of DTCs are vital for food security and climate resilience. AICCRA is supporting establishment of community seed banks where community produce quality seeds for themselves, with the aim of creating linkages between farmers and small seed companies for contract seed production as one commercial pathway, and supporting farmers to register as of cooperatives, and as independent seed producers and suppliers.

The survey was sent to 22 partners, of which 18 responded, for an 82% response rate.

Kenya respondents' demographics

72% of the respondents were over 45 years old, and 28% were women. No respondents were younger than 25 years old. Below, a gender disaggregation of different age groups:

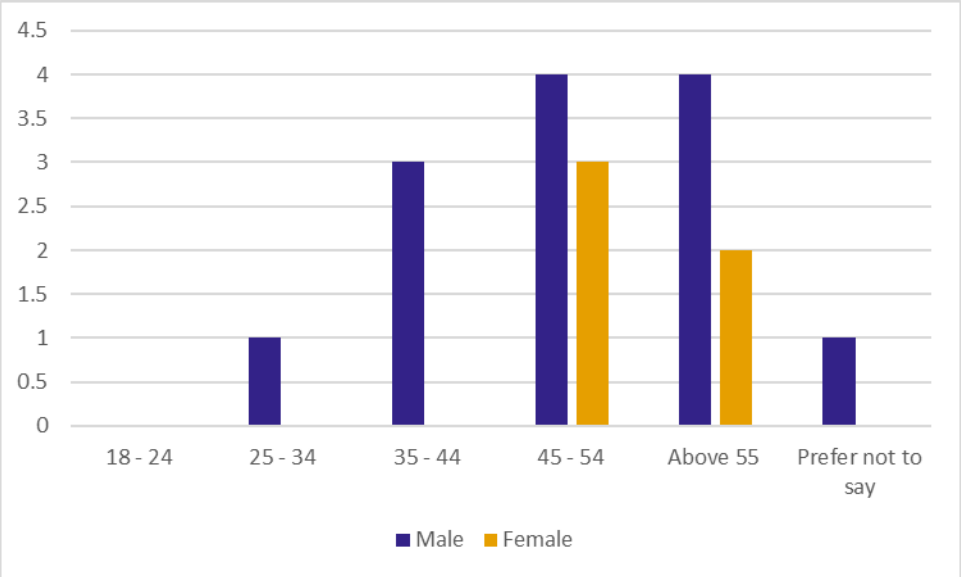

Figure 57 Kenya- Age and gender of the respondents

Kenya respondents' affiliation

Respondents were affiliated with 14 partner organizations, notably Chucka University (2 respondents), KALRO (2 respondents) and KMD (2 respondents). 6 respondents were ward or sub-county agricultural officers from multiple Kenyan counties.

Table 39 Kenya partner organizations

PARTNER ORGANIZATION	N OF RESPONDENTS
Chuka University	2
KALRO	2
KMD	2
Ward Agricultural Officer - Makueni County	2
African Conservation Tillage Network, Association of Women in Agriculture (AWAK), Laikipia University Lewa Wildlife Conservancy, Murang'a University of Technology, Sub-County Agricultural Officer - Taita Taveta County, Sub-County Crops Development Officer - Kitui County, Taita Taveta University	1 each

Kenya services and their use

On average, the five services surveyed by Kenya were used by 66% of the partners, which expressed an overall average satisfaction of 88%. This score includes multiple dimensions of satisfaction such as usefulness, relevance and alignment to one's organization, needs and expectations being met, tailoring of content to needs, relevance for gender and social inclusion, incorporation of interactive elements and presence of feedback mechanisms. High satisfaction (80%-93%), but varying usage levels suggest differing levels of accessibility or awareness. Opportunity for improvement involves increasing awareness, accessibility, and integration of underutilized services, particularly AgDataHub)

Table 40 Use and Satisfaction of Kenya's services

AICCRA SERVICE	N OF RESPONSES	USE	OVERALL SATISFACTION
University Curricula	6	67%	80%
AgDataHub	6	50%	90%
Mobile app for KMD's volunteer observers	13	77%	85%
Kaznet	3	67%	93%
Technical capacity support on community seed production for Drought Tolerant Crops	8	63%	92%

Total/Average	**36**	**66%**	**88%**

Four of the AICCRA services surveyed for Kenya included questions regarding sharing of knowledge acquired during the training to train or inform other people and sharing of the AICCRA tool/technology with others. On average, 58% of respondents used the knowledge acquired to train other people, reaching almost 5700 people in total (of which 53% are estimated to be women).

Table 41 ToT effect in Kenya's services

AICCRA SERVICE	TRAINING OR SHARING DONE	N OF PEOPLE TRAINED	% OF WOMEN TRAINED
University Curricula	43%	5135	62%
AgDataHub	67%	169	53%
Mobile app for KMD's volunteer observers	54%	267	63%
Kaznet	67%	121	36%
Total/Average	**58%**	**5692**	**53%**

Demand-driven nature of the services

The university curricula was perceived as having been either co-identified (66%) or being offered in response to specific requests (33%). Half of the respondents felt that AgDataHub had been offered by AICCRA, one respondent believed it was offered in response to specific requests, while the remaining 30% felt it had been co-identified. 46% of the respondents believed that the need for the Mobile app for KMD's volunteer observers had been co-identified, while the remaining respondents felt that it was either offered by AICCRA (23%) or in response to requests (23%). Kaznet was perceived as being developed in response to requests by 2 of the 3 respondents (66%), while the remainder felt that its need was co-identified. One respondent (12%) felt that technical assistance on community seed production responded to specific requests, 37% believed the opportunity had been co-identified, while the remaining 50% believed it was offered by AICCRA.

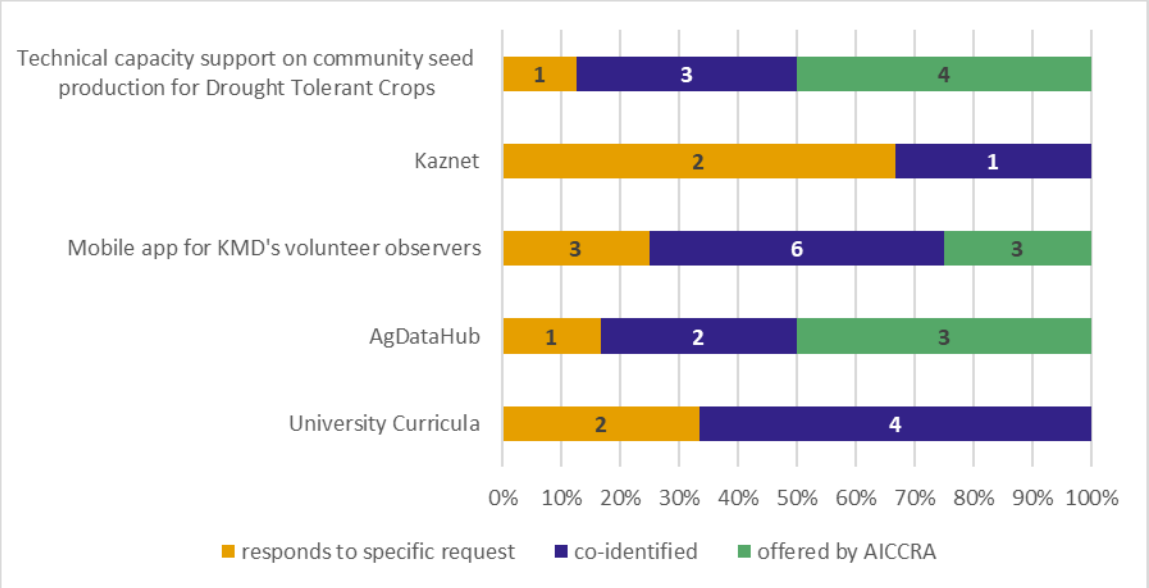

Figure 58 Count and percentage of respondents believing that the AICCRA services surveyed in Kenya were offered in response to specific requests, co-identified, or offered by AICCRA.

Detailed results by service

University Curricula

The insights acquired in the University curricula development were reportedly used by 67% (4 of the 6 respondents) who said they were familiar with this service. Moreover, 50% of the respondents reported using the knowledge acquired to train, in total, about 5000 people (of which 62% are reported to be women). 50% of the respondents attended the workshops in the past year (of which 17% in the past 6 months), while 50% had done so more than a year before. Respondents reported using the knowledge acquired:

- *To train farmers, students and department staff on CSA technologies and social inclusion*
- *When organize field activities*
- *To teach climate modeling; develop climate smart agriculture short courses and MSc curriculum; integrate farmer communities with industry and academia (Prof. Dorothy A. Amwata, Murang'a University of Technology)*
- *To ensure gender inclusivity in the field and to develop three university curricula (Grace Opetu, Chuka University)*

Respondents expressed an average overall satisfaction of 81%, and scored most positively the alignment to the respondents' organization (87%) and the curricula having met expectations (83%). Improvements could be achieved by increasing the relevance for gender and social inclusions (77%). Suggestions included the need to implement follow-up training to integrate the knowledge into the other activities of the partner. See Figure 59 for more details on the satisfaction of this service.

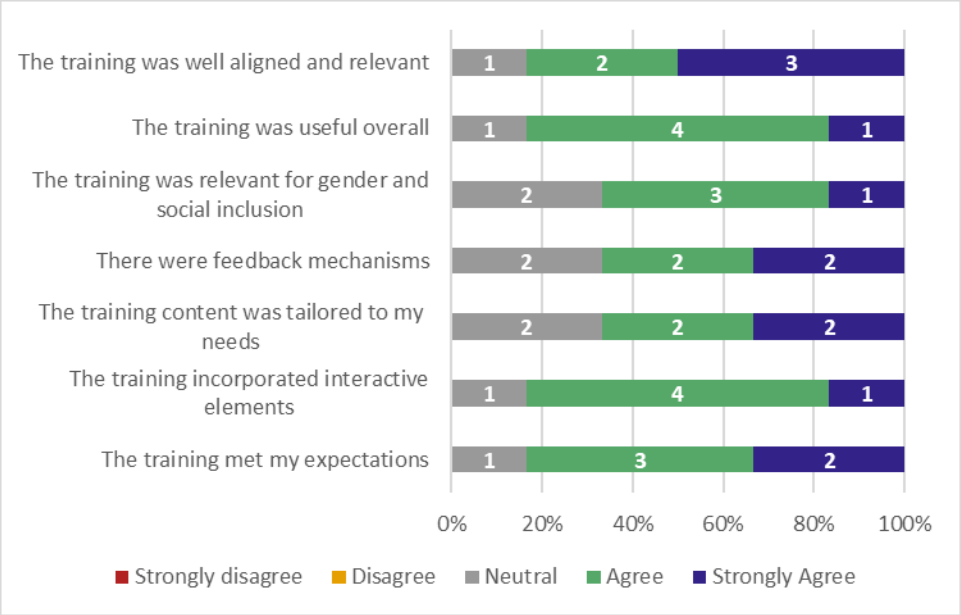

Figure 59 Satisfaction of the University Curricula

AgDataHub

The AgDataHub was reportedly used by 50% (3) of the 6 respondents who said they were familiar with this service. Moreover, 67% (4) of the respondents reported using the knowledge acquired to train, in total, about 170 people (of which 53% are estimated be women) both within (2) and beyond (2) their organization. 3 respondents reported not using the tool because timing was off, there were not opportunities to motivate the use of the tool and because of infrastructure challenges (Munyoki Mbaluka, Sub-County Agricultural Officer - Taita Taveta County). Respondents reported using the knowledge acquired:

- *to inform policy and communicate with local communities about climate smart agriculture and innovations (Prof. Dorothy A. Amwata, Murang'a University of Techology)*
- *to process and provide climate information services to support climate smart agriculture.*
- *For data sharing (Ag DataHub, and advancements to KAOP Weather Data tool)*

Respondents expressed an average overall satisfaction of 90%, where the three criteria of needs being met, satisfaction, and relevance for GSI were scored equally. Challenges in the use of the tool included data limitations (Prof. Dorothy A. Amwata) and OTP challenges, which were resolved. See Figure 60 for more details on the satisfaction of this service.

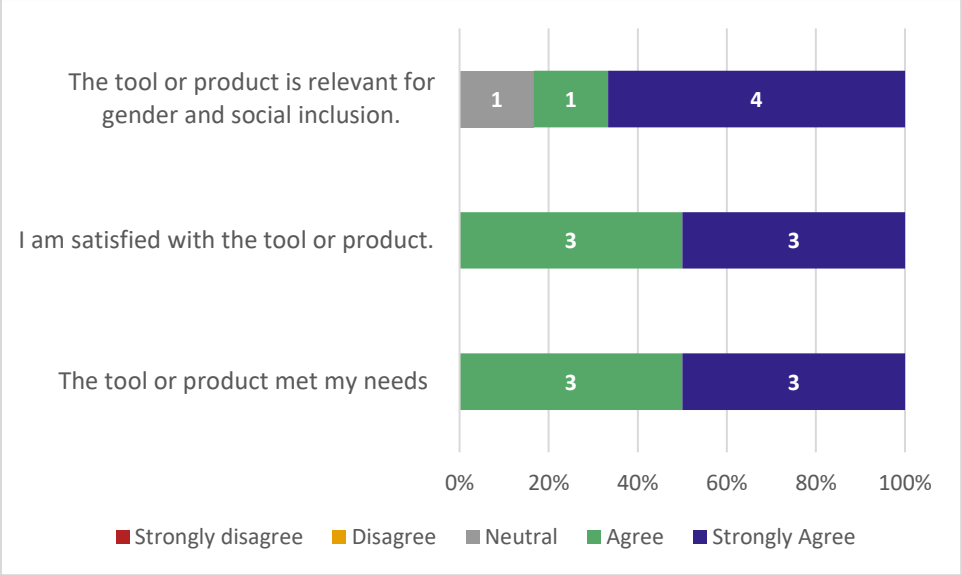

Figure 60 Satisfaction of the AgDataHub

Mobile app for KMD's volunteer observers

The mobile app for KMD's volunteer observers was reportedly used by 77% (10) of the 13 respondents who said they were familiar with this service. Moreover, 54% (7) of the respondents reported using the knowledge acquired to train, in total, about 270 people (of which 63% are estimated be women) both within (5) and beyond (5) their organization. 3 respondents reported not using the tool. One respondent reported not using the tool because there is no infrastructure (John Kariuki Kathee, KALRO), one intends to use the tool in the future when activities are ongoing, and one believes the tool will be useful in the future to validate satellite information. Respondents reported using the tool:

- *to make informed decision in the work place*
- *to send data to headquarters*
- *to train the farmers and extension agricultural officers. Also, to train students when they enroll for the programme in BSc Climate Smart Agriculture in Laikipia University*
- *to determine the type of crop to be grown, breeds of livestock to be kept (Prof. Dorothy A. Amwata, Murang'a University of Techology)*
- *to enable women farmers, especially in Kitui, to accurately rely on weather forecasts much more than they did in the past in every farming season (Julius Mundia, Association of Women in Agriculture (AWAK))*
- *to access and disseminate agro weather information (Munyoki Mbaluka, Sub-County Agricultural Officer - Taita Taveta County)*
- *to use rain gauges to monitor the amount and distribution of rainfall within the area of work*
- *to collect rainfall data from volunteer observers.*
- *to disseminate periodic weather forecast to farmers for proper planning.*
- *Training farmers on climate change (John Kariuki Kathee, Ward Agricultural Officer - Makueni County)*

Respondents expressed an overall satisfaction of 85%, scoring most positively the fact that needs were met (88%). Improvements could be achieved by increasing its relevance for gender and social inclusion (83%). Details on agreement on the different dimensions of satisfaction can be found in Figure 61.

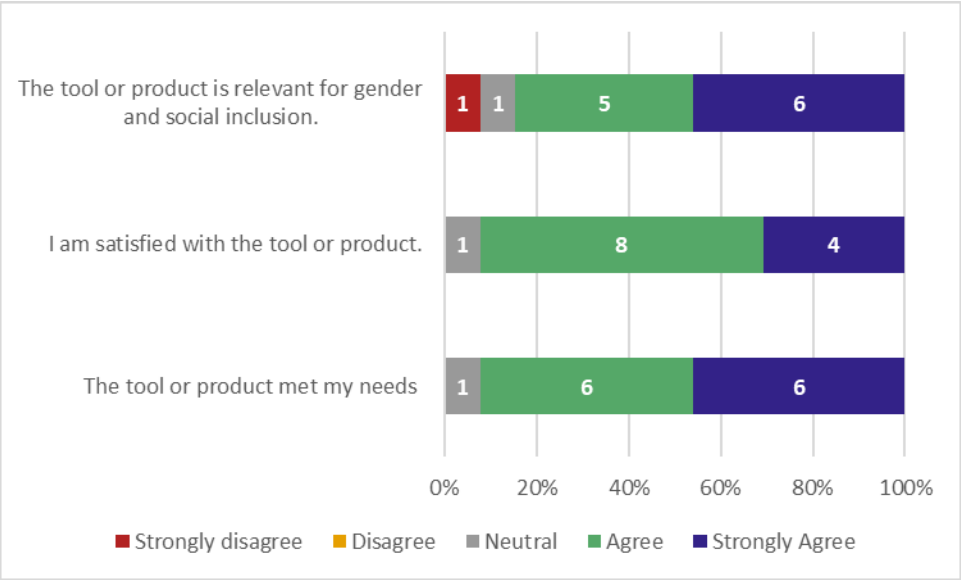

Figure 61 Satisfaction of the mobile app for KMD's volunteer observations

Several challenges in the use of the tool or suggestions for improvement were reported:

- *Some of my clients do not believe the tool/technology. There is need for continuous sensitization (Ward Agricultural Officer - Kitui County)*
- *Reliable internet for access and sometime general information which lack details and specifics for very localized places*
- *Lack of political will, no put system to attract users of the technology (Prof. Dorothy A. Amwata, Murang'a University of Techology)*
- *More awareness of KMD tool through local media for it to be uptaken by bigger numbers in the grassroots villages (Julius Mundia, Association of Women in Agriculture (AWAK))*
- *Infrastructure challenges like connectivity and farmer understanding of the tool (Munyoki Mbaluka, Sub-County Agricultural Officer - Taita Taveta County)*
- *The challenge is that the rain gauges are placed at farmers demo farms only and recording timely is a challenge.*
- *There is need to translate the weather forecast information in local dialect so that many of our farmers can clear understand*
- *lack of facilitation (John Kariuki Kathee, Ward Agricultural Officer - Makueni County).*

Kaznet

Kaznet was reportedly used by 67% (2) of the 3 respondents who said they were familiar with this service. The two respondents who reported using the tool also reported using the knowledge acquired to train, in total, about 120 people (of which 36% are estimated be women) both within (1) and beyond (1) their organization.

One respondent reported not using the tool because of Infrastructure challenges (Munyoki Mbaluka, Sub-County Agricultural Officer - Taita Taveta County). Respondents reported using the tool:

- *To provide insights on market information*
- *To (access) digital technologies (Prof. Dorothy A. Amwata, Murang'a University of Techology)*

Respondents expressed an overall satisfaction of 93%, with one respondent agreeing, and two respondents strongly agreeing that they were satisfied with the tool, and that the tool met their needs and was relevant for gender and social inclusion (Figure 62). No suggestions were reported.

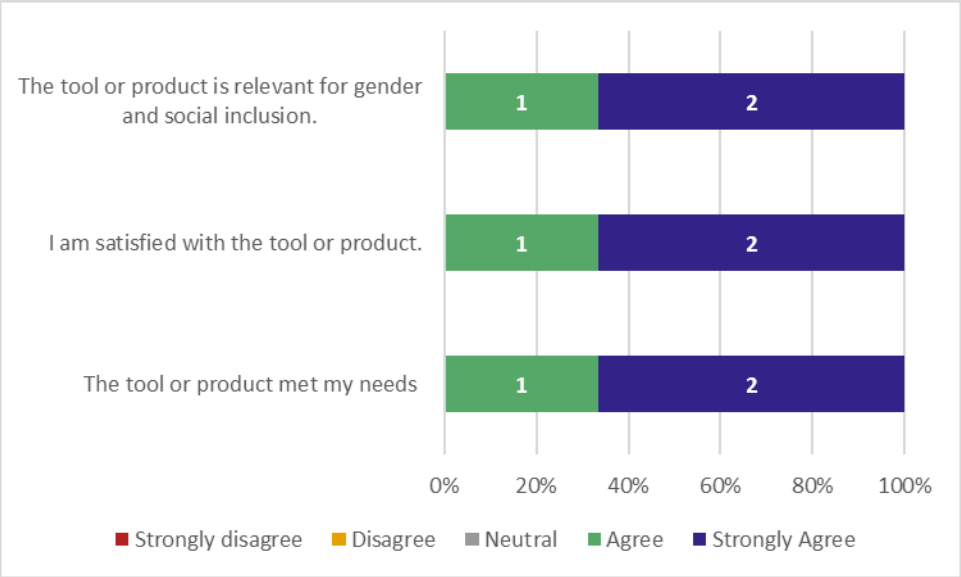

Figure 62 Satisfaction of Kaznet

Technical capacity support on community seed production for Drought Tolerant Crops (DTCs)

The knowledge acquired through technical capacity support on community seed production for Drought Tolerant Crops was reportedly used by 63% (5) of the 8 respondents who said they were familiar with this service. Three respondents did not use the knowledge because the technical assistance should have been delivered earlier, before the start of season, and due to lack of support material (John Kariuki Kathee, Ward Agricultural Officer - Makueni County). The third respondent who did not use the service expressed the "need to train more seed producers and capacity build them to register as seed producers with relevant authorities". Respondents reported using the knowledge acquired in the following circumstances:

- *"Some of our farmers in Kitui have already been incorporated as demo farmers and are on the forefront of promotion of planting of DTCs in their respective localities of Makueni, Kitui, and Taita Taveta. More farmers are planting DTCs than previously and the results are very good" (Julius Mundia, Association of Women in Agriculture (AWAK))*
- *Workshops, staff capacity building forum, meetings (Munyoki Mbaluka, Sub-County Agricultural Officer - Taita Taveta County)*

- *Knowledge acquired is assisting in multiplication of seeds at farming household level*
- *Training farmers on drought tolerant crops (John Kariuki Kathee, Ward Agricultural Officer - Makueni County).*
- *In increased crop productivity. Also, due to the weather focus I was able to advise the community accordingly. Thanks to the facilitation provided I was able to reach more farmers*

Respondents expressed an overall satisfaction of 92%, with all respondents strongly agreeing that their needs were met (100%). Respondents scored positively the integration of technical assistance in the plans and activities of one's organization (95%), and satisfaction (90%). Improvements could be made to increase the usefulness of technical assistance (85%). See Figure 63 for more details on the satisfaction of this service.

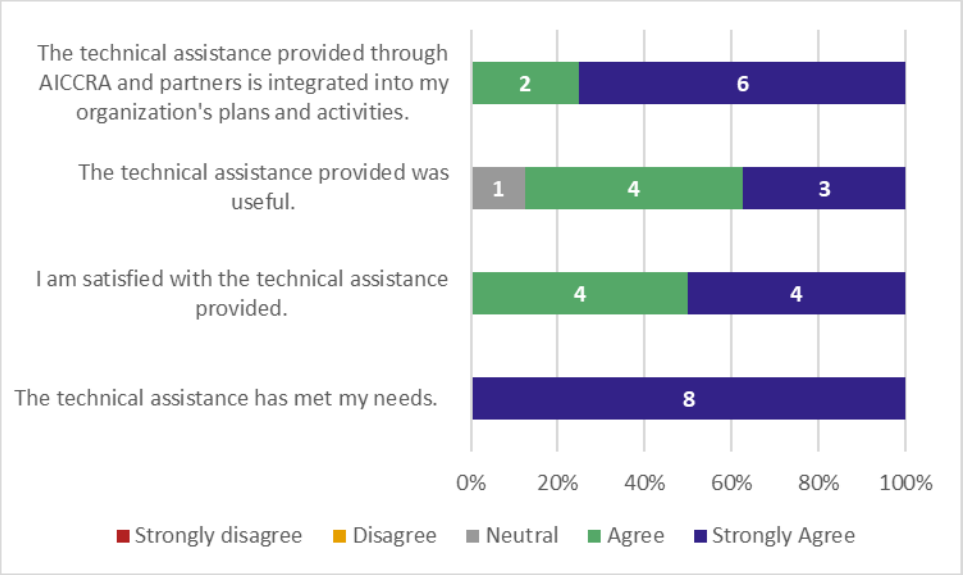

Figure 63 Satisfaction on the technical capacity support on community seed production for Drought Tolerant Crops

Take aways

Partnership feedback

Overall, respondents appreciated AICCRA for its continued support in helping farmers and expressed the willingness to strengthen the partnership for the benefits of the targeted clients (i.e. smallholder farmers). A respondent appreciated the continuous support in the provision of CIS to make society resilient in a changing climate.

"We appreciate the collaboration with AICCRA. This has gone a long way in fulfilling some of our objectives as a teaching, research and outreach organization. However, as a university, some parameters on designing activities meant that we were more of agricultural extension agents rather specialist knowledge and technology creators and disseminators." Anonymous

"Very exciting! collaboration and networking has contributed to the excellent working relationship including continuous consultation, rural participation, identifies specific niche areas that no one else is working on." Prof. Dorothy A. Amwata, Murang'a University of Techology - ' Talent wins games, but teamwork & intelligence win championships'

"The partnership has improved the capacity in the provision of climate information services to assist farmers in decision making in farming." Anonymous

Issues, improvement suggestions, recommendations for cluster lead

Verbatim suggestions from partners regarding the partnership are indicated in Table 42, along with the cluster answer and actions taken in response to those comments and to the service-specific suggestions.

Table 42 Feedback for the Kenya cluster

PARTNERS' FEEDBACK	**CLUSTER RESPONSE**
We require capacity strengthening on scaling and inclusivity. Any support offered will be highly appreciated. Grace Opetu	This is noted as a growth area for the university curriculum work.
Our projects are season based and it becomes a challenge when funds are received towards the end of the season. Anonymous	This appears to emerge from AICCRA's very late disbursement of funds to centres, which affected our ability to implement.
As partners, we would appreciate multi-year funding to enable the implementation of smart agriculture amongst our communities to achieve long-term impact. We also request capacity building of our team on AgDataHub, KMD, Kaznet, etc for us to familiarise ourselves with new technologies and practices. Anonymous	We agree that stable funding would improve the process, but the steady decline of funding allocated to country Clusters has made this difficult.
AICCRA to do good facilitation. John Kariuki Kathee, Ward Agricultural Officer - Makueni County,	Desire for stronger facilitation in the counties is being addressed based on other feedback.
We would wish more of our farmers to be incorporated in the training programs within the AICCRA training cycle, every year. The weather forecasts by KMD should be broadcasted weekly in popular local radio stations within Kenya. This will promptly promote increased food production. (Julius Mundia, Association of Women in Agriculture (AWAK))	We would also like to expand our engagements with partners like AWAK as well as farmers, but steady decreases in funding to country Clusters have not facilitated this.
There are changes in management of demonstration farms that are not suitable in the	This is already being addressed based on feedback

collaboration. That private ToTs, who are just farmers taking the lead of the same and technical officers participating in limited areas. This must be reconsidered for best results. Anonymous	received through other channels as well.
AICCRA to carry out survey to get feedback i.e. likes & dislike about their new crop varieties issued to community. Anonymous	The desire to provide feedback on the varieties is noted.

Significance of the results for AICCRA scaling pathways and work in Kenya

Overall, the results from the partners survey show that our multi-pronged approach to scaling is well appreciated by our partners. By engaging with national institutions, universities, county extension agents, and farmers and herders, we are strengthening complementary and synergistic pathways of change that we believe will have good institutional sustainability in the absence of AICCRA support. National programs, such as the AgDatHub and the KMD weather observer app, reinforce local programs such as the drought tolerant crop community seed banks and market development.

Mali

Cluster overview

Mali is a major rice producer in West Africa but faces high vulnerability to climate risks. The AICCRA-Mali project, led by AfricaRice with CGIAR and national partners, strengthens capacities to scale climate-smart agriculture (CSA) and climate information services (CIS) for rice-based systems and related value chains. The project addresses data gaps, enhances access to timely climate services, and supports inclusive, gender-responsive solutions tailored to local contexts. It also promotes sustainable financing, improved water management, and resilient storage and processing. Since its launch in 2021, AICCRA-Mali has achieved significant milestones in the co-development, validation, and large-scale dissemination of CSA, CIS, and digital advisory services. This report captures partners reflections on AICCRA-Mali interventions, offering insights into the effectiveness, strengths, gaps, and opportunities for improving collaboration, alignment, and impact.

In Mali, five AICCRA services were surveyed:

- *Climate Risk Management Curriculum for Extension Agent*

A structured training program designed to build extension agents' skills in integrating climate risk management into advisory services. The curriculum equips them with knowledge on climate-smart practices, climate information interpretation, and decision-making support, enabling them to guide farmers toward resilient agricultural planning and climate-adaptive actions.

- AgDataHub. A centralized digital platform designed to collect, harmonize, store, and share agricultural data for improved research, policymaking, and farmer advisory services. AgDataHub enables timely access to standardized datasets, supporting climate-smart agriculture innovations, crop monitoring, and real-time decision-making for various stakeholders across the agricultural value chain.

- Digital Platforms (What's App Group farmers, Phone call and SMS) for SIC dissemination. A multi-channel communication approach using WhatsApp groups, direct phone calls, and SMS to deliver timely, localized climate information to farmers in local languages. This system ensures broader reach, improves farmers' preparedness for weather variability, and facilitates the adoption of climate-smart practices for risk reduction and productivity enhancement.

- Impacts/Effects assessment studies on the field using RCT approach. Rigorous studies applying Randomized Control Trial (RCT) methods to evaluate the effectiveness of climate-smart agriculture innovations and climate information services. The approach enables evidence-based measurement of adoption rates, yield impacts, and livelihood benefits, providing actionable insights to refine interventions and support policy and investment decisions.

- Multi Stakeholders Platforms. Collaborative forums bringing together farmers, researchers, policymakers, private sector actors, and civil society to co-design and implement climate-resilient agricultural solutions. These platforms facilitate

knowledge exchange, joint problem-solving, alignment of priorities, and collective action to enhance adoption of innovations and strengthen food system resilience at local, sub-national and national levels.

The survey was sent to 37 partners, of which 37 responded (100% response rate).

Mali respondents' demographics

46% of the respondents were man aged between 25 and 34 years old, and 11% were women. Three respondents were younger than 25 years old. Below, a gender disaggregation of different age groups:

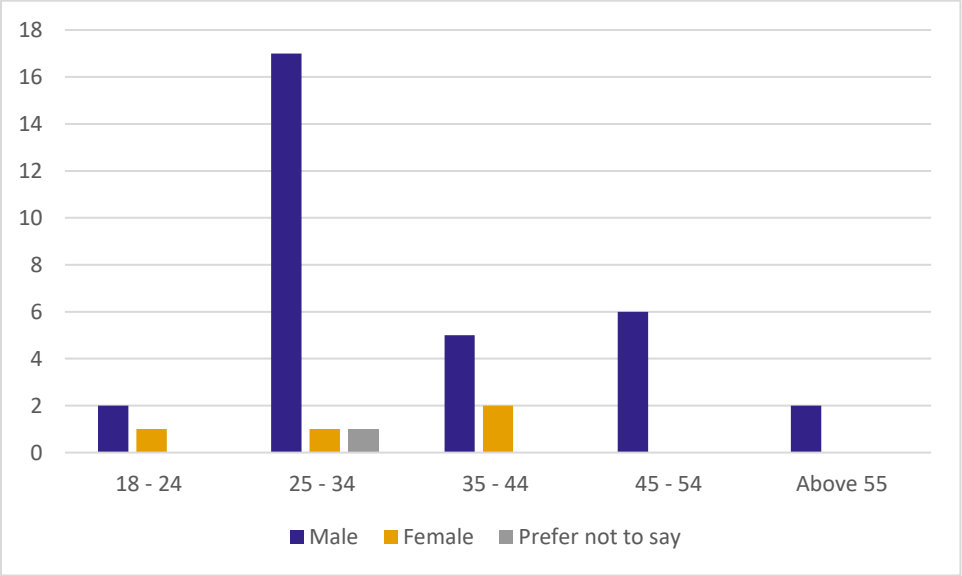

Figure 64 Mali- Age and gender of the respondents

Mali respondents' affiliation

Respondents were affiliated with 17 partner organizations, notably the Rural Polytechnic Institute for Training and Applied Research (*Institut Polytechnique Rural de Formation et de Recherche Appliquée* or IPR-IFRA) of Katibougou (9 respondents), the Niger Office (6 respondents) and Mali-Meteo (4 respondents).

Table 43 Mali partner organizations

PARTNER ORGANIZATION	N OF RESPONDENTS
IPR-IFRA Katibougou	9
Office du Niger	6
Mali-Meteo	4
Acad-Mali	2
ISPDR	2
Université Mandé Bukari	2

University of Bamako	2
Aptitude Globale Sud, Cabinet d'étude et de formation, Association Vision21, École Nationale d'ingénieur ENI/ABT, Faranfassi So, FSEG, IER, Institut supérieur privé pour le développement rural, Interprofession de la filière riz au Mali (IFRIZ-M), SEXAGON, Université DELTA-C	1

Mali services and their use

On average, the five services surveyed by Mali were used by 95% of the partners, which expressed an overall average satisfaction of 97%. This score includes multiple dimensions of satisfaction such as usefulness, relevance and alignment to one's organization, needs and expectations being met, tailoring of content to needs, relevance for gender and social inclusion, incorporation of interactive elements and presence of feedback mechanisms.

Table 44 Use and Satisfaction of Mali services

AICCRA SERVICE	N OF RESPONSES	USE	OVERALL SATISFACTION
Climate Risk Management Curriculum for Extension Agent	26	100%	98%
AgDataHub	29	97%	96%
Digital Platforms (What's App Group farmers, Phone call and SMS) for SIC dissemination	27	85%	95%
Impacts/Effects assessment studies on the field using RCT approach	21	95%	98%
Multi-Stakeholders Platforms	26	96%	97%
Total/Average	**129**	**95%**	**97%**

Four of the AICCRA services surveyed for Mali included questions regarding sharing of knowledge acquired during the training to train or inform other people and sharing of the AICCRA tool/technology with others. On average, 86% of respondents used the knowledge acquired to train other people, reaching almost 7500 people in total (of which 44% are estimated to be women).

Table 45 ToT effect in Mali services

AICCRA SERVICE	TRAINING OR SHARING DONE	N OF PEOPLE TRAINED	% OF WOMEN TRAINED
Climate Risk Management Curriculum for Extension Agent	81%	2805	41%
AgDataHub	93%	2080	40%
Digital Platforms (What's App Group farmers, Phone call and SMS) for SIC dissemination	85%	2021	44%
Impacts/Effects assessment studies on the field using RCT approach	86%	526	56%
Total/Average	**86%**	**7432**	**44%**

Demand-driven nature of the services

The Climate Risk Management Curriculum for Extension Agent was equally perceived as having been co-identified (35%), offered in response to specific requests (31%), or offered by AICCRA (31%). Also the AgDataHub was almost equally perceived as having been co-identified (28%), offered in response to specific requests (34%), or offered by AICCRA (34%). The digital platforms were mostly perceived as having been offered by AICCRA (41%), with the remainer believing they was offered in response to specific requests (26%) or that they had been co-identified (30%). Also the digital platforms were mostly perceived as having been offered by AICCRA (52%), with the remainer believing they was offered in response to specific requests (24%) or that they had been co-identified (19%). The Multi-Stakeholders Platforms were instead mostly perceived as having been developed in response to specific requests (46%), with the remainer believing they was offered by AICCRA (35%) or that they had been co-identified (15%). See Figure 65 below for more details.

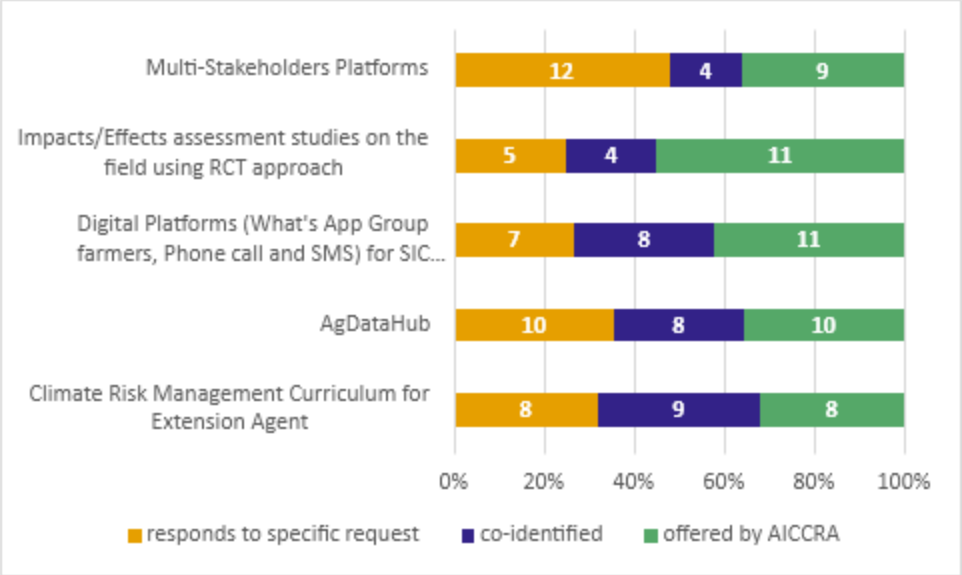

Figure 65 Count and percentage of respondents believing that the AICCRA services surveyed in Mali were offered in response to specific requests, co-identified, or offered by AICCRA

Detailed results by service

Climate Risk Management Curriculum for Extension Agent (CRMEA)

The insights acquired in the development of the Climate Risk Management Curriculum for Extension Agent were reportedly used by all the 26 respondents who said they were familiar with this service. Moreover, 81% of the respondents reported using the knowledge acquired to train, in total, about 2800 people (of which 41% are reported to be women). 84% of the respondents attended the workshops in climate smart agriculture and climate information services curriculum development the past year (of which 72% in the past 6 months), while 16% had done so more the year before. Respondents reported using the knowledge acquired in the following circumstances:

- *As our role is to use sustainable economic model networks to disseminate climate-smart technologies, we have set up CEMAs and farmers' associations specifically for women, including solar watering systems. This has considerably improved the income of women and young people in the project areas in Mali. (Samuel Guindo, Acad-Mali)*
- *During presentations at innovation platforms. Development of the smart valley approach, RiceAdvice tools and crop diversification and climate information technologies (Salif DOUMBIA, IER)*
- *Information processing (Issa Traore, Mali-Meteo)*
- *In the establishment of the agricultural calendar and the orientation of producers at the beginning of the season; (ii) in the integration of the gender dimension in the fight against climate change; (iii) in the process of creating and increasing marketing surpluses at farm level through the prevention and management of climatic risks. (Mahamadou Sidibe, Niger Office)*
- *Adoption of the intensive rice-growing system, use of organic manure and rational management of irrigation water at plot level (Moussa KANE, Chairman,*

Union des Sociétés Coopératives de Semences Certifiées de Riz en Zone Office du Niger)

- *Intensive rice-growing system, use of climate-intelligent varieties (SUTURA and Wachi) (Cheick Keita, Faranfassi So)*
- *In cascade training on farmer agro-ecology in the SEXAGON zones (Cheickna DIANE, Sexagon)*
- *Capacity building for target stakeholders in climate justice and techniques for restoring biodiversity and ecosystems (Cheick Amadou BOUARE, Coordinator of the Vision21Association)*
- *Better choice of seeds adapted to climate change (Bamoye Keita, Niger Office)*
- *At specialist meetings (Youssouf Coulibaly, Niger Office)*
- *Raising producers' awareness of the need to adopt the alternating wetting and drying (AWD) technique as an efficient water resource management practice. (Moctar Senou, IPR-IFRA Katibougou)*
- *Sharing experience with peers (Mamoutou Coulibaly, IPR-IFRA Katibougou)*
- *Raising awareness among users of the sustainable use of natural resources (Seydou Diallo, University of Bamako)*
- *The training gave us a better knowledge and understanding of climate information services so that we could incorporate them into our advisory support work with producers. It has also strengthened our ability to interpret climate information and provide agricultural advice to guide farmers in their agricultural decision-making. (Mamadou Dao, IPR/IFRA of Katibougou)*
- *Setting up conflict management committees (Makan Kaloga, École Nationale d'ingénieur ENI/ABT)*
- *RiceAdvace, solar irrigation, varieties adapted to climate change, integrated rice intensification, biofertilisation, deep urea application, pest control and direct seeding machines.*
- *Interpreting climate information to support farmers in their agricultural decision-making*
- *Interpreting climatic information to help farmers make agricultural decisions*
- *Obtaining a lot of information on climate information services and climate-smart agricultural technologies through scientific publications, in-depth knowledge of the smart agricultural technologies disseminated by the project at its experimental sites, direct contact with rice growers, understanding the perceptions of growers who use the technologies disseminated. (Maïga Hamidou Ibrahim, Université Mandé Bukari)*
- *With the women's groups involved in the EPC approach, which is the subject of my dissertation. At tontine meetings, we pass on technologies and information about the climate to the women.*
- *Demonstration of integrated rice-fish systems (Boubacar Sidiki Tangara, IPR-IFRA Katibougou)*
- *Raising farmers' awareness of rational water resource management (Ali Sankar, Université Mandé Bukari)*
- *In my communication activities as Project Communication Officer for the AICCRA Project at Office du Niger (Almamy Doumbia, Niger Office)*
- *During the consultations, and more specifically the training of community organizations (Moctar aks Bienvenu Kon, Aptitude Globale Sud, Cabinet d'étude et de formation)*
- *I made women producers aware of the need to use the WhatsApp platform and to adopt GEM technology to better respond to the effects of climate change. (Tenin Nomoko, FSEG)*

Respondents expressed an average overall satisfaction of 98% and scored most positively the fact that the curriculum met expectations (99%). Improvements could be achieved by increasing the presence of feedback mechanisms (96%). No suggestions were reported. See Figure 66 for more details on the satisfaction of this service.

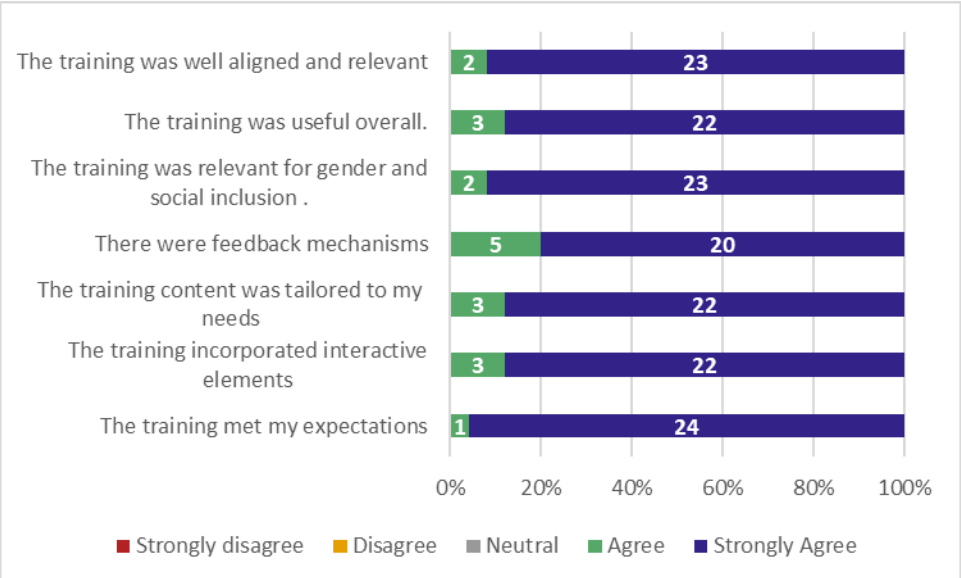

Figure 66 Satisfaction on the Climate Risk Management Curriculum for Extension Agent

AgDataHub

The AgDataHub was reportedly used by 97% (28) of the 29 respondents who said they were familiar with this service. Moreover, 93% (27) of the respondents reported using the knowledge acquired to train, in total, 2080 people (of which 40% are estimated be women) both within (17) and also beyond (10) their organization. One respondent reported not using the tool because the right environment is being created (Bamoye Keita, Office du Niger). Respondents reported using the knowledge acquired in the following circumstances:

- *As a service provider acting as a relay between the technical and financial partners and their targets, the tool was used during the training and support sessions. Learners were shown how to access the site, the types of data available and how to extract them, and how to integrate it into decision-making. (Moctar dit Bienvenu KONE, Aptitude Globale Sud, Cabinet d'étude et de formation)*
- *The Agdatahub is used to obtain rainfall forecasts to prevent climatic shocks. (Tenin Nomoko , FSEG)*
- *We use AgDataHub to obtain rainfall data for localities where there are no weather stations. This data is used to produce the GTPA (Groupe de Travail Pluridisciplinaire d'Assistance AgroHydrométéorologique) bulletin*
- *Downloading agricultural and soil data*
- *We use the tool's stimulating data to guide us in our day-to-day activities (reports, capacity-building). During capacity-building sessions for agricultural advisory staff (Salif Doumbia, IER)*
- *We intervene on the IT side to update and perform other tasks on the tool or product (Bakari Diarra, Mali-Meteo)*
- *To solve certain user problems (Issa Traore, Mali-Meteo)*

- *The platform aims to integrate climate data into agricultural and pastoral decisions. Uses: (i) accessing the space; (ii) extracting available climate information such as seasonal forecasts, bioclimatic indicators and flood warnings; (iii) analysing it and providing specialised advice to producers in order to minimise agricultural risks and optimise production. (Mahamadou Sidibe, Office du Niger)*
- *Researching data and using it to select seed varieties. (Moussa Kane, Président de l'Union des Sociétés Coopératives de Semences Certifiées de Riz en Zone Office du Niger , Office du Niger)*
- *Subtracting information, analysing the extracted data and constructing a decision (Cheick Keita, Faranfassi So, Faranfassi So, Partenaire de l'Office du Niger)*
- *To provide information and guidance to SEXAGON member growers during the campaign. (Cheickna Diane, SEXAGON, partenaire Office du Niger)*
- *Using data and making it available to farmers (Youssouf Coulibaly, Office du Niger)*
- *Use of climate information for research purposes (Moctar Senou , IPR-IFRA Katibougou)*
- *Access to climate information (Mamoutou Coulibaly , IPR-IFRA Katibougou)*
- *Use of meteorological data (Seydou Diallo , University of Bamako)*
- *Use of climate data for professional purposes (Mahamadou Oua Diallo, Institut supérieur privé pour le développement rural)*
- *Periodic consultation of climate data (Boubacar Traoré , ISPDR)*
- *We have access to the platform through a link shared by Mali-Meteo for this purpose. From the search engine you put the link to access the platform to navigate and get the information you are looking for. (Mamadou Dao, de l'IPR/IFRA de Katibougou Mali, IPR-IFRA Katibougou)*
- *I use it to get climatic information*
- *The AgDataHub data platform is accessible through the link that Mali-Meteo has shared to enable users to use the platform.*
- *I use it for data collection, storage, analysis and sharing. I use it to keep better control and to protect producers against the leakage of information collected. (Maïga Hamidou Ibrahim, Université Mandé Bukari)*
- *The weather data provided by the platform enables me to plan my activities more effectively. (Ali Sankare, Université Mandé Bukari)*
- *Using a link that has been shared for this purpose, you can access the platform to browse and retrieve the information you need*
- *Extracting data and using it in the communication plan (Almamy Doumbia, Project Communication Officer for the AICCRA Project at Office du Niger)*
- *"We work with groups of farmers who run businesses in agricultural value chains. Among them are the young APSs responsible for technology dissemination and marketing. We have equipped them with these technologies to enable them to provide more technology packages, offering farmers more choice. (Samuel Guindo, Acad-Mali)*
- *During our meetings with the women, this tool enables us to provide more accurate localized climatic information. This helps the women to make decisions*

Respondents expressed an average overall satisfaction of 96%, scoring most positively the fact that AgDataHub met their needs (98%). Improvements could be made by increasing the relevance for gender and social inclusion (94%). Details on the satisfaction dimensions can be found in Figure 67.

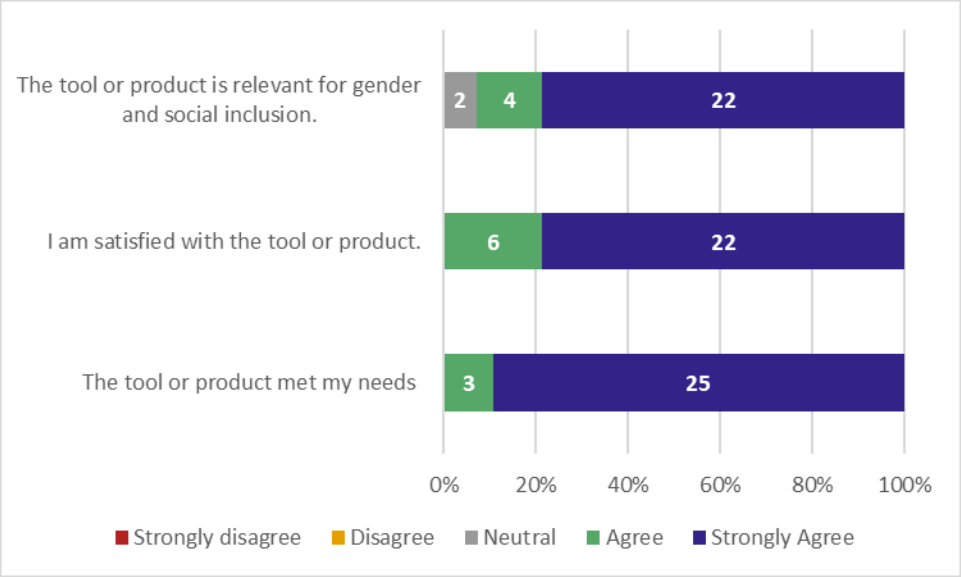

Figure 67 Satisfaction on the AgDataHub in Mali

Challenges in the use of the tool included:

- *Network problems as the use of the tool requires a more stable Internet connection, which is not always the case in rural areas. (Issa Traore, Mali-Meteo; Cheick Keita, Faranfassi So; Mamadou Dao, de l'IPR/IFRA de Katibougou Mali, IPR-IFRA Katibougou)*
- *the language of the platform (Moctar dit Bienvenu KONE, Aptitude Globale Sud, Cabinet d'étude et de formation)*
- *'1- Integrate other satellite rainfall data because there is a delay in the availability of chirps rainfall data for monitoring the season, the data is often delayed by 10 days at the most at the end of a decade and this does not allow us to use these data for drawing up the season monitoring bulletin. 2- Update the administrative boundaries. 3-Have regional or national rainfall maps. 4-Integrate agricultural indices such as the water needs satisfaction index.*
- *Data extraction by grid point*
- *Taking into account, in the case of Mali, the new administrative division (Salif Doumbia, IER)*
- *In practical terms, we can say that we had no difficulty in setting up the IT side of the project, except for the language problems that sometimes arose for us French speakers. As a recommendation, we would like the IT administrators to be trained to take care of the tasks on the IT side so that the tool can work without any problems. (Bakari DIARRA, Mali-Meteo)*
- *Full integration of specific geolocalised data (Cheickna Diane, SEXAGON, partenaire Office du Niger)*
- *Poor mastery of the tool by farmers. Development of modules adapted to farmers' realities and translation into local languages. (Youssouf Coulibaly, Office du Niger)*
- *Only accessible via the Internet (Moctar Senou , IPR-IFRA Katibougou)*
- *Periodicity of validity of information provided (Mamoutou Coulibaly , IPR-IFRA Katibougou)*
- *Producers' linguistic difficulties in using the technology*

- *data complexity (Maïga Hamidou Ibrahim, Université Mandé Bukari)*
- *Extraction of climatic information and its use in the communication plan (Almamy Doumbia, Project Communication Officer for the AICCRA Project at Office du Niger)*

Digital Platforms (What's App Group farmers, Phone call and SMS) for CIS dissemination

The Digital Platforms for CIS dissemination, which include What's App Group farmers, phone calls and SMS, were reportedly used by 85% (23) of the 27 respondents who said they were familiar with this service. Moreover, all of the respondents who reported using the platforms have used the knowledge acquired to train, in total, about 2000 people (of which 44% are estimated be women) both within (11) and also beyond (12) their organization. Respondents reported not using the tool because. Respondents reported using the knowledge acquired in the following circumstances:

- *Telephone call, specification of questions, operator response (Moctar dit Bienvenu Kone, Aptitude Globale Sud, Cabinet d'étude et de formation)*
- *To obtain information on rainfall, sowing dates and other information relating to rice production. (Tenin Nomoko , FSEG)*
- *To share and receive rainfall data*
- *The connection*
- *"Sharing information on the group has not only made it easier for farmers to access information, but especially for farmers who cannot read, this platform has become a key tool for PSAs, who can use the information content to run their activities with farmers. (Samuel Guindo, Acad-Mali)"*
- *Disseminating climate information (Salif Doumbia, IER)*
- *'These digital platforms can be used to inform target audiences by providing them with weather information on climate change, for example.We also have a website that publishes information for the general public. (Bakari Diarra, Mali-Meteo)*
- *to solve a problem posed by a user (Issa Traore, Mali-Meteo)*
- *(i) Registration of producers on the Whatsap platform for AICCRA producers; (ii) Sending of geolocalised weather information by MALI MÉTÉO in the local language; (iii) Training of used producers in decision-making based on the information sent; (iv) Possibility of feedback to producers for the purpose of improving the MALI METEO service and interconnecting producers; (v) Possibility of extension of the platform to other producers by extension agents and leading producers. (Moussa Kane, Président de l'Union des Sociétés Coopératives de Semences Certifiées de Riz en Zone Office du Niger , Office du Niger)*
- *Operator request or solicitation (Cheick Keita, Faranfassi So, Faranfassi So, Partenaire de l'Office du Niger)*
- *WhatsApp call, questioning and use of answers in decision-making (Cheickna Diane, SEXAGON, partenaire Office du Niger)*
- *Through the WhatsApp group, we have a lot of information on the effects of climate change and mitigation measures. (Cheick Amadou Bouare, Coordinateur de l'Association Vision21, Association Vision21, spécialisée dans la gouvernance environnementale et justice climatique)*
- *Connecting the phone, opening the platform and asking questions (Youssouf Coulibaly, Office du Niger)*

- *Telephone calls through WhatsApp and using the information provided by the operator to make decisions. (Seydou Diallo , University of Bamako)*
- *To evaluate activities within my organisation (Mamadou Dao, de l'IPR/IFRA de Katibougou Mali, IPR-IFRA Katibougou)*
- *Once registered on the platform by the manager, I have access to climate information shared on the WhatsApp group or on my telephone number (call or SMS) by Mali-Meteo that I can listen to or read at any time I wish. The information is voice type in the local language on the WhatsApp platform that I listen to for guidance in making decisions. I also receive calls and SMS messages in the local Bambara language. (Makan Kaloga, École Nationale d'ingénieur ENI/ABT)*
- *We're using this technology in synergy with Mali Météo to provide rainfall information to strengthen farmers' resilience to climatic shocks.*
- *First you register on one of the platforms and then you receive climate information. On the WhatsApp platforms, the information is shared with the group as a voice recording in Bambara that can be listened to at any time. On the phone in Call or SMS the information is given in Bambara or French as the user wishes. (MAÏGA Hamidou Ibrahim, Université Mandé Bukari)*
- *I use it to disseminate climatic information (in particular the start and end dates of the rainy season, the timing and amount of rainfall, etc.) to farmers in local languages.*
- *Monitoring - Development of AiCCRA project activities*
- *You must first be registered on one of the platforms, then you will receive the information or ask for it, depending on your request and location. (Almamy Doumbia, Chargé de Communication sur le Projet AICCRA à l'Office du Niger, Office du Niger)*

Respondents expressed an average overall satisfaction of 95%, scoring most positively the fact that digital platforms met their needs (97%). Improvements could be made by increasing satisfaction with the products (92%). Details on the satisfaction dimensions can be found in Figure 68.

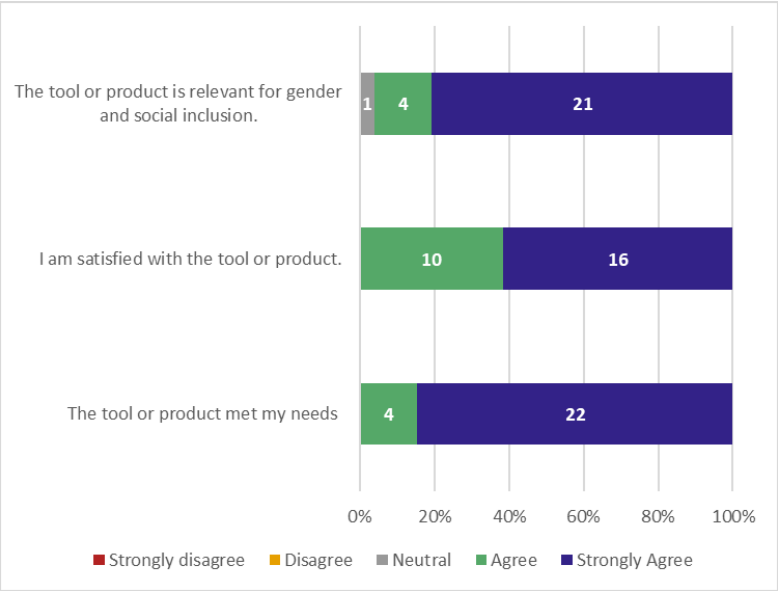

Figure 68 Satisfaction of Digital Platforms

Challenges in the use of the tool included:

- *The main difficulty is access to the internet connection, as connection is often not available in certain localities*
- *(Moctar dit Bienvenu Kone, Aptitude Globale Sud, Cabinet d'étude et de formation; Issa TRAORE, Mali-Meteo, Cheick Keita, Faranfassi So; Cheick Amadou Bouare, Coordinateur de l'Association Vision21, Almamy Doumbia, Office du Niger, Maïga Hamidou Ibrahim, Université Mandé Bukari; Mahamadou Sidibe, Office du Niger)*
- *The main difficulty is the poor coverage of telephone antennas to enable stable communication on the various platforms. (Makan Kaloga, École Nationale d'ingénieur ENI/ABT)*
- *Verification of observed data with those estimated by satellite (, Mali-Meteo)*
- *'Difficulties may arise in remote areas where network coverage is poor. The recommendations are to help us have an application that can use different languages for a better understanding of the population'. (Bakari Diarra, Mali-Meteo)*
- *'Network problems in some localities and lack of mastery of the platform by some producers. (Youssouf Coulibaly, Office du Niger)*
- *Mass training of producers, choice of sites where the network is available'. (Seydou Diallo, University of Bamako)*
- *The problem with text messaging. Most producers can't read*

Impacts/effects assessment studies on the field using RCT approach

The RCT impact assessment studies were reportedly used by 95% (20) of the 21 respondents who said they were familiar with this service. Moreover, 86% (18) of the respondents who were familiar with the platform have used the knowledge acquired to train, in total, about 530 people (of which 56% are estimated be women) both within (12) and also beyond (6) their organization. One respondent reported not using the tool but stated that its use is in the organization's timetable (Samuel Guindo, Acad-Mali). Respondents reported using the knowledge acquired in the following circumstances:

- *During our impact assessment studies (Moctar dit Bienvenu Kone, Aptitude Globale Sud, Cabinet d'étude et de formation)*
- *Impact assessment (Salif Doumbia, IER)*
- *In fact, a basic study had been carried out at our level and the impact assessment is underway. (Mahamadou Sidibe, Office du Niger)*
- *We posed the question and the operator replied (Moussa Kane, Président de l'Union des Sociétés Coopératives de Semences Certifiées de Riz en Zone Office du Niger)*
- *I knew it from the project baseline (Cheick Keita, Faranfassi So)*
- *Reading the study reports enables us to plan our actions more effectively and take appropriate measures for producers. (Cheickna Diane, SEXAGON, partenaire Office du Niger)*
- *At the start of the project (Cheick Amadou Bouare, Coordinateur de l'Association Vision21)*
- *Developing tools and protocols, collecting and analysing data (Youssouf COULIBALY, Office du Niger)*
- *To evaluate activities within my organization (Mamoutou Coulibaly , IPR-IFRA Katibougou)*
- *Access to meteorological information (Seydou Diallo , University of Bamako)*

- *RCT is an experimental approach that involves setting up groups of stakeholders to whom an intervention is applied in order to assess its impact, compared with a control group that does not receive the intervention. In socio-economic studies, this technology consists of identifying and setting up a group of people according to a set of criteria who are to receive an intervention called a treatment. The data from this group is analysed in comparison with that from a control group. (Mamadou DAO, IPR-IFRA Katibougou)*
- *Multi-stakeholder platforms serve as crucibles for raising stakeholder awareness of the sustainable management of natural resources associated with lowlands. (Makan Kaloga, École Nationale d'ingénieur ENI/ABT)*
- *This is an impact/effect evaluation technique used in socio-economic studies, which involves setting up groups of people to receive an intervention and then comparing them with a control group to determine the impact of the intervention.*
- *RCT is a tool that allows us to set up several samples as needed in agricultural experimentation systems, in our case rice, to see the causal effect of the technology on indicators of producers' well-being. (Maïga Hamidou Ibrahim , Université Mandé Bukari)*
- *Evaluation of activities linked to the AICCRA project (Boubacar Sidiki Tangara, IPR-IFRA Katibougou)*
- *Evaluation of ongoing activities within my organization. (Mamadou Fofana , Université DELTA-C)*
- *As part of the analysis of certain socio-economic data (Ali Sankare, Université Mandé Bukari)*
- *This is an experimental approach to evaluating the effects or impact of an intervention by setting up a treatment group and a control group whose data will be compared.*

Respondents expressed an average overall satisfaction of 98%, scoring most positively the fact that digital platforms met their needs (99%). Improvements could be made by increasing the relevance of the tools for gender and social inclusion (97%). Details on the satisfaction dimensions can be found in Figure 69.

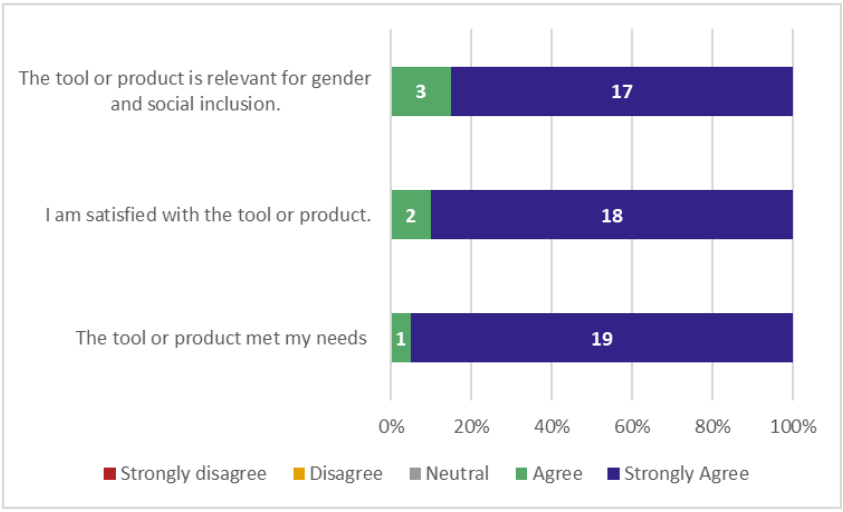

Figure 69 Satisfaction on the RCT impact assessment studies

Challenges in the use of the tool included:

- *Training the trainers (Moctar dit Bienvenu KONE, Aptitude Globale Sud, Cabinet d'étude et de formation)*
- *The implementation of this technology requires time and resources to be able to adopt the technology in compliance with these recommendations. (Mamadou DAO, IPR-IFRA Katibougou)*
- *Reluctance of certain players (Makan Kaloga, École Nationale d'ingénieur ENI/ABT)*
- *It's an experimental approach that requires a lot of time, whereas we generally don't have the resources to implement projects.*
- *Strict problems of variable control, problems of selection bias often, divergent behaviour of certain producers. (Maïga Hamidou Ibrahim , Université Mandé Bukari)*
- *Financial resources and time are needed to carry out the experiment.*

Multi-Stakeholders Platforms

The knowledge acquired through the Multi-Stakeholders Platforms was reportedly used by 96% (25) of the 26 respondents who said they were familiar with this service. One respondent did not use the knowledge acquired, but did not provide reasons for this (*NA*). Respondents reported using the knowledge acquired in the following circumstances:

- *Platform training (Moctar dit Bienvenu KONE, Aptitude Globale Sud, Cabinet d'étude et de formation)*
- *In the lowlands of Sikasso (Tenin NOMOKO , FSEG)*
- *With CEMA (Samuel Guindo, Acad-Mali)"*
- *Finkolo Ganadougou, Blendio, Siramana and Sélingué (Salif DOUMBIA, IER)*
- *In all four (4) of our production zones, where we work more specifically with four (4) platforms. (Mahamadou SIDIBE, Office du Niger)*
- *In the field with farmers (Moussa KANE, Président de l'Union des Sociétés Coopératives de Semences Certifiées de Riz en Zone Office du Niger)*
- *In the centres (Cheick KEITA, Faranfassi So)*
- *We use them in our intervention zones (the 7 zones of the Office du Niger) (Cheickna DIANE, SEXAGON, partenaire Office du Niger)*
- *Especially on climate change and Intelligent Agriculture (Cheick Amadou BOUARE, Coordinateur de l'Association Vision21)*
- *Better organization of women in the Office du Niger to improve management of their activities in relation to climate change. (Bamoye KEITA, Office du Niger)*
- *In our production zones*
- *In the Ké-Macina production zone (Youssouf COULIBALY, Office du Niger)*
- *Conflict management between farmers and livestock breeders in Siramana (Mamoutou Coulibaly, IPR-IFRA Katibougou)*
- *Conflict management between farmers and livestock breeders in Loutana (SEYDOU DIALLO , University of Bamako)*
- *With the multi-actor platform on the use of lowland resources in Finkolo Ganadougou (Mamadou DAO, IPR-IFRA Katibougou)*
- *Conflict management between rice growers and livestock breeders (Makan Kaloga, École Nationale d'ingénieur ENI/ABT)*
- *Support for the Baguinida irrigated plains management cooperative*

- *Support for the producers' cooperative for the management of irrigated plains in Bagueneda*
- *We have supported producers' cooperatives in managing their platforms for natural resource management.*
- *In writing my final dissertation for my Master 2 in environmental management (MAÏGA Hamidou Ibrahim , Université Mandé Bukari)*
- *My role is to get women more involved in our approaches, so I work with women's EPC groups.*
- *Training workshop for my organization's staff (Boubacar Sidiki Tangara, IPR-IFRA Katibougou)*
- *At the Sikasso rice production cooperatives for the management of platform resources*
- *During the dissemination of information on supporting and strengthening the platforms (Almamy DOUMBIA, Chargé de Communication sur le Projet AICCRA à l'Office du Niger)*

Respondents expressed an overall satisfaction of 97%, positively scoring the fact that that their needs were met (98%), the integration of technical assistance in the plans and activities of one's organization (98%), and its usefulness (98%). Some improvements could be made by increasing the satisfaction of technical assistance provided (97%). No Suggestion were reported. See Figure 70 for more details on the satisfaction of this service.

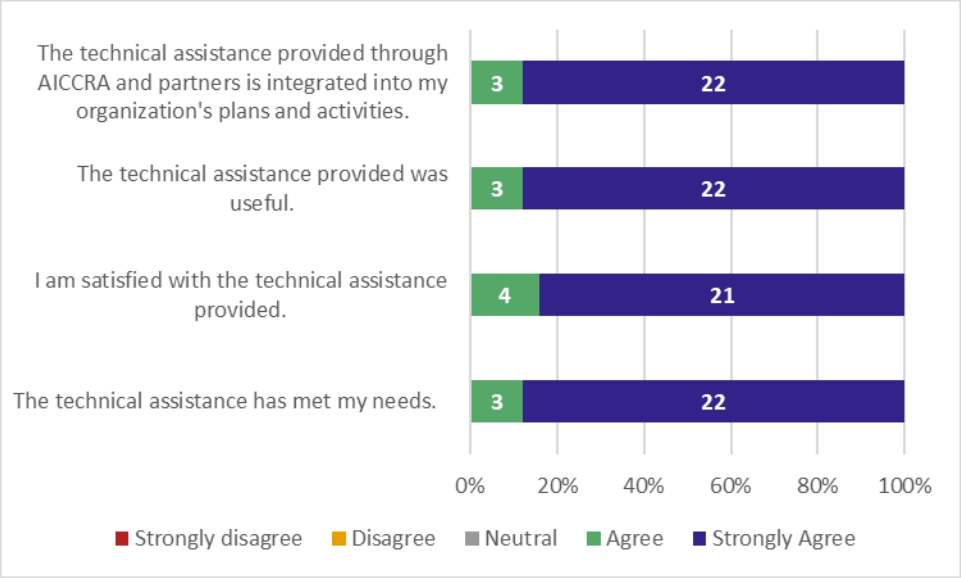

Figure 70 Satisfaction on the Multi-Actor community level platforms

Take aways

Partnership feedback

Overall, respondents appreciate the collaboration with AICCRA and expressed willingness to continue the partnership and extend collaboration to other technologies. A respondent encourages the project in the implementation of these activities to help producers face the challenge of climate change.

"*We greatly appreciate our open collaboration with AfricaRice for their availability to all AICCRA project partners in Mali. The effective involvement of stakeholders in the project is to be commended*". Samuel Guindo, Acad-Mali

"*The pragmatic nature of the AICCRA project, its precise benchmarking system and the effectiveness of its component for strengthening the capacities of the partners, combined with its strong capacity for mobilisation and continuous improvement of resources, skills and capacities, have enabled us to bring about a very significant change in level within a short period of time. It is up to us, the project and its partners, to stay the course in order to ensure a better completion*." (Mahamadou SIDIBE, Office du Niger)

"*We are currently observing the achievements of the AICCRA project in the field and are seeking its collaboration, as its actions are very much in line with our own. This will enable us to make use of its many practices and technologies, as well as other results, in supporting our stakeholders and beneficiaries*." (Cheick Amadou BOUARE, Coordinateur de l'Association Vision21)

"*We are really satisfied with our collaboration with the project and we would like to reassure you of our availability and our commitment to supporting the project in the realisation of its activities*." (Mamadou DAO, IPR-IFRA Katibougou)

"*My partnership with AICCRA Mali consists of comparing farmers' practices with the sustainable rice platform standard and performance indicators in rice-growing environments, and identifying entry points for improving the sustainability of rice cultivation. The results obtained are very satisfactory*." (Madialia TRAORE , ISPDR)

"*This partnership has allowed me to discover agricultural technologies that enable adaptation to the harmful effects of climate change. The collaboration has awakened in me a capacity for deep understanding of how producers deal with climate change. Simply put, thank you. Continue to promote excellence in scientific research through the dissemination of climate-smart agricultural technologies and expand your scope to other regions of Mali*". (MAÏGA Hamidou Ibrahim , Université Mandé Bukari

Issues, improvement suggestions, recommendations for cluster lead

Verbatim suggestions from partners regarding the partnership are indicated in Table 46, along with the cluster answer and actions taken in response to those comments and to the service-specific suggestions.

Table 46 Feedback for the Mali cluster

PARTNERS' FEEDBACK	**CLUSTER RESPONSE**
Suggestions and comments listed in the section above for the Climate Risk Management Curriculum for Extension Agent	The cluster welcomes the positive feedback on the Climate Risk Management Curriculum and will ensure its rollout through targeted training for universities and extension agents.

Suggestions and comments listed in the section above for the AgDataHub	The cluster values the encouraging feedback on the AgDataHub and will continue supporting national institutions in data sharing and utilization.
Suggestions and comments listed in the section above for the digital platforms	The cluster welcomes the positive comments on the digital platforms and will maintain its support for their use in disseminating climate information services.
Suggestions and comments listed in the section above for the RCT impact assessment studies	The cluster appreciates the recognition of the Randomized Control Trial (RCT) approach and will continue using it for robust impact assessments of interventions.
Suggestion and comments listed in the section above for the Multi actor level platforms	The cluster acknowledges the positive feedback on the establishment and strengthening of Multi-Stakeholder Platforms (MSPs) and will sustain efforts to promote their use for consensus building, as well as for input and market linkages.
We are not a direct partner of the AICCRA project. Since we are interested in its actions, we want to take better advantage of its beneficial effects or impacts. Two of us in the organisation had information about its use when it was launched. (Cheick Amadou Bouare, Coordinator of the Vision21Association)	The cluster values the interest expressed by the two organizations in engaging with the project and will collaborate with the Environmental and Safeguard Assessment Specialist to explore partnership opportunities. In the meantime, the cluster will ensure that members of these organizations are invited to upcoming capacity-building activities.
Have more training on the various AICCRA tools with more emphasis on the promotion of young people and women. Anonymous	The cluster appreciates the feedback and reaffirms its commitment to ensuring that young people and women fully benefit from project interventions.

Disbursement of funds on time. (Salif DOUMBIA, IER)	The cluster acknowledges the comment and will ensure timely fund disbursement to enable smooth implementation of activities.
We would like to continue our partnership with AICCRA in the following areas: - supply of automatic weather stations; - supply of weather radar; - supply of latest generation computer equipment - training of technicians and engineers from technical departments; - action plan to combat climate change and desertification (Bakari DIARRA, Mali-Meteo)	The cluster appreciates the feedback and will continue close collaboration with Mali-Meteo on the areas highlighted.
We are calling on AICCRA to support the process of seed multiplication and certification, as well as to improve access to smart varieties for small producers with limited economic power. (Moussa KANE, Président de l'Union des Sociétés Coopératives de Semences Certifiées de Riz en Zone Office du Niger)	The cluster welcomes the recommendation and will prioritize support for seed multiplication, certification, and improved access to climate-resilient varieties.
The adaptation of funding to the cost of strengthening platforms (substantial budget). (Cheickna DIANE, SEXAGON, partenaire Office du Niger)	The cluster appreciates the feedback and will maintain support for strengthening digital platforms for climate information service delivery.
Better organize communication within the Project (Bamoye KEITA, Office du Niger)	The cluster values the comment and will ensure effective internal communication within the project team.
Build on the project's achievements and allocate a substantial budget to its activities (Youssouf COULIBALY, Office du Niger)	The point is noted and will be duly considered.
I want to be involved in scaling up the technology. Ibrahima Kalifa COULIBALY, IPR-IFRA Katibougou	The point is noted and will be duly considered.
We are calling for the establishment of a network of service providers specializing in the various areas of action of the AICCRA project and the use of the network's skills. (Moctar dit Bienvenu KONE, Aptitude Globale Sud, Cabinet d'étude et de formation)	The point is noted and will be duly considered.
We are asking AICCRA to include Communications Officers in all capacity-building programmes, which will enable them to become	The point is noted and will be duly considered.

actively involved in the dissemination or scaling-up of smart technology. Also, equipping the communications teams of partner institutions with modern communications equipment (camera, kakemono, toolbox, etc.). (Almamy DOUMBIA, Chargé de Communication sur le Projet AICCRA à l'Office du Niger)

Significance of the results for AICCRA scaling pathways and work in Mali

Partnership survey results highlight the strong relevance of AICCRA Mali innovations in driving climate-smart agriculture adoption. Partners emphasized the value of the Climate Risk Management Curriculum in strengthening extension agents capacity to deliver tailored advice to farmers. The AgDataHub was praised for enhancing data sharing and informed decision-making. Digital platforms such as WhatsApp groups, calls, and SMS were recognized as effective tools for timely climate information dissemination. The use of Randomized Control Trials was viewed as essential for generating robust evidence on intervention impacts. Finally, Multi-Stakeholder Platforms were seen as critical spaces for collaboration, knowledge exchange, and market linkages. The AICCRA Mali cluster appreciates the valuable comments and suggestions from partners and will ensure their insights are fully considered in shaping the project's implementation for 2025.

Senegal

Cluster overview

The AICCRA Senegal cluster has made significant strides in enhancing climate-smart agricultural practices and climate information services (CIS) through five key initiatives. I) Climate Risk Management for Agricultural Extension (CRMAE): AICCRA co-developed the CRMAE curriculum to strengthen extension agents' capacity in climate risk decision-making. After a pilot with 75 agents, a training-of-trainers approach was adopted, integrating gender and livestock modules. CRMAE is now embedded in two universities and 16 agricultural education centers. II) Training Programs on Climate-Smart Agricultural (CSA) Practices: Over 9,000 farmers (33% women) have adopted climate-smart seed varieties through community-based seed production and demo plots. AICCRA reinforced seed dissemination channels across eight intervention zones and enhanced remote access to technical guidance through IVR, ensuring farmers receive essential climate and production information. III) AgData Hub & Apps: In collaboration with ANACIM, AICCRA facilitated the creation of an AgData Hub within the GTP portal to streamline data collection, improve extension activity monitoring, digitalize weather station data for better climatic modeling, and enhance user experience. IV) Community of Practice (CoP) Advisories: Bringing together 14 institutions, AICCRA's CoP strengthens agro-climatic services for over 78,000 livestock farmers. This multi-stakeholder approach improves knowledge sharing, co-produces climate information, and fosters a shift from a top-down to a collaborative, user-centered climate data system. V) iSAT: Through IVR advisories, AICCRA provided climate-smart guidance to 3,000 agropastoralists in Louga, improving their knowledge and decision-making. Farmers valued the service, sharing messages with peers and showing a willingness to pay for continued access.

In Senegal, five AICCRA services were surveyed:

- Climate Risk Management for extension officer (CRMAE). AICCRA co-developed the Climate Risk Management for Agricultural Extension (CRMAE) curriculum to strengthen extension agents' capacity in climate risk decision-making. After piloting with 75 agents, a training-of-trainers followed, integrating gender and livestock modules. CRMAE is now embedded in 2 universities and 16 agricultural education centers in Senegal.

- Training Programs on best Climate Smart Agricultural Practices. AICCRA's community-based seed production and demo plots have enabled 9,000+ farmers (33% women) in Senegal to adopt climate-smart seed varieties. Strengthening seed dissemination channels across eight zones, AICCRA also enhances remote access to technical guidance through IVR, ensuring farmers receive vital climate and production information for improved resilience.

- Agdata hub & Apps. The evolution of CIS delivery in Senegal with ANACIM includes: (a) an AgData Hub within the GTP portal for faster data collection and remote collaboration, (b) efficient monitoring of extension activities with timely feedback, (c) digitalizing weather station data for enhanced climatic models, and (d) improved user experience.

- Community of Practices advisories. AICCRA's Community of Practice in Senegal unites 14 institutions to improve agro-climatic services for 78,000+ livestock farmers. This inclusive, multi-stakeholder approach enhances knowledge sharing, co-produces climate information, and streamlines efforts, transforming national climate data production from a top-down model to a collaborative, user-centered process for better decision-making.

- iSAT. AICCRA's Climate Information CoP launched 50 IVR advisories in Louga, benefiting 3,000 agropastoralists with climate-smart guidance. Designed for gender and social inclusion, these messages enhance knowledge, attitudes, and practices. Farmers found them valuable, willingly sharing with peers and expressing readiness to pay for continued access to this critical information.

The survey was sent to 35 partners, of which 33 responded (95% response rate).

Senegal respondents' demographics

42% of the respondents were man aged between 45 and 55 years old, and 12% were women. No respondents were younger than 25 years old. Below, a gender disaggregation of different age groups:

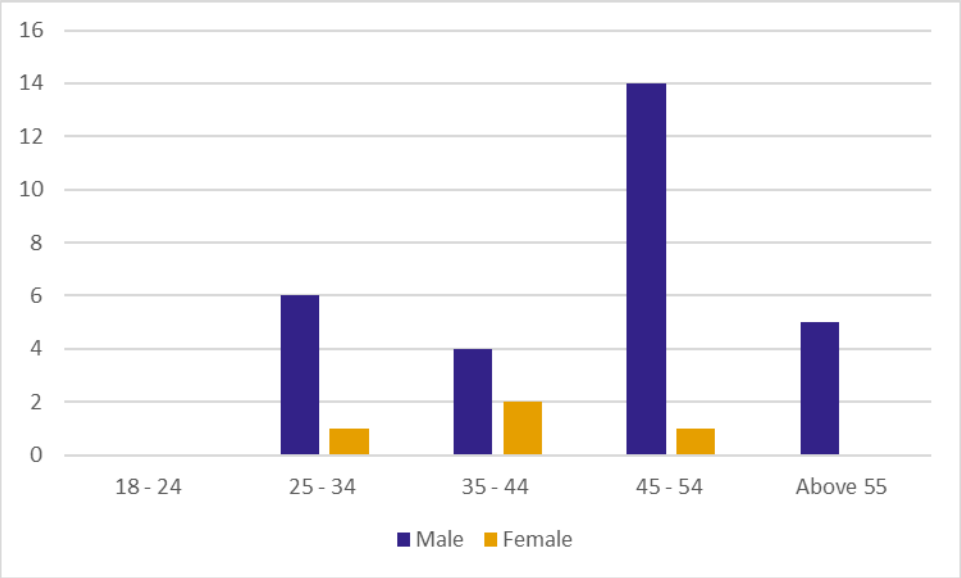

Figure 71 Senegal- Age and gender of the respondents

Senegal respondents' affiliation

Respondents were affiliated with 22 partner organizations, notably the Senegal Ministry of Agriculture (5 respondents) and the Mbao CFPA (4 respondents). Overall, 9 respondents were affiliated with CFPAs (Centre de Formation Professionnelle Agricole -Agricultural Vocational Training Center).

Table 47 Senegal partner organizations

PARTNER ORGANIZATION	N OF RESPONDENTS
Ministry of Agriculture, Senegal	5

CFPA de Mbao	4
ANCAR	2
CFPA Ziguinchor	2
DIREL / Ministry of Agriculture & Livestock	2
RESOPP	2
ADID, ANACIM, ANCAR-MABO, CFPA de Nioro, de Thiès, de Saint-Louis, CFPH (Centre de Formation Professionnelle Horticole-Horticultural Vocational Training Center) of Camberene, CIFA (Centre d'Initiation et de Formation Agricole -Center for Agricultural Initiation and Training) de Ndiaye, de Diourbel, CNFTAGR (Centre National de Formation et de Perfectionnement en Techniques Agricoles et en Gestion Rurale -National Center for Training and Improvement in Agricultural Techniques and Rural Management) de Ziguinchor, CSE, ICRISAT, JOKALANTE, KSDE/LDB, Radio Ferlo FM, UADB	1 each

Senegal services and their use

On average, the five services surveyed by Senegal were used by 70% of the partners, which expressed an overall average satisfaction of 85%. This score includes multiple dimensions of satisfaction such as usefulness, relevance and alignment to one's organization, needs and expectations being met, tailoring of content to needs, relevance for gender and social inclusion, incorporation of interactive elements and presence of feedback mechanisms.

Table 48 Use and Satisfaction of Senegal's services

AICCRA SERVICE	N OF RESPONSES	USE	OVERALL SATISFACTION
Climate Risk Management for extension officer	21	76%	90%
Training Programs on best Climate Smart Agricultural Practices	12	67%	91%
Agdata hub & Apps	12	50%	77%
Community of Practices advisories	10	90%	76%

iSAT	3	67%	89%
Total/Average	**58**	**70%**	**85%**

Four of the AICCRA services surveyed for Senegal included questions regarding sharing of knowledge acquired during the training to train or inform other people and sharing of the AICCRA tool/technology with others. On average, 65% of respondents used the knowledge acquired to train other people, reaching almost 3200 people in total (of which 37% are estimated to be women).

Table 49 Use and Satisfaction of Senegal's services

AICCRA SERVICE	TRAINING OR SHARING DONE	N OF PEOPLE TRAINED	% OF WOMEN TRAINED
Climate Risk Management for extension officer	62%	288	65%
Training Programs on best Climate Smart Agricultural Practices	50%	374	50%
Agdata hub & Apps	50%	30	21%
Community of Practices advisories	100%	2477	13%
Total/Average	**65%**	**3169**	**37%**

Demand-driven nature of the services

The Climate Risk Management Curriculum for Extension Agent was perceived by most respondents as having been co-identified (52%), while the others felt it was offered in response to specific requests (29%), or offered by AICCRA (10%). Also the training programs on best Climate Smart Agricultural practices was perceived by most respondents as having been co-identified (42%), while the others felt it offered in response to specific requests (25%), or offered by AICCRA (17%). The AgdataHub & Apps were as well perceived by most respondents as having been offered by AICCRA (58%), with the remaining respondents believing they was offered in response to specific requests (17%) or that they had been co-identified (17%). The Community of Practices advisories were instead mostly perceived as having been developed in response to specific requests (50%), with the remainer believing they was offered by AICCRA (20%) or that they had been co-identified (30%). See Figure 72 below for more details. iSat was equally perceived as having been co-identified (33%), offered in response to specific requests (33%), or offered by AICCRA (33%).

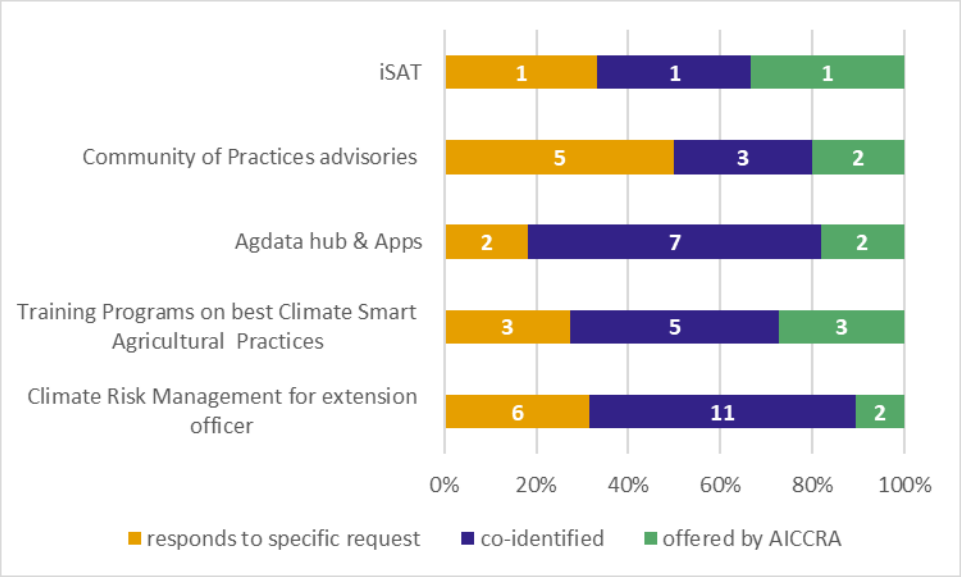

Figure 72 Count and percentage of respondents believing that the AICCRA services surveyed in Senegal were offered in response to specific requests, co-identified, or offered by AICCRA

Detailed results by service

Climate Risk Management Curriculum for Extension Agent (CRMEA)

The insights acquired in the development of the Climate Risk Management Curriculum for Extension Agent were reportedly used by 76% (16) of the 21 respondents who said they were familiar with this service. Moreover, 62% of the respondents reported using the knowledge acquired to train, in total, about 290 people (of which 65% are estimated to be women). 90% of the respondents attended the workshops in the past year (of which 71% in the past 6 months), while 10% had done so more than a year before. Five respondents did not use the knowledge acquired because:

- *We are at the central level, we play the role of supervising the training programs under supervision (SENY SONKO, Ministry of Agriculture, Senegal)*
- *Waiting for the next school year to integrate the modules on climate change*
- *The module in which this training is to be included is not yet being taught. We need teaching materials, especially for initial training. (Ibrahima NDAO CFPA Mboro, CFPA de Mbao)*
- *Because it has been agreed to include it in the training program modules or to create modules for it. Seminars are planned for the year 2025 to revise the curriculum. In the meantime, we will see with the possible modules how to integrate it into the training of the new class.*
- *We have not applied these skills because we do not yet have the opportunity and the necessary support. (Ibrahima NDAO, CFPA de Mbao)*

Respondents reported using the knowledge acquired in the following circumstances:

- *In the training of producers who are members of CIFA*

- *The application of crop calendars among producers (Ibrahima NDAO, Directeur CFPA de Mboro, CFPA de Mbao)*
- *Integration of training modules into the curricula of our specialties, seminar training for women (Sadibou SOW, UADB)*
- *Training of CFPA women (Mamadou SY, CFPA de Nioro)*
- *The reporting of meetings and the dissemination of all information received to the local population, which appreciates it from different angles depending on the locality*
- *Management of environmental and sanitary risks of pesticide use*
- *Seed multiplication and millet storage.*
- *I am a director and I also give courses on plant protection and the module on field crops (peanuts, millet, corn, cowpea, etc.). And I took advantage of this training to talk to them about the risks related to the climate (Alassane Diallo, CFPA de Thiès)*
- *introduction of the course on climatology*
- *Facilitated training workshop to extension workers Local NGO, field agents and leading farmers on application of weather and climate for decision making in farming system*
- *Integration of the modules in the next training curricula of the training centers under the supervision of the Ministry of Agriculture*
- *Improvement of teaching*
- *sending of climate information and advice tailored to our producers*
- *improvement of the content of the climatology course with the concept of climate change and of the extension course with information and awareness-raising on the risks associated with climate change.*
- *I was able to give feedback to my establishment, including all fellow trainers. We are currently looking at how to introduce learning into the courses and schedule extension sessions for producers in the northern zone of Senegal. (Amadou SIDIBE, CFPA, Saint-Louis)*
- *In pastoral information management*
-

Respondents expressed an average overall satisfaction of 90% and scored most positively the fact that the content was tailored to the partners' needs (92%). Improvements could be achieved by increasing the its relevance for gender and social inclusion (87%). No suggestions were reported. See Figure 73 for more details on the satisfaction of this service.

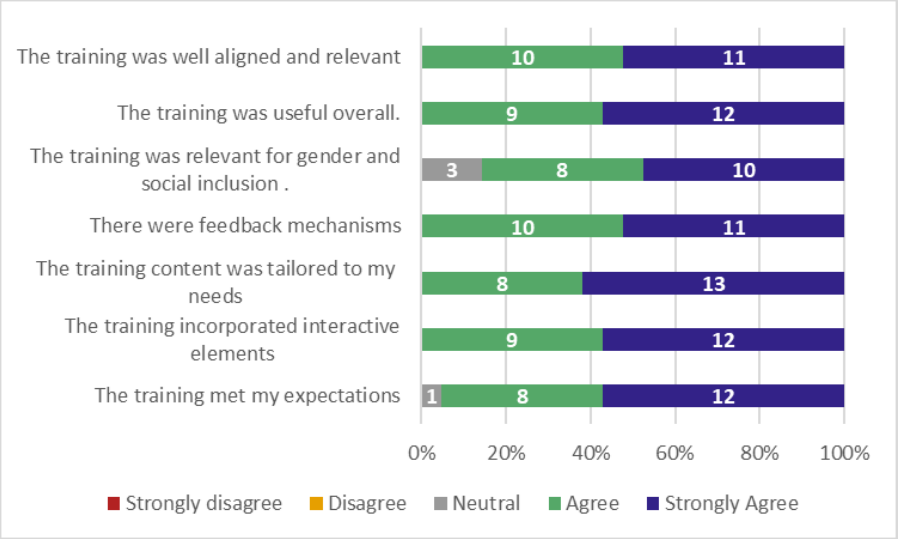

Figure 73 Satisfaction on the Climate Risk Management Curriculum for Extension Agents

Training programs on best Climate Smart Agricultural Practices

The insights acquired in the training programs on best Climate Smart Agricultural practices were reportedly used by 67% (8) of the 12 respondents who said they were familiar with this service. Moreover, 50% of the respondents reported using the knowledge acquired to train, in total, about 375 people (of which 50% are estimated to be women). 83% of the respondents attended the workshops in the past year (of which 75% in the past 6 months), while 17% had done so more than a year before. Four respondents did not use the knowledge acquired because:

- *I am at the strategic level (Seny Sonko, Ministry of Agriculture, Senegal*
- *I have not received training on gender and social inclusion through AICCRA*
- *The opportunity had not yet arisen to take the courses*
- *Because they plan to do so during the year 2025 by integrating it into the training modules. In addition to the training of producers.*

Respondents reported using the knowledge acquired in the following circumstances:

- *The use of climate information, calculation of terciles, understanding of GTP operation (Sadibou Sow, UADB)*
- *Good agricultural practices (Mamadou Sy, CFPA de Nioro)*
- *Reporting and communication of activities*
- *Post-harvest management*
- *Seed multiplication and millet storage*
- *Capacity building in climate change*
- *On the occasion of social mobilizations for animal welfare and local advisory support activities on pastoralism (Samba Mamadou Sow, president of ADID)*
- *As part of the development of MASAE projects*

Respondents expressed an average overall satisfaction of 91% and scored most positively the fact that the content met expectations (93%) and interactive elements were incorporated (93%). Improvements could be achieved by further

aligning the content to the partners' organizations (88%). No suggestions were reported. See Figure 74 for more details on the satisfaction of this service.

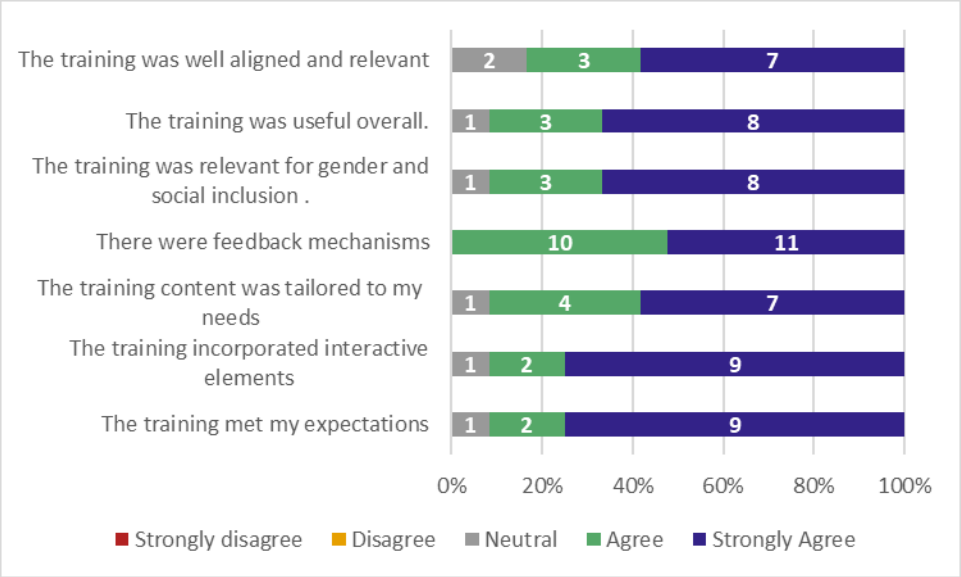

Figure 74 Satisfaction on the training programs on best CSA practices

Agdatahub & Apps

The AgDataHub was reportedly used by 50% (6) of the 12 respondents who said they were familiar with this service. Moreover, all of the respondents who reported using the knowledge acquired also trained, in total, 30 people (of which 21% are estimated be women) both within (2) and also beyond (4) their organization. Six respondents reported not using the tool because there is *no infrastructure in place* (Sadibou SOW, UADB), there is *unfavorable environment in place* (Ousmane SARR, RESOPP and another 2 anonymous respondents), and b*ecause I haven't had the opportunity to use it yet* (Anonymous).

Respondents reported using the knowledge acquired in the following circumstances:

- *I use it to analyze data for forecasts and development of indicators for sectors of interest.*
- *This tool provides information on trends in livestock prices and local cereals (Samba Mamadou Sow president of ADID)*
- *Look at the climate forecasts on a fine scale*
- *for climate products (Mamadou Adama SARR, CSE)*
- *The tool is used to help me provide advice in collaboration with my multidisciplinary team for decision-making in relation to the crop calendar based on rainfall forecasts, especially*
- *in the orientation of strategies related to herd management*

Respondents expressed an average overall satisfaction of 77%, scoring most positively the fact that AgDataHub met their needs (83%). Improvements could be made by increasing the relevance for gender and social inclusion (73%). Details on the satisfaction dimensions can be found in Figure 75.

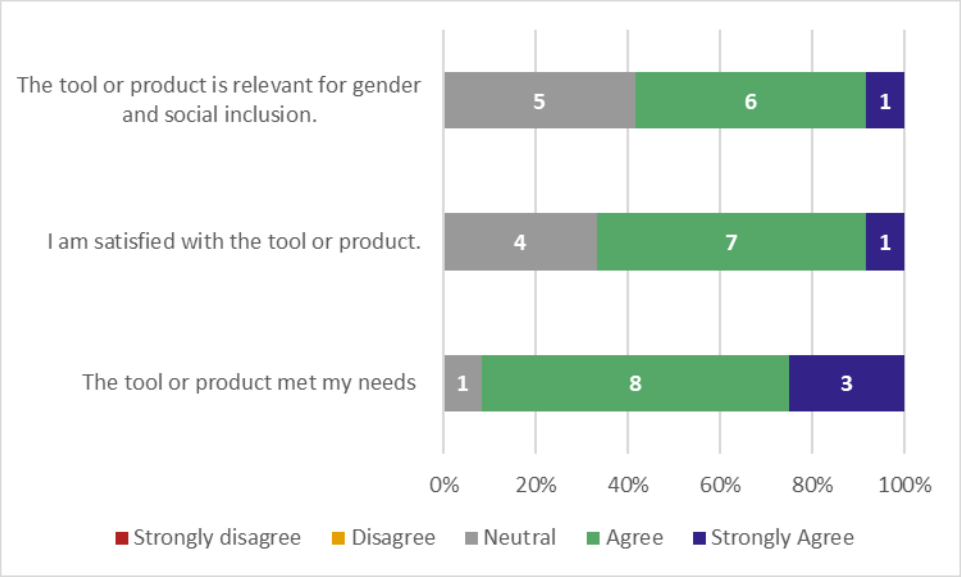

Figure 75 Satisfaction on the AgDataHub Senegal

Challenges in the use of the tool included:

- *Problem connecting and updating the tool's content (Samba Mamadou Sow président ADID, ADID)*
- *Sometimes the forecasts are not up to date*
- *There are many features at once, which can sometimes be difficult to use. It was necessary to do as with WhatsApp, that is to say to make evolutionary versions*
- *There are still factors to be developed in the field of livestock farming*

Community of Practices advisories

The Community of Practices advisories were reportedly used by 90% (9) of the 10 respondents who said they were familiar with this service. Moreover, all of the respondents who were familiar with the service (10) also trained, in total, about 2480 people (of which 13% are estimated be women) both within (9) and also beyond (1) their organization. One respondent reported not using the tool because of timing. Respondents reported using the knowledge acquired in the following circumstances:

- *Use the platforms and master the techniques for good fodder cultivation, but also consult the climate information*
- *In relation to the platform, I was introduced to its use and since then I have been using it to give advice to agro-pastoralists*
- *I am a member of the Community of Practice and as such I participate in the formulation of advice for Pastors and agro-pastoralists.*
- *Dissemination of climate information and advice (Samba Mamadou Sow président ADID, ADID)*
- *Dissemination of climate information and agricultural advice to our members. (Ousmane SARR, RESOPP)*

- *Producing advice for agro-pastoralists.*
- *General messages are shared with our loved ones*
- *In guiding breeders to areas with epizootic diseases. In developing advice for breeders on animal health and herd management.*

Respondents expressed an average overall satisfaction of 76%, scoring most positively the fact that Community of Practices advisories met their needs (80%). Improvements could be made by increasing the relevance for gender and social inclusion (72%). Details on the satisfaction dimensions can be found in Figure 76.

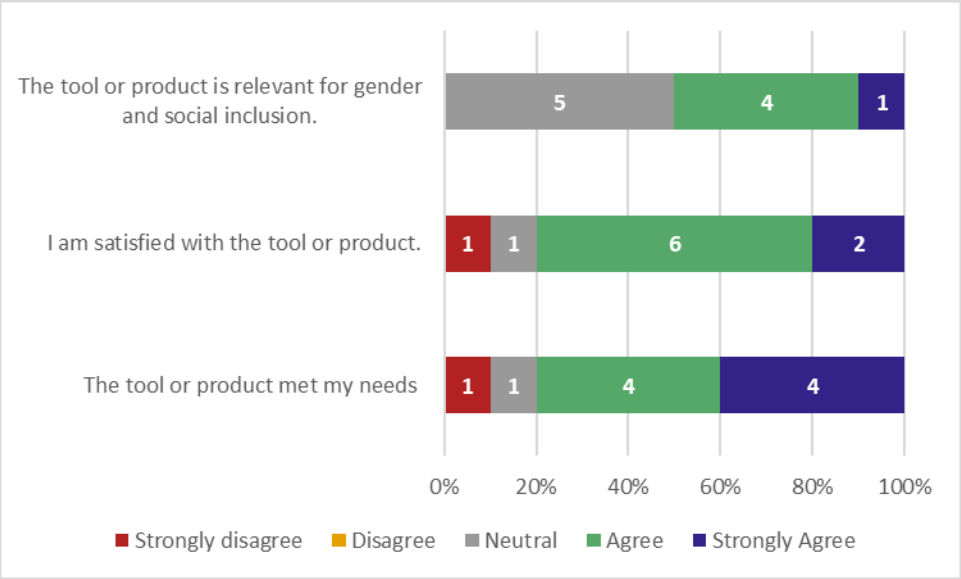

Figure 76 Satisfaction on the Community of Practice advisories

Challenges in the use of the tool included:

- *Consult the platforms and visit some fields*
- *it is impossible to select several sections.*
- *Not many difficulties, however, we have no feedback on the impact of the advice on the daily lives of the recipients.*
- *network problem (Samba Mamadou Sow président ADID, ADID)*
- *cheapest delivery of messages (advice and weather information) through operators (Ousmane SARR, RESOPP)*
- *Lack of automation in the provision of advice*
- *So far, so good, just confirm the advice in time and share it, because the information is perishable*

iSAT

The knowledge acquired through iSAT was reportedly used by 67% (2) of the 3 respondents who said they were familiar with this service. One respondent did not use the knowledge acquired, but reported not knowing why. Respondents reported using the knowledge acquired in the following circumstances:

- *To broadcast advice*

- *The messages sent are translated into audio messages and sent to the buses in the areas concerned, especially to Thiel And Daga Biram*

Respondents expressed an overall satisfaction of 89%, positively scoring the fact that that their needs were met (93%) and the integration of technical assistance in the plans and activities of one's organization (93%). No Suggestion were reported. See Figure 77 for more details on the satisfaction of this service.

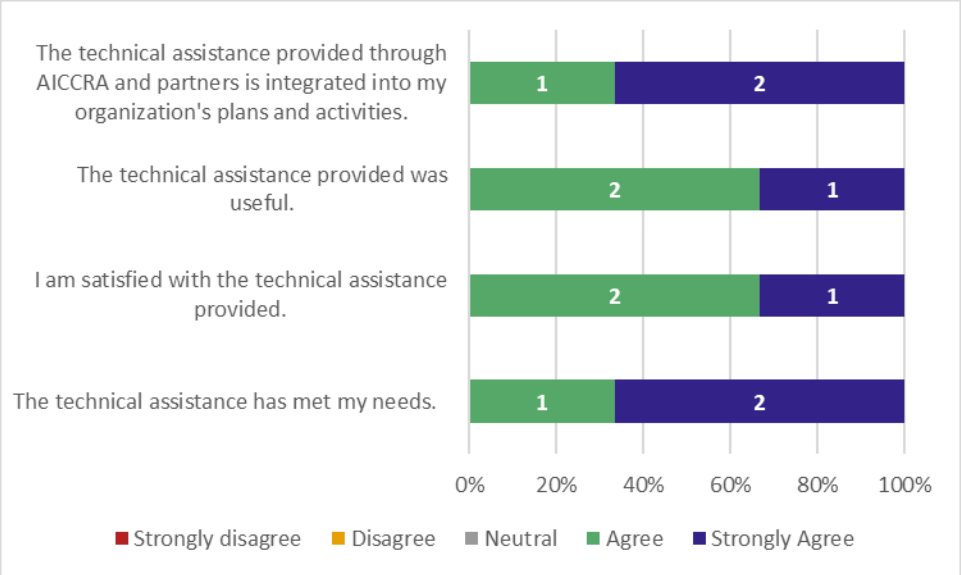

Figure 77 Satisfaction on iSAT

Take aways

Partnership feedback

Overall, respondents appreciate the collaboration with AICCRA and expressed willingness to continue the partnership and extend collaboration to other areas of work, providing multiple suggestions for how the partnership could develop further (see table below for details).

Issues, improvement suggestions, recommendations for cluster lead

Verbatim suggestions from partners regarding the partnership are indicated in Table 50, along with the cluster answer and actions taken in response to those comments and to the service-specific suggestions.

Table 50 Feedback for the Senegal cluster

PARTNERS' FEEDBACK	**CLUSTER RESPONSE**
Suggestions and comments listed in the section above for the Climate Risk Management Curriculum for Extension Agent	Noted. Some improvements of GSI and livestock system management are in the process to be upgraded in the CRMAE

Suggestions and comments listed in the section above for the best CSA practices	NA
Suggestions and comments listed in the section above for the AgDataHub	AgData hub is currently in the process to design bulletin that will enhance user's experience and information flow: a feature to generate bulletins for all communes once a week or every 10 days is set to make them available on the GTP website & focusing on including the current situation, forecast, and advisory.
Suggestions and comments listed in the section above for Community of Practices advisories	The CoP is using community agent model. We believe that successful AgTech implementations are indeed important when intermediaries (Jokalante, radio) help to overcome multiple barriers simultaneously - device limitations, connectivity issues, and digital literacy challenges.
Suggestions and comments listed in the section above for iSAT	NA
The thematic tools that AICCRA gave us could be accompanied by practical tools. (Ibrahima NDAO *Directeur CFPA de Mboro , CFPA de Mbao)"*	The CRMAE program was conceptualized for 2 weeks,this was adapted for a week to fit on logistic constraints.
Continue the contacts and organize annual refresher seminars lasting one or two days. (Sadibou SOW, UADB)	This is part of 2025 agenda
Strengthen climate communication. (Mamadou SY, CFPA de Nioro)	Agree
We thank AICCRA and wish to continue the partnership with them in other areas, in particular food systems, the resilience of agriculture in peri-urban areas, the integration of young people, CSR.	Thanks

Establishment of a dissemination platform for producer organizations	Agree
It's about making funds available in time so that we can carry out our activities very early on.	The disbursement rate aligns with the reporting
Extension of training periods	Agree
Monitor the impact of AICCRA activities and communicate more about achievements	Agree. This is part of agenda in 2025
Provide CFPA with teaching tools and materials. (Alassane Diallo, CFPA de Thiès)	Training guides are available online
More capacity building (Ibrahima NDAO CFPA Mboro , CFPA de Mbao)	Agree
Continue to monitor implementation in agricultural training centres under the supervision of the Ministry of Agriculture and continue to support multiplier workshops to reach as many trainers as possible.	Agree
Schedule other training courses on climate change or intelligent agriculture in the face of climate change.	Agree
Diversification of animal health activities and pastoral infrastructures (transhumance corridors, vaccination parks, storage facilities)	Agree
Capacity building for women and young people on production techniques (Samba Mamadou Sow president of ADID)	Agree
Raising awareness on bushfire prevention (Ousmane Sarr, RESOPP)	Agree
Training on securing pastoral land tenure and dissemination of texts (pastoral code, agro-sylvo-pastoral orientation laws and the laws on the national domain)	We have started the discussion as part of the CoP in 2025
Training of our livestock auxiliaries and our CA in the areas of climate, weather and agricultural risk concepts for better resilience	In 2025 Agenda
Strengthen communication between partner institutions.	Agree
The topic of training is important and topical.	Agree

The partnership must be maintained or even strengthened with other training sessions which will include, for us the beneficiaries, the development of an action plan for post-training follow-up. (Amadou Sidibe, CFPA, Saint-Louis)	Agree
Ministry officials must be trained in climate risk at least once a year.	AICCRA is willing to provide supportive backup on climate change to
The number of hours of training must also be increased to at least 2 weeks in order to allow for more practice. (Ibrahima NDAO, CFPA de Mbao)	Agree

Significance of the results for AICCRA scaling pathways and work in Senegal

4 out 5 innovations are use as case study during the AICCRA scaling framework. The results highlight AICCRA's significant impact on capacity-building for climate resilience in Senegal, with high satisfaction rates among respondents (85%) and strong demand for its services. The integration of climate risk management, climate-smart agricultural practices, and digital tools like AgDataHub has enhanced local agricultural systems. The widespread dissemination of knowledge and training (reaching over 3,000 people, 37% women) suggests that AICCRA is fostering long-term change. To scale, AICCRA should focus on expanding gender and social inclusion, ensuring more localized impact, and strengthening partnerships with local institutions for sustainable, inclusive climate resilience development.

Zambia

Cluster overview

The AICCRA-Zambia team develops services and innovations to help Zambian farmers, SMEs, public sector partners and communities safeguard their livelihoods in the face of climate change. In Zambia, climate change is threatening existing crop, aquaculture and livestock systems, impacting agriculture businesses, and undermining livelihoods. It is increasingly urgent for Zambian farmers, fishers and livestock keepers to be able to anticipate climate-related events and take appropriate preventative actions.

AICCRA-Zambia aims to improve water, food and energy security through access to knowledge, technologies, and decision-making tools, to strengthen climate resilience in Zambia's agriculture and food systems in the face of a hotter and drier climate. AICCRA-Zambia works with Zambian partners by scaling actionable Climate Information Services (CIS) and Climate-smart Agriculture (CSA) technologies such as sustainable financing for off-grid solar irrigation; integrated aquaculture-agriculture systems; addressing drought through climate smart seed varieties; and diversified chicken/goats-legume systems, all of which are meant to promote gender and social inclusion.

The project aims to strengthen local capacity by training intermediaries to communicate climate services; as well as by implementing a local internship program; providing accelerator grants for SMEs/entrepreneurs; and assessing challenges in the enabling environment for startups. It also seeks to inform policy and enhance investment plans by identifying suitable financing mechanisms, using fiscal tools to de-risk private sector investments in food value chains.

In Zambia, four AICCRA services were surveyed:

- WorldFish capacity building provided on aquaculture Better Management Practices (BMPs) provided to bundle two partners. A Series of Better management practices (BMPs) for smallholders farming fishpond-based systems have been developed based on learning from field experiences, including empirical evidence from elsewhere. These BMPs include biosecurity in fish farms, sex-reversed fingerlings to promote faster and uniform growth of fish, fishpond construction, choice of fish species, stocking, feeding, and harvesting as well as marketing table size fish. The adoption of BMPs can support the development of the aquaculture sector and increase the production and availability of fish and fish products from small and medium-sized aquaculture businesses.

- Needs Assessment for CSA CIS integration into the university curriculum. The Nationwide assessment for the Needs and Pathways for integration of CSA CIS into the Curricula of Zambian Higher Education Institutions.

- Open Capital Advisories on Investment Readiness. AICCRA, in partnership with Open Capital Advisors, provided investment readiness programs and services to strengthen the commercial capacity of Zambian agribusinesses, increasing their likelihood of attracting private investment. The program aims to strengthen the commercial capacity of the portfolio, making them more attractive to potential investors.

The survey was sent to 11 partners, of which 7 responded, for a 64% response rate.

Zambia respondents' demographics

42% of the respondents were man aged between 45 and 55 years old, and one respondent (14%) was a woman. No respondents were younger than 25 years old. Below, a gender disaggregation of different age groups:

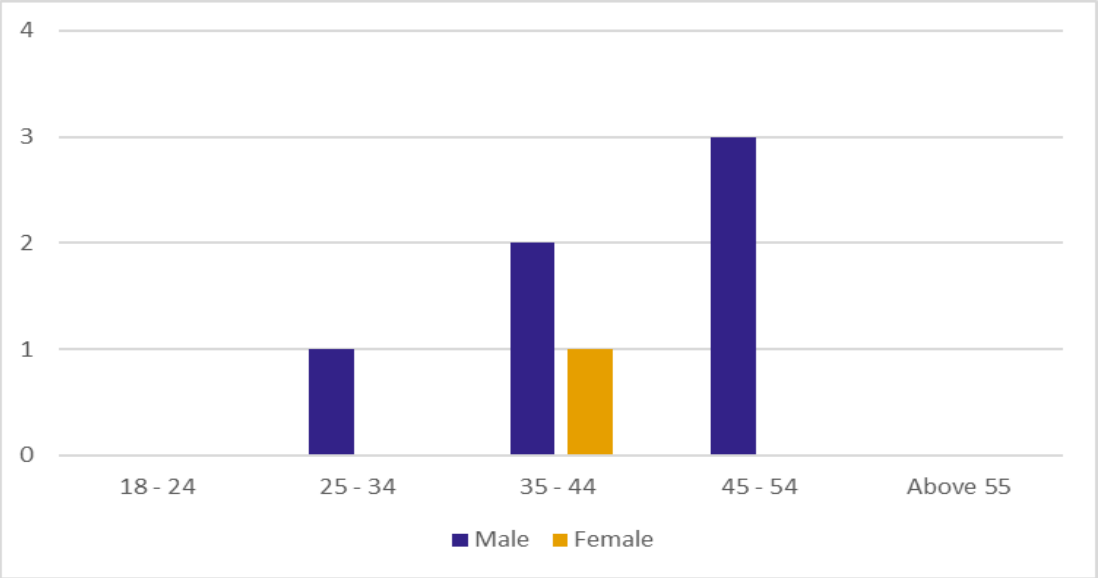

Figure 78 Zambia- Age and gender of the respondents

Zambia respondents' affiliation

Respondents were affiliated with 7 partner organizations.

Table 51. Zambia partner organizations

PARTNER ORGANIZATION	N OF RESPONDENTS
Adsek	1
Eunimos Investment Ltd	1
Hope ways	1
Kasakalabwe	1
Lupiya	1
Plantcatalyst	1
Triple C	1

Zambia services and their use

On average, the three services surveyed by Zambia were used by 96% of the partners, which expressed an overall average satisfaction of 70%. This score includes multiple dimensions of satisfaction such as usefulness, relevance and alignment to one's organization, needs and expectations being met, tailoring of content to needs, relevance for gender and social inclusion, incorporation of interactive elements and presence of feedback mechanisms.

Table 51 Use and Satisfaction on Zambia's services

AICCRA SERVICE	N OF RESPONSES	USE	OVERALL SATISFACTION
WorldFish capacity building provided on aquaculture Better Management Practices (BMPs) provided to bundle two partners	5	100%	75%
Needs Assessment for CSA CIS integration into the university curriculum	3	100%	60%
Open Capital Advisories on Investment Readiness	6	83%	71%
Total/Average	**14**	**94%**	**69%**

Two of the AICCRA services surveyed for Zambia included questions regarding sharing of knowledge acquired during the training to train or inform other people and sharing of the AICCRA tool/technology with others. On average, 56% of respondents used the knowledge acquired to train other people, reaching almost 54550 people in total (of which 10% are estimated to be women).

Table 52 ToT effect in Zambia's services

AICCRA SERVICE	TRAINING OR SHARING DONE	N OF PEOPLE TRAINED	% OF WOMEN TRAINED
WorldFish capacity building provided on aquaculture Better Management Practices (BMPs) provided to bundle two partners	100%	54480	10%
Needs Assessment for CSA CIS integration into the university curriculum	67%	60	NA
Total/average	**56%**	**54540**	**10%**

Demand-driven nature of the services

The WorldFish capacity building provided on aquaculture Better Management Practices (BMPs) provided to bundle two partners was equally perceived by respondents as having been co-identified (40%) and offered by AICCRA (40%), while one respondent felt he/she did not know. The needs assessment for CSA CIS integration into the university curriculum was equally perceived by respondents as having been co-identified (33%), offered in response to specific requests (33%), and offered by AICCRA (33%). The open capital advisories on investment readiness were perceived by most respondents as having been offered by AICCRA (50%), with the remaining respondents believed it was offered in response to specific requests (17%), or did not know (33%). The one respondent who was familiar with the Disaster Management and Mitigation Unit (DMMU) Mobile App felt he/she did not know how his/her organization became familiar with the capacity strengthening opportunity.

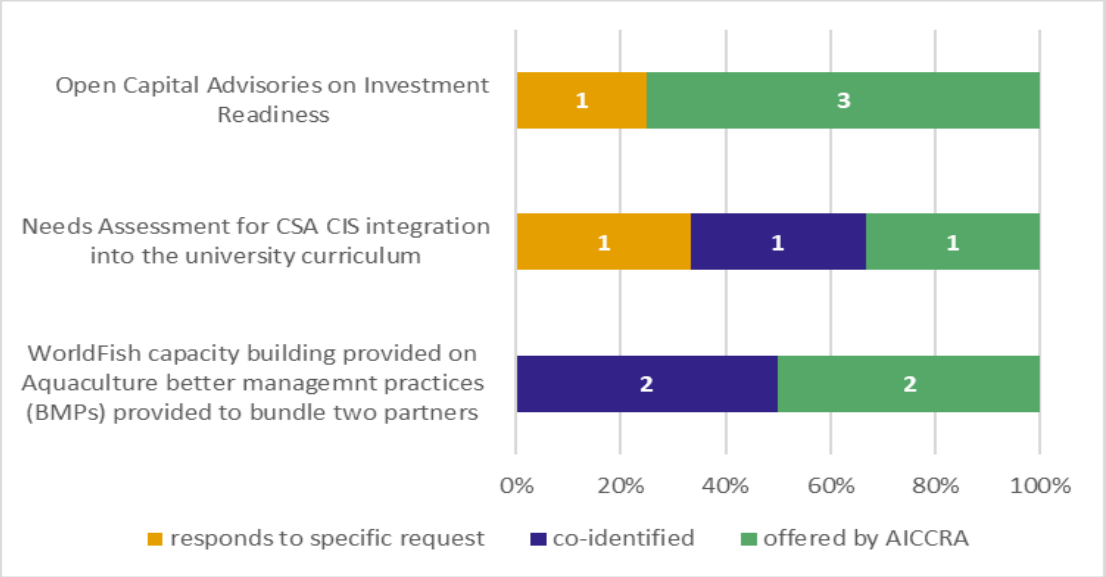

Figure 79 Count and percentage of respondents believing that the AICCRA services surveyed in Zambia were offered in response to specific requests, co-identified, or offered by AICCRA

Detailed results by service

WorldFish capacity building provided on aquaculture Better Management Practices (BMPs)

The insights acquired in the WorldFish capacity building provided on aquaculture Better Management Practices (BMPs) were reportedly used by all of the 5 respondents who said they were familiar with this service. Moreover, all (5) of those respondents reported using the knowledge acquired to train, in total, about 54480 people (of which 10% are estimated to be women). 40% of the respondents attended the capacity building in the past year (of which 20% in the past 6 months), while 60% had done so more than a year before. Respondents reported using the knowledge acquired in the following circumstances:

- *At our organization farm plot, in the three district I provide extension services, eg. Kasama , Mungwi and Mbala Demo sites. (Felix Mulenga, Kasakalabwe)*

- *We have planned to work with women and the youth in specific programs. (Mubanga Seketeni, Adsek)*
- *Integrated farming, Climate smart Agriculture and Aquaculture practices (Chachi Cosmas , Triple C)*
- *At our newly hatchery (Collins Chongo, Eunimos Investment Ltd)"*
- *At my business farm*

Respondents expressed an average overall satisfaction of 75% and scored most positively the usefulness of the service (80%). Improvements could be achieved by further tailoring the content to the partners needs (72%) and by incorporating feedback mechanisms (68%). No suggestions were reported. See Figure 80 for more details on the satisfaction of this service.

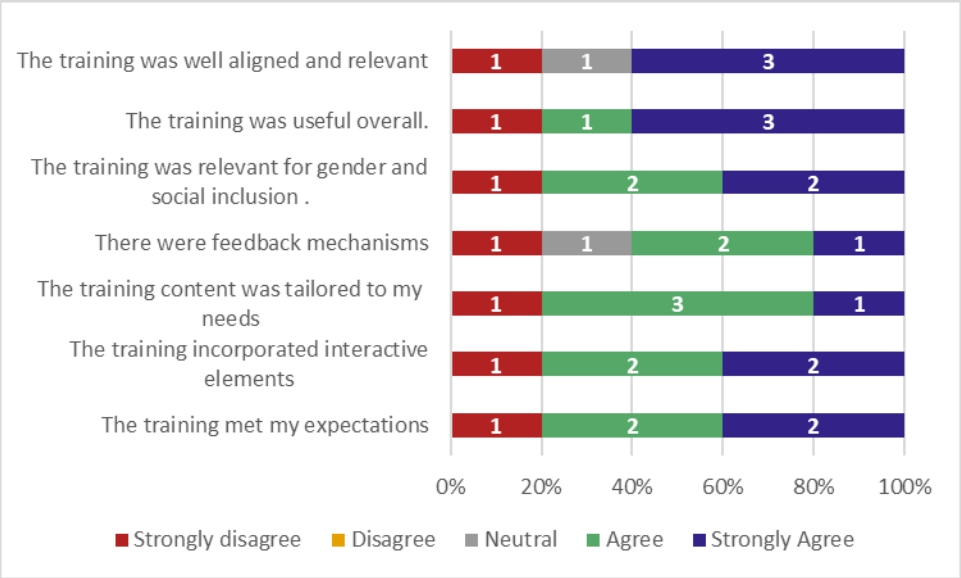

Figure 80 Satisfaction on the capacity strengthening on aquaculture BMPs

Needs Assessment for CSA/CIS integration into the university curriculum

The findings from the needs assessment for CSA/CIS integration into the university curriculum were reportedly used by all of the 3 respondents who said they were familiar with this service. Moreover, 67% (2) of those respondents also trained, in total, 60 people, both within and also beyond their organization. Respondents reported using the knowledge acquired in the following circumstances:

- *1-The technology provided by ACCRA, eg climate information services, which am using to help small holder farmers understand right information that they should apply at right time, linking them to metrological information on weather focused. 2- Climate smart agriculture, which I am helping formers to adapt and practice. 3- Agriculture -Aquaculture integration which am using as a method farmers should apply on their farms. (Felix Mulenga , Kasakalabwe)"*
- *We utilize weather prediction apps to stay informed about prevailing weather conditions, enabling us to prepare effectively for our farming seasons. (Chachi Cosmas , Triple C)*
- *For weather advisories (Collins Chongo, Eunimos Investment Ltd)*

Respondents expressed an average overall satisfaction of 60%, with one respondent strongly disagreeing and two respondents agreeing that the service

met their needs, that they were satisfied with it, and that it was relevant for gender and social inclusion. No suggestions were reported. Details on the satisfaction dimensions can be found in Figure 80.

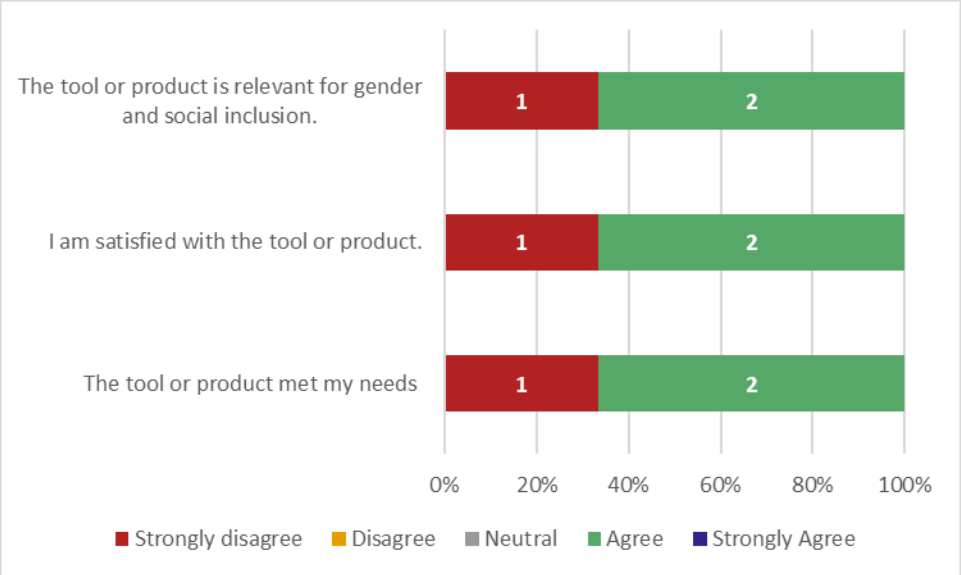

Figure 80 Satisfaction on needs assessment for CIS/CSA integration in the university curriculum

Challenges in the use of the tool included:

- *Lack of adequate transport to reach the interior farms in the province and in adequate funds for trainings eg 1.624 million farmers in Northern province (Felix Mulenga, Kasakalabwe)*
- *Sometimes the weather forecast app misses the prediction on a specific area (Chachi Cosmas, Triple C)*

Open Capital Advisories on Investment Readiness

The knowledge acquired through Open Capital Advisories on Investment Readiness was reportedly used by 83% (5) of the 6 respondents who said they were familiar with this service. One anonymous respondent did not use the knowledge acquired but stated that the "*timely response to our programs will help*". Respondents reported using the knowledge acquired in the following circumstances:

- *We have used the technical assistance to improve our business management for the company (Mubanga Seketeni , Adsek)*
- *Record keeping in the retail shop (Chachi Cosmas , Triple C)*
- *In the CEEC loan application (Collins Chongo, Eunimos Investment Ltd)*
- *On my business*
- *We have built a credit scoring model that incorporates 2 additional value chains to attend to additional farmer funding opportunities. (Evelyn Chilomo Kaingu, Lupiya)*

Respondents expressed an overall satisfaction of 71%, most positively scoring the fact that that their needs were met (73%) and the integration of technical

assistance in the plans and activities of one's organization (73%). No Suggestion were reported. See Figure 81 for more details on the satisfaction of this service.

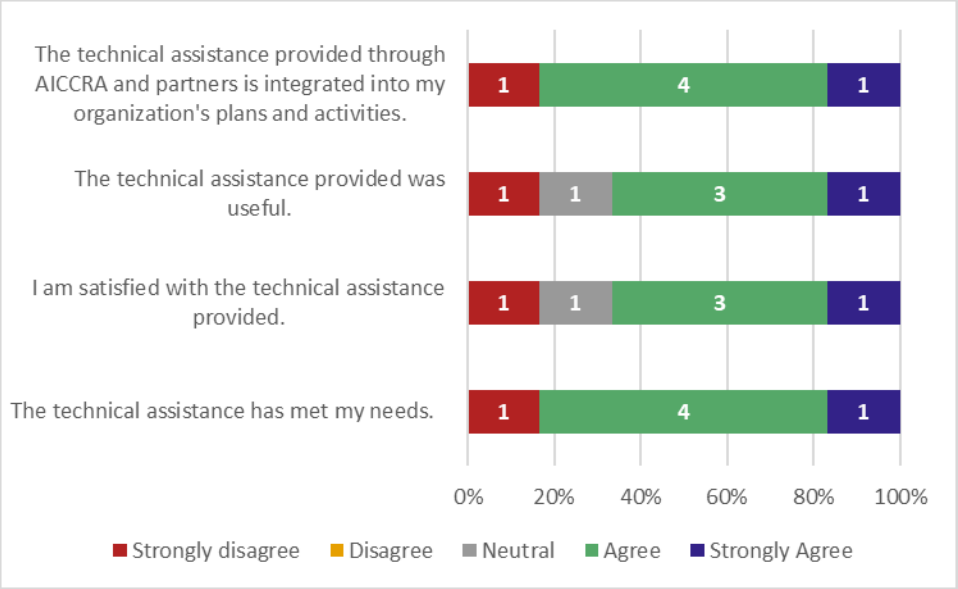

Figure 81 Satisfaction on the Open Capital advisories on investment readiness

Take aways

Partnership feedback

Overall, respondents appreciated the collaboration with AICCRA and expressed willingness for AICCRA to continue the partnership with them, as, for example, their organization "*inseminate information to communities about Climate change* (Chachi Cosmas, Triple C)"

Issues, improvement suggestions, recommendations for cluster lead

Verbatim suggestions from partners regarding the partnership are indicated in Table 53, along with the cluster answer and actions taken in response to those comments and to the service-specific suggestions.

Table 53 Feedback for the Zambia cluster

PARTNERS' FEEDBACK	**CLUSTER RESPONSE**
Suggestions and comments listed in the section above for the WorldFish capacity building on aquaculture BMPs	"The training on aquaculture BMPs has helped us to improve our knowledge in farming practices and we have been able to pass-on this information to smallholder farmers who are buying the aquaculture inputs like fingerlings from our hatcheries." HopeWays

Suggestions and comments listed in the section above for the needs assessment for CIS/CSA integration in the University Curriculum	The curriculum needs assessment was an eye opener on the existing gaps in our higher-level education training in agriculture.
Suggestions and comments listed in the section above for the Zambia DMMU mobile app	No comment
Suggestions and comments listed in the section above for the Open Capital advisories on investment readiness	"The training on investment readiness was useful in that helped us to manage and prepare our businesses for expansion." EUNIMOS
A credit guarantee funding to support large ticket funding towards small farmers which will allow them to expand their operations. (Evelyn Chilomo Kaingu, Lupiya)	

Significance of the results for AICCRA scaling pathways and work in Zambia

The AICCRA Zambia partnership satisfaction survey findings have revealed and demonstrated very important results regarding the significance of the scaling pathways adopted by the project. For instance, the 94% average use rate and 69% satisfaction of the CSA and CIS technologies such as the aquaculture BMPs that were disseminated through accelerator agribusinesses is a testimony that these technologies were relevant and well aligned to the needs of the target beneficiaries. Thus, it is important that the project considers re-enforcing this scaling approach now and for the future related programs. Furthermore, reaching over 54,000 beneficiaries suggests that the scaling pathway is very effective in reaching thousands of farmers and helping them to manage climate risks. However, there should be deliberate efforts to help more women access and use these technologies in order not to worsen the existing gender disparities. The results showed that very few women were using the CSA CIS technologies. AICCRA-Zambia aims to improve water, food and energy security through access to knowledge, technologies, and decision-making tools, to strengthen climate resilience in Zambia's agriculture and food systems in the face of a hotter and drier climate.

METHOD SUMMARY

Changes from AICCRA to AICCRA AF

The 2024 AICCRA Partnership survey underwent some changes in its structure compared to previous editions, motivated by the aim to align to the start of the Additional Financing stage of AICCRA. Some changes in the partnership survey were driven by alterations in the AICCRA results framework, where IPI 3.3 on the "use or adaptation of AICCRA-funded climate relevant knowledge product, decision-making tools and services stated and confirmed by surveyed partners and stakeholders" was kept, but indicators on the "satisfaction with quality and usefulness of services" (IPI 1.3) and on the "effectiveness of the partnership" (IPI 2.4) were discontinued. Questions on the satisfaction of the AICCRA services by partners were maintained, even if satisfaction was no longer monitored by a project indicator, while questions on the efficacy of the partnership were removed.

Other changes to the survey have been made to incorporate lessons learnt and to increase the learning potential of the exercise. Further details on the questions can be found in the next section, but the main changes covered:

- *Surveying only services designed for partners and next users (the intended respondents on this survey) and not farmers.*
- *Adding questions on the demand drivenness of the AICCRA services*
- *Adding questions on the impact of AICCRA work on the integration of four GSI dimensions in the partner organization*
- *Tailoring survey questions based on the typology of service surveyed*
- *Adding questions on the Training or Trainers effect among next users*

In AICCRA (2021-2023) use by cluster was calculated as the percentage of the total respondents, in each cluster, that have used at least one service. In AICCRA AF (2024-2025) use by cluster is calculated as the average use of the AICCRA service surveyed. Use of each AICCRA service surveyed was calculated as the percentage of respondents who reported using the service, out of the number of respondents who reported being familiar with such service. In the 2023 partnership surveys, where both metrics were applied, the percentage of the total respondents that have used at least one service was consistently higher than the average of the percentage of respondents who reported using each service.

Survey questions

Standard survey questions for all Clusters were developed by the AICCRA central MELIA team to understand:

- *Age and gender of respondents*
- *Partner organizations affiliated with respondents*
- *Impact of AICCRA work on the integration of four GSI dimensions in the partner organization: i) Integration of specific GSI goals, components, programs, and/or policies, ii) focus on youth as a specific group, iii) knowledge and awareness on how climate-smart GSI components can be integrated and strengthened, iv) intention to integrate GSI in the near future.*

- *Demand-drivenness of the AICCRA services surveyed, i.e. whether respondents felt that each service surveyed was offered by AICCRA, offered in response to specific partners' needs and requests, or co-identified.*
- *Use and application of the products or of the knowledge acquired, and reasons for when not used*
- *Respondents could answer 'Yes' or 'No' to whether they had used the service. If the respondent replied 'Yes', the respondent was asked to report example(s) of where the knowledge, skills, and products were applied. If the respondent replied 'No, the respondent was asked to provide a reason for why the knowledge, skill or product was not applied or used.*
- *Occurrences of respondents training other people, and number of people indirectly trained on AICCRA products (disaggregating by gender when possible)*
- *Satisfaction with services, challenges encountered, and suggestions for improvement*
- *General feedback on the partnership and suggestions for further areas of work*

After respondents confirmed that they were familiar with a service, questions related to IV-VII were asked for each service. Questions related to V-VII were tailored based on whether the service was i) Capacity Strengthening, curricula, or training, ii) Products, tools, technologies or iii) Technical Assistance, and dimensions of satisfaction were also explored slightly differently for each typology of service (Table 54). Further details on the questions featured in the survey can be found in Annex I.

Table 54 Satisfaction dimensions assessed in the survey

SATISFACTION DIMENSIONS ASKED SURVEY	CAPACITY STRENGTHENING, CURRICULA, OR TRAINING	PRODUCTS, TOOLS, TECHNOLOGIES	TECHNICAL ASSISTANCE
Expectations met			
Incorporation of interactive elements			
Content tailored to partner needs			
Presence of feedback mechanism			
Relevance for GSI			
Usefulness			
Alignment to one's organization			
Needs met			
General satisfaction			

Survey delivery

Each of the 12 AICCRA Clusters provided the name and the typology of the 3 to 5 AICCRA services that the cluster wished to survey, along with the list of partners they would send the survey to. 12 cluster-specific surveys were developed by AICCRA MELIA and administered through MS Forms. Surveys for Theme1, Theme 2, Theme 3, Theme 4, West Africa, Mali and Senegal were provided both in English and in French. Each cluster invited partner organizations to respond to the survey between the 2nd of December 2024 and 12th of January 2025. The Kenya cluster was allowed an extension up to the 27th of January 2025.

Data analysis

Analysis was carried out by the AICCRA central MELIA team, using Excel. Comments in French were translated into English using DeepL and then revised. ChatGPT was used to summarize the hundreds of comments reported and derive insights into the main feedback given for each typology of AICCRA service.

Demographics

Age and gender of the respondents were analyzed to understand the gender ratio and the distribution of respondents in the following age classes: 18 – 24; 25 – 34; 35 – 44; 45 - 54; Above 55. The number of individual partner organizations was derived, along with how many respondents were affiliated with each organization.

GSI considerations

Levels of agreement (strongly disagreeing, disagreeing, neutral, agreeing, strongly agreeing) with the integration of each GSI dimension in the partner organization as a result of AICCRA's work were converted in numerical scores (1, 2, 3, 4, 5, respectively) to derive a numerical average. The integration of each GSI dimension was first calculated as the average score (out of 5) given by cluster respondents and then expressed in percentage (out of 100%). Averages were computed for each GSI dimension and for each cluster.

Demand-driven nature of the services

The demand drivenness of each AICCRA service surveyed was analyzed by providing the count and the percentage of respondents who believed that each service was either i) offered by AICCRA, ii) co-identified, or iii) offered in response to specific requests and partner needs.

Use

Use of each AICCRA service surveyed was calculated as the count and percentage of respondents who reported using the service, out of the number of respondents who reported being familiar with such service. Examples of where the knowledge, skills or products were applied were reported verbatim or in-text, along with reasons why those were not applied, when respondents reported not using the service. Name and affiliation of the respondent were reported only when the respondent gave consent to use his or her name. Two services where only one respondent was familiar with the service were excluded from the analysis (Climate-Smart Agriculture Basics: An Introduction to Practices & Technologies, from the WA cluster and Disaster Management and Mitigation Unit (DMMU) Mobile App from the Zambia cluster).

Use of AICCRA services per cluster (informing IPI 3.3 on use or adaptation of AICCRA-funded products, tools and services) was calculated as the average of the use percentages of each AICCRA service surveyed by the cluster.

Training of Trainers effect

The Training of Trainers effect among respondents was estimated as the percentage of respondents who trained other people on AICCRA products and tools or on the knowledge acquired in capacity strengthening events, out of the total number of respondents who were familiar with each service. The number of people trained by respondents was summed to estimate indirect reach of each service. Double reporting may have occurred if multiple respondents reported the same training event. The gender ratio among people trained on each service was estimated by considering only the data that were reported disaggregated by gender, counting the number of women out of the total people reported.

Training of trainer effect per cluster was reported as the average of the trainers percentage of each service, as the sum of the people trained on each service, and the average of the gender ratio of each service.

Satisfaction

The overall satisfaction of each AICCRA service surveyed was calculated as the average of the satisfaction dimensions assessed. Levels of agreement (strongly disagreeing, disagreeing, neutral, agreeing, strongly agreeing) with each satisfaction dimension statement were converted in numerical scores (1, 2, 3, 4, 5, respectively) to derive a numerical average. Each satisfaction dimension scored by respondents was first calculated as the average score (out of 5) and then expressed in percentage (out of 100%). If any, challenges in the use of tools and suggestions for improvements were reported verbatim or in-text. Name and affiliation of the respondent were reported only when the respondent gave consent to use his or her name.

Satisfaction of AICCRA services per cluster was calculated as the average of the overall satisfaction percentages of the AICCRA service surveyed by the cluster.

Qualitative general feedback

Qualitative general feedback on the partnership was reported verbatim for each cluster. Name and affiliation of the respondent were reported only when the respondent gave consent to use his or her name.

LESSONS LEARNT

While there had been issues in the delivery of the survey through Microsoft Forms in previous years, no challenges occurred for the 2024 Partnership survey edition. This confirms that MS Forms is a suitable tool to be used, but that important best practices should be adopted during the development of the forms. These include:

- Careful planning of deadlines to ensure that each process receives the appropriate level of attention, particularly for reviewing the content and logic of branching questions.
- Ensuring that the survey is finalized before generating the Excel file, and re-generating it after any change to the form to prevent any data synchronization issues.
- Keeping a fixed survey start and end date, avoiding any re-openings that could lead to errors during analysis phase.

Prioritizing and reducing the number of services surveyed by each cluster to 3-5 services per cluster has made the survey leaner, reducing stakeholder fatigue, while allowing us to ask more detailed questions, that have improved the understanding of the satisfaction of respondents. The prioritization of services to be surveyed by Clusters was guided by the need to only survey services which are designed for partners and next users, the intended respondents on this survey, and not farmers. Use of services designed for farmers is indeed captured by PDO3 instead.

Calculating use by cluster as the average use of each service surveyed, rather than as the percentage of respondents who have used at least one service, provided a stricter, but more accurate and realistic measure of use. The effect of adopting a more conservative metric of use (as seen in the 2023 partnership report, where both metrics were reported) might have been balanced by the prioritization of services to be surveyed, which has accompanied the change of metric.

Given that respondents answer service-specific questions only after confirming their familiarity with said service, each service receives different number of individual responses. Clusters were encouraged to reach a minimum of 3 responses per service through their selection of partners to invite. In the analysis, this rule of thumb was bent slightly, including in the analysis three services which had received 2 responses, and excluding two services which had received only 1 response.

In the 2024 Partnership survey edition, questions were tailored based on the typology of the service surveyed. This has allowed us to get more targeted and insightful information on the services, such as quality, interactivity and presence of feedback mechanisms in training events, challenges observed in the use of the tools, or people trained. Looking forward, questions specific to each typology on satisfaction dimensions could be refined and aligned in their formulation. Gender disaggregation in the number of people trained could be collected in a more structured way, rather than as open text. Questions on whether other people were trained, both within and beyond a partner's organization, could be asked also for instances of technical assistance.

CONCLUSIONS

Changes to the structure of the partnership survey have been overall positive, as they have allowed to gather more accurate and insightful information and to align to the changes derived from the start of AICCAR AF. Average use (84%) and satisfaction (88%) of AICCRA services as stated by next user respondents is well above the target value of 75% and is the highest reported since the start of AICCRA. Changes to the structure of the survey made in 2024, however, do not make those results fully comparable with those from the first stage of AICCRA. Most of the AICCRA services surveyed, especially instances of technical assistance, were perceived as being offered in response to partners requests or at least co-identified. AICCRA's work with partner organizations was reported to have increased their consideration of GSI, especially in a climate context. Although large variability was observed among the clusters, both in terms of typology of services surveyed and in results, most metrics and indicators used scored positively and generally well above 75%. This was confirmed by trends observed in the qualitative comments. When looking at use, 32 out of 44 (73%) services were used by more than 75% of the respondents familiar with each service. When looking at satisfaction, 42 out of 44 (95%) services received an overall satisfaction score greater than 75%.

Way forward

The lessons learnt from this edition of the partnership survey will be applied to further refine the structure of the 2025 Partnership survey. Given the increased focus on capacity strengthening in AICCRA III, these learnings will be taken in account to assess the satisfaction and quality of training events, courses and programs.

ANNEX

Anne 1: Survey questions

Consent Form

Introduction

Thank you for considering participating in our partnership survey. The survey aims to gather information on your experiences and insights regarding our collaboration. Your responses will help us to improve our partnership strategies and delivery of services and to identify areas for mutual growth and development.

Purpose of the Survey

The purpose of this survey is to collect data that will contribute to enhancing the effectiveness of our partnerships and delivery of products, tools and services. The information gathered will be used to understand the current status of the partnership, identify strengths and areas for improvement, and inform future planning.

Voluntary Participation

Your participation in this survey is entirely voluntary. You may choose to skip any questions you do not wish to answer, and you can withdraw from the survey at any time without any negative consequences.

Confidentiality and Data Protection

All information collected during this survey will be kept confidential. Your responses will be anonymized and used only for the purposes of this survey. The data will be securely stored and will not be shared with third parties without your explicit permission. Only authorized members of the AICCRA Monitoring, Evaluation and Learning for Impact Assessment (MELIA) team will have access to the anonymized data for analysis.

Benefits and Risks

While there are no direct benefits to you for participating in this survey, your input is valuable and will contribute to improving our partnership and collaborative efforts. There are no known risks associated with participating in this survey.

Contact Information

If you have any questions or concerns about this survey, please feel free to contact Tonya Schutz, AICCRA MELIA Lead, Alliance of Bioversity International and CIAT, T.Schuetz@CGIAR.ORG.

Consent

By proceeding with the survey, you indicate that you:

- Have read and understood the information provided above.
- Voluntarily agree to participate in this survey.
- Understand that you can withdraw your participation at any time.

If you consent to participate, please proceed to the survey.

Survey questions

*indicates that the question requires a response

Part I: General Information

1. What is your gender?* (select applicable one)
a. Female
b. Male
c. Prefer not to say

2. What is your age?* (select applicable one)
a. 18 – 24 (Young adults)
b. 25 – 34 (Early working years)
c. 35 – 44 (Mid-career)
d. 45 – 54 (Late career)
e. Above 55 (Approaching or in retirement)
f. Prefer not to say

3. Where is your organization based?*
a. Mali
b. Senegal
c. Ghana
d. Ethiopia
e. Kenya
f. Zambia
g. East and Southern Africa
h. West and Central Africa
i. Other, Specify

4. Please select the name of the organization you are affiliated with. If your organization is not listed, select "Other" at the bottom of the list and specify. [drop down]*

Part 2 Insights from AICCRA Partners and next-user stakeholders

Instruction: Over the past year, the AICCRA team has engaged with you on certain processes to develop/strengthen knowledge products/tools/services and has also provided services like capacity building and training. Please indicate your level of agreement with each statement by ticking the appropriate box.

I. Gender and Social Inclusion

Statement	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
5. Due to AICCRA's work with my organization, the integration of specific gender and social inclusion goals, components, programs, and/or policies has increased.					
6. Due to AICCRA's work with my organization, the focus on youth as a specific group has increased.					
7. Due to AICCRA's work with my organization, our knowledge and awareness on how we can integrate and strengthen climate-smart Gender and Social Inclusion components has increased.					
8. AICCRA's work with my organization has fostered our intention to integrate Gender and Social Inclusion in the near future.					

II. Capacity strengthening

9. Have you participated in "….."*
a. Yes (Go to Q10)
b. No (Go to next training/service/etc.)

10. Which of the following statements best describes how you and your organization became familiar with the above capacity strengthening opportunity? [single choice]
a. The provision of this capacity strengthening opportunity responds to a specific request or demand from my organization to AICCRA.
b. This capacity strengthening opportunity was offered or promoted to my organization by AICCRA
c. This capacity strengthening opportunity was co-identified as a relevant solution through AICCRA's engagement with me or my organization.
d. I do not know/ Not applicable
11. When did you complete the training?*
a. In the past six months
b. Between six months and a year ago
c. More than a year ago
12. Please indicate your level of agreement with each statement by ticking the appropriate box

Statement*	Strongly disagree	Disagree	Neutral	Agree	Strongly agree

	1	2	3	4	5
a. The training met my expectations.					
b. The training incorporated interactive elements to keep me engaged and facilitate my active learning.					
c. The training content was tailored to my specific needs and background, ensuring relevance to my current role.					
d. There were feedback mechanisms included to gather my input on the training content and delivery *(e.g. surveys, open discussions).*					
e. The training was relevant for addressing gender and social inclusion issues.					
f. The training was useful overall.					
g. The capacity strengthening efforts are well aligned and relevant to my organization's plans and activities.					

13. Since the training, have you applied some of the skills or knowledge that you acquired from the capacity building events? *

a. Yes (if yes, go to the next question)
b. No (go to Q17)

3. If Yes, please provide example(s) of where you have applied the skills or knowledge you acquired from capacity building events. [open text]
3. If No, please tell us the reason (e.g., content, timeliness, support materials, engagement) and share any suggestion with us how to improve the technical assistance.

14. Have you shared and/or applied the skills and knowledge acquired from the training to train or inform other people? *

a. Yes (if yes, go to next question)
b. No
c. Not yet, but plan to

15. If yes, approximately how many people have you trained? If you can give an estimated gender distribution (e.g. ratio of approx.. 40:60 male: female) that will be much appreciated. [open question]

III. Provision of tools and technologies

16. Are you familiar with "….."*

a. Yes (Go to Q18)
b. No (if no, go to next service)

17. Which of the following statements best describes how you and your organization became familiar with the above tool/technology? [single choice]
a. The provision of this tool/technology responds to a specific request or demand from my organization to AICCRA.
b. This tool/technology was offered or promoted to my organization by AICCRA
c. This tool/technology was co-identified as a relevant solution through AICCRA's engagement with me or my organization.
d. I do not know/Not applicable
18. Please indicate your level of agreement with the following statements.

Statement*	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
a. The tool or product met my needs in relation to my job.					
b. I am satisfied with the tool or product.					
c. The tool or product is relevant to addressing gender and social inclusion issues.					

19. Are you using the tool/technology ?*
a. Yes (if yes, go to next q)
b. No (if no, go to q 22)
c. Not yet, but plan to.
20. (If yes)Please describe how you are using the product or tool. [open text]
21. (If no)Please tell us the reason. (e.g. not useful, poor quality, no infrastructure in place, no encouragement/ enabling environment in place, timing is off, …) [open text]

22. Please share any challenges you have experienced in using the tool/technology and provide recommendations to enhance the user experience. [open text]
23. Have you shared this tool/technology with other people?*
a. Yes, within my organization if yes, go to next q)
b. Yes, within and beyond my organization if yes, go to next q)
c. No.
24. If yes, approximately how many people have you shared it with? If you can give an estimated gender distribution (e.g. ratio of approx.. 40:60 male: female) that will be much appreciated. [open text]

IV. Technical assistance

Note: Technical assistance refers to backstopping and support provided to governments and organizations to enhance their capacity and effectiveness in specific areas.

25. Have you received technical assistance on "…."*
a. Yes (go to Q27)
b. No (if no, go to next service)

26. Which of the following statements best describes how you and your organization came to receive technical assistance? *
a. The provision of this technical assistance responds to a specific request or demand from my organization to AICCRA.
b. This technical assistance was offered or promoted to my organization by AICCRA

c. This technical assistance was co-identified as a relevant solution through AICCRA's engagement with me or my organization.
d. I do not know/ Not applicable

27. Please indicate your level of agreement with the following statements.

Statement*	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
a. The technical assistance has met my needs.					
b. I am satisfied with the technical assistance provided.					
c. The technical assistance provided was useful.					
d. The technical assistance provided through AICCRA and partners is integrated into my organization's plans and activities.					

28. Have you used the insights or analysis provided through the technical assistance?*
a. Yes (if yes, go to next q)
b. No (if no, go to q 31)
c. Not yet, but plan to
29. (If yes) Please provide example/s of where you have used the insights or analysis provided through the technical assistance. [open text]
30. (If no) Please tell us the reason (e.g. content, timeliness, support materials, engagement) and share any suggestion with us how to improve the technical assistance. [open text]

Closing

31. If there is anything else you would like to add about your partnership with AICCRA, please tell us. [open text]

32. AICCRA can use any of my quotes for reporting and communication products*
a. Anonymously
b. With my name (Q34)
c. Not at all.

33. Since you have chosen to use your quotes with your name, please provide the correct spelling below. [open text]

Annex 2: Data and Comments

Detailed consolidated results and anonymized comments uploaded as Annex separately