



Enhancing Climate Resilience in Africa through the Scaling and Bundling of Adaptation Solutions



Workshop Report

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January 2025



To cite this report

Desire M. Kagabo., Mathieu Ouedraogo., Evan Girvetz. 2025. Enhancing Climate Resilience in Africa through the Scaling and Bundling of Adaptation Solutions. International Center for Tropical Agriculture - CIAT.

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Acknowledgement

Accelerating Impacts of CGIAR Climate Research for Africa (AICCRA) is a project that helps deliver a climate-smart African future driven by science and innovation in agriculture. It is led by the Alliance of Bioversity International and CIAT and supported by a grant from the International Development Association (IDA) of the World Bank. Explore our work at aiccra.cgiar.org

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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.

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ABOUT AICCRA



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Executive summary

Climate change and variability have emerged as an existential threat to the global community, particularly the African continent. Thus, there is a never-before-pressing need to ensure that climate adaptation and resilience solutions are context-specific and user- and entrepreneur-centric to amplify momentum toward Nationally Determined Contributions (NDCs), Global Goal on Adaptation (GGA), and the Paris Agreement. Climate-Smart Agriculture (CSA) has been the main strategy through which climate adaptation and resilience plans are implemented. However, it is increasingly becoming evident that bundling and scaling Climate-Smart Agriculture, Climate Information Services (CIS), and other agricultural products and services has the potential to make climate adaptation and resilience interventions financially sustainable and, as a result, positively impactful by engaging and benefiting diverse stakeholders (private and public) and catering to the spatially and temporally evolving needs of beneficiaries. Accordingly, the African Group of Negotiators Experts Support (AGNES), collaborating with the Government of Kenya, African Union Development Agency (AUDA-NEPAD), the Alliance of Bioversity International and CIAT under Accelerating Impacts of CGIAR Climate Research for Africa (AICCRA), and other partners, organized a one-day workshop to strengthen the capacity of “front-line” climate actors on scaling and bundling of climate innovations that can drive resilience of communities against current and future climate shocks. The one-day event immersed the participants in climate-adaptation-and-resilience-related subjects: *Climate Rationale, CSA Investment Planning Framework, National and sub-national Action Planning, Bundling Scaling Solutions, Scaling Solutions for Impact and Investment, and Tracking Adaptation Progress*. Based on the feedback from participants, only a small percentage (15% - 17%) were fully acquainted with all the themes presented. In contrast, a considerable number (21% - 26%) indicated that the climate adaptation knowledge tools were relevant to their situations. Nevertheless, a significant portion of the attendees highlighted the necessity for additional capacity building regarding all the tools, implying that a single-day workshop was insufficient for them to fully understand the concepts. The statistical analysis results reveal that the workshop offered participants a versatile framework for converting their climate adaptation and resilience goals into evidence-based, policy-aligned, and ultimately quantifiable plans for implementation and investment, which can effectively contribute to a climate-resilient Africa.

Keywords:

Resilience; sustainable agriculture; bundling solutions; adaptation; Climate-Smart Agriculture (CSA); Climate Information Services (CIS).



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Acronyms

AGNES	African Group of Negotiators Experts Support
AICCRA	Accelerating Impacts of CGIAR Climate Research for Africa
CGIAR	Consultative Group on International Agricultural Research
CIAT	International Center for Tropical Agriculture
CIS	Climate Information Services
CSA	Climate-Smart Agriculture
COP	Conference of Parties
CSA	Climate-Smart Agriculture
CSAIP	Climate Smart Agriculture Investment Plan
GGA	Global Goal on Adaptation
NDCs	Nationally Determined Contributions
PACJA	Pan African Climate Justice Alliance
UNCC	United Nations Compensation Commission
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change



1. Introduction

While there have been Nationally Determined Contributions (NDCs) and Global Goals on Adaptation (GGA) in place in response to climate change and variability to safeguard the livelihoods of communities, for sustainable outcomes, climate adaptation and resilience solutions need to be “no-one-left-behind”, financially viable, and amenable to scientifically valid monitoring and evaluation schemes. “Poorly defined or unrealistic [climate adaptation and resilience plans] based on insufficient or inadequate data, with little public and private stakeholder buy-in, will arguably reduce the chances of successful implementation” (Röser et al., 2020). NDCs are country-level climate-related plans that contribute to the Paris Agreement, to keep global warming below 2 degrees Celsius. Climate Smart Agriculture built on three pillars: food security, adaptation, and mitigation (Wijk et al., 2020) remains the mainstream strategy for implementing NDCs. However, given the complexity of climate change and variability problems, it is unlikely that the current CSA approach will lead to lasting positive climate adaptation and resilience changes (Kagabo et al., 2024).

Complex problems require integrated solutions. Thus, there is a need to understand how bundling and scaling CSA, CIS, and other agricultural products and services through financially viable all-stakeholder-inclusive investment and delivery plans can be leveraged to realize NDCs and achieve the Global Goal on Adaptation. It is against this background that AGNES gathered parliamentarians and other government officials, researchers, and climate scientists across Africa for a pre-COP 29 (COP: Conference of Parties) to raise awareness about Transboundary Climate Adaptation Risks (TCRs), and reach a consensus, ensuring that the resolutions of the COP 29 cater to the climate adaptation and resilience needs and interests of Africa. Alliance Bioversity International and CIAT, under AICCRA leveraged the AGNES Pre-COP 29 opportunity to strengthen the capacity of the opinion leaders for a one-day training workshop. The workshop focused on climate adaptation knowledge tools—*climate rationale, CSA investment planning framework, national and subnational planning, bundling for scaling solutions, scaling solutions for investment and impacts, and tracking progress*. The climate adaptation tools have the potential to improve the relevance, effectiveness, and efficiency of climate adaptation and resilience interventions at the continent level. In this report, we present the workshop's proceedings and its outcomes.

2. Opening and launch of the training workshop

Several prominent individuals played a significant role in the event's introduction, including the Team Lead of AGNES, the Executive Director of pan African Climate Justice Alliance (PACJA), the Chair of the Africa Network of Parliamentarians on Climate Change, and the Director of the Regional Office for Africa at UNEP. They shared essential background information relevant to the gathering. The meeting was officially inaugurated by the Principal Secretary at the Ministry of Environment and Climate Change of Kenya. Subsequently, Alliance Bioversity International and CIAT conducted a series of comprehensive



presentations on the theme “Scaling of climate innovations that enhance community resilience to current and future climate shocks.” Each presentation was followed by a question-and-answer session aimed at promoting audience interaction.

3. Content of the workshop

3.1. Climate rationale

The training workshop commenced with a presentation on the “climate rationale,” which aims to establish and strengthen effective, comprehensive interventions while integrating diverse actions into broader frameworks. The participants learned that climate rationale is a multi-dimensional situation analysis to understand climate risks, vulnerabilities, and potential solutions. It explores scientifically a climate adaptation and resilience problem from the “What,” “Who,” “How,” and “Why” perspectives to guide the design and implementation of climate adaptation and resilience efforts. Climate rationale entails asking: “What are climate risks/ hazards and who are affected? Why is there a need for interventions in the first place?”, “Who is vulnerable to this or that climate risk or hazard?”, “Who is likely to benefit from climate adaptation and resilience interventions?”, “Who is likely to be made worse off by interventions?”, “Who will design and implement solutions?”, and “How will interventions reduce the vulnerabilities of the vulnerable?”

Additionally, the participants delved into the structure and functionalities of Climate Risk Planning & Managing Tool (CRISP) an online free tool based on a sizable body of expert knowledge and peer-reviewed publications that serve communities to screen climate risks and devise customizable climate adaptation strategies. Furthermore, the workshop walked the participants through the theory of change for sustainable water harvesting, storage, and utilization projects, highlighting that the impacts of such interventions should be reflected in terms of increased adaptive capacity, reduced greenhouse emissions, decreased disaster risk, and increased productivity.

Furthermore, the participants learned about Africa Agriculture Adaptation Atlas, a body of user-friendly-format scientific information that serves diverse climate adaptation needs and interests of policymakers and investors. The presentation highlighted the need for understanding the multi-dimensional nature of climate adaptation problems to achieve sustainable outcomes.

3.2. CSA Investment Planning Framework

The participants delved into CSA investment risk profiling. An example of the rice value chain was used to enhance the technical accessibility of the concept, revealing how climate risks and hazards can be characterized to devise effective coping strategies. Additionally, the workshop exposed some of the high-priority areas of CSA investment: abiotic-stress (drought and heat) tolerant varieties; water harvesting; climate-smart dairy livestock farming, aquaculture, and fishery; and knowledge advisory services.



A participant remarked: "We need to look closely at farmers, for example, in South Africa. Farmers are producing directly from farms to supermarkets. We have to make farmers who come from the poorest actors to be the people that lead the world. "My [view] is that we need to have a clear vision and a strategy and come up with these investment plans that contribute to the wellbeing and economic improvement in our countries." [Take a look] at East Africa. They have been talking about setting up factories for fertilizers; none of them have materialized. Why? We don't see an economy supporting agriculture. Why? Why is the factory not there? Why do we have to import fertilizer at such a high cost? Making agriculture very expensive for us. I see no clear investment plan in agriculture and other critical sectors."

Broadly speaking, the success of any investment would depend on how it outstandingly cost-effectively caters to the pain points of its beneficiaries without losing its financial viability. In low-income countries, however, the success of CSA business innovation would largely depend on its ability to circumvent the economic constraints of smallholder farmers; only CSA business innovations with smallholder-farmer-centric revenue-generation streams would thrive financially and benefit most farmers (Desire M. Kagabo et al., 2024). Therefore, apart from ensuring the technical excellence of its products and services and the effectiveness of its demand, a robust CSA investment planning framework would have to be smallholder-farmer-oriented.

The presentation underscored that the success of climate adaptation investments requires public and private collaborative efforts, spotlighting the need to ensure that such endeavors engage and benefit diverse stakeholders and are aligned with best policies and practices.

3.3. Bundling Work for Scaling Solutions

The Alliance Bioversity and CIAT walked the participants into the basics of bundling. The presentation emphasized the opportunity to combine climate-smart agricultural products and services, aiming to enhance synergistic relationships that could lead to increased customer satisfaction and higher revenue for producers. The participants learned about how complementary products and services can be bundled to improve their individual usefulness and commercial "palatability." Additionally, the attendees explored what gets bundled knowledge products, consumables, financial services, and physical products highlighting that a climate adaptation and resilience solution package capable of catering to the diverse needs of the vulnerable would have to contain most if not all of the products and services. To spotlight the potential of bundling as one of the most promising delivery models of climate adaptation and resilience solutions, the workshop presented thriving bundled business models—LERSHA (Ethiopia)—<https://www.lersha.com/> and ESOKO (Ghana)—<https://www.esoko.com/>.

The presentation highlighted that a bundle should be designed based on a multi-dimensional analysis of relationships between products and services and how a combination of such complementary products and services would cost-effectively and efficiently address the needs of customers without compromising



the financial viability of a business. Poorly designed bundles would not only lead to the failure of a CSA business but also lead to unintended environmental or social outcomes.

Bundling CSA products and services equips farmers with the knowledge to help them in climate risk management as well as making informed decisions in relation to climate variability.

The informed decisions made at various stages of the farming activities including soil fertilization, increased production contribute to food security and raise income generation which results in climate resilience. Therefore, while bundling can, for example, enhance the cost-friendliness of CSA products and services, there is a need to ensure that CSA business stakeholders understand the complexity of bundled solutions and how they interact with the vulnerabilities of farmers and other components of ecosystem.

3.4 Scaling climate solutions: Balancing Impact, Inclusivity, and Sustainability

The climate actors explored a more holistic six-element description of scaling users, use cases, times, types and versions, and geographic highlighting that scaling goes beyond the number of users a participant from Alliance Bioversity and CIAT. The presentation underscored that for sustainable scaling, there is a need to ensure that products and services are accessible and used by diverse groups and the process is co-owned by diverse stakeholders and partners. This includes governments, private sector players, farmers, and local communities. The workshop also emphasized that sustainable (responsible) scaling should have mechanisms in place to anticipate and respond to unintended social and environmental impacts.

The workshop delved into the concept of scaling by highlighting the various factors that need to be considered to ensure that scaling efforts are not just about increasing numbers but also about achieving meaningful, sustainable impacts. From the climate adaptation and resilience perspectives, the presentation emphasized that the scaling process requires a more holistic understanding of how the levels of vulnerabilities of the vulnerable evolve across spacetime, socio-economic, and cultural spectra, and what investor-and-customer-centric business innovation models would result in better climate adaptation and resilience outcomes.

By leveraging adaptive strategies, government and private sectors can respond to unforeseen challenges such as climate related disruptions, without compromising their long-term objectives. Additionally, scaling efforts must prioritize inclusivity and equity, ensuring that innovations benefit diverse groups, particularly those in underserved or vulnerable communities. This adaptive approach not only enhances resilience but also positions businesses to drive transformative change, creating systems that are both scalable and sustainable in the face of complexity.



3.5 Tracking Adaptation Progress

The workshop presented an 8-element (best actions, best metric, finance, capacity, partnership, adaptation rationale, adaptation pathway, and data system) tracking system, highlighting that there is more to tracking adaptation endeavors than finding the best indicators and metrics. The participants explored the “What,” “Who,” “How,” and “Why” facets of the system, an integral part of understanding the neighborhoods of cause-and-effect surrounding a climate adaptation problem to devise evidence-backed solutions and, as a result, attain sustainable better outcomes.

The presentation highlighted that an ideal indicator should be specific and amenable to quantitative and objective analysis. Using maize as a model, the workshop presented the structure of an adaptation pathway, linking climate risks, activities, pain points, outcomes, and impacts.

4. Drivers of Relevance and Capacity Needs of Climate Adaptation Tools: Insights from African Front-Line Actors at AGNES Pre-CoP 29 Workshop

4.1 Methodology

In the arena of climate change and variability, it is increasingly becoming essential to ensure that Capacity building interventions are demand driven not supply driven (UNCC, n.d). To better understand the factors influencing climate adaptation and resilience including tools such as climate rationale, climate-smart agriculture investment planning frameworks, national and subnational action planning, bundling for scaling, scaling for impact and investment, and tracking progress a survey was conducted among male and female participants at the AGNES Pre-CoP 29. Their responses were analyzed both descriptively and quantitatively. Nineteen participants, including six females and 13 males holding climate-related professional positions such as climate specialists, researchers, government administrative officers, and others, from nine African countries (Figure 1), were asked the following questions:

- To indicate whether they have experience with the tools/approaches that were presented during the training workshop
- To indicate which tools/approaches they find most relevant for their countries' contexts
- To indicate if they are planning to implement any of the tools/approaches in their respective countries
- To indicate what additional capacity needs they require to successfully implement climate action for agriculture and food security in their countries

The participants were also asked to rate the relevance of the knowledge tools to their contexts and their capacity-building needs for the tools on a 1- 5 scale. Two-factor linear regression models were used to quantitatively explore the statistical significance of the relationship between the dependent (relevance and capacity-building needs) and explanatory (gender and position) variables. We assumed that the models pass through the origin and, thus, excluded the intercept terms. The models were built as follows:



relevance = gender + position and capacity-building needs = gender + position. The levels of the explanatory variables were the following: position; climate specialist, researcher, government administrative officer, and other; gender. Using the Matlab function, fitlm, we produced results on the strength of the relationship.

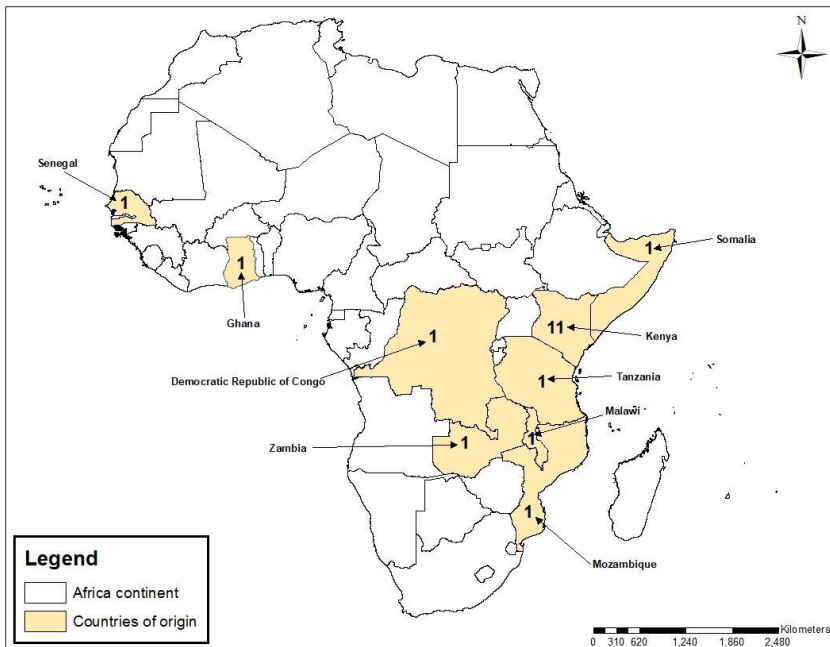


Figure 1. The countries where survey respondents are from. The numbers inside each country represent the number of participants from that country who took part in the survey during the AGNES Pre-CoP 29 workshop in Nairobi, Kenya, in September 2024.

4.2 Results presentation

The results are graphically depicted, offering a fair body of insights into the participants' perceptions about the relevance of the six scaling innovation tools to their contexts (Figure 3a), their experience with the tools (Figure 3b), their willingness to implement the knowledge tools (Figure 3c), and the tools on which they need more capacity building (Figure 3d).

Figure 3a reveals that while notable fractions of the participants reported having experience with climate rationale (23%) and subnational and national planning (30%), only a few participants were familiar with the other tools, for example, bundling for scaling (6%), scaling for impact and investment (6%), and tracking progress (15%). Figure 3b shows that all the tools are almost equally relevant to the participants' contexts (14% - 18%). Figure 3c reveals that significant portions of the participants would like to implement, for example, climate rationale and national and subnational action planning tools (21%). Based on Figure 3d, for all the tools, almost equal fractions of the participants (15% - 17%) responded that they needed more capacity building.

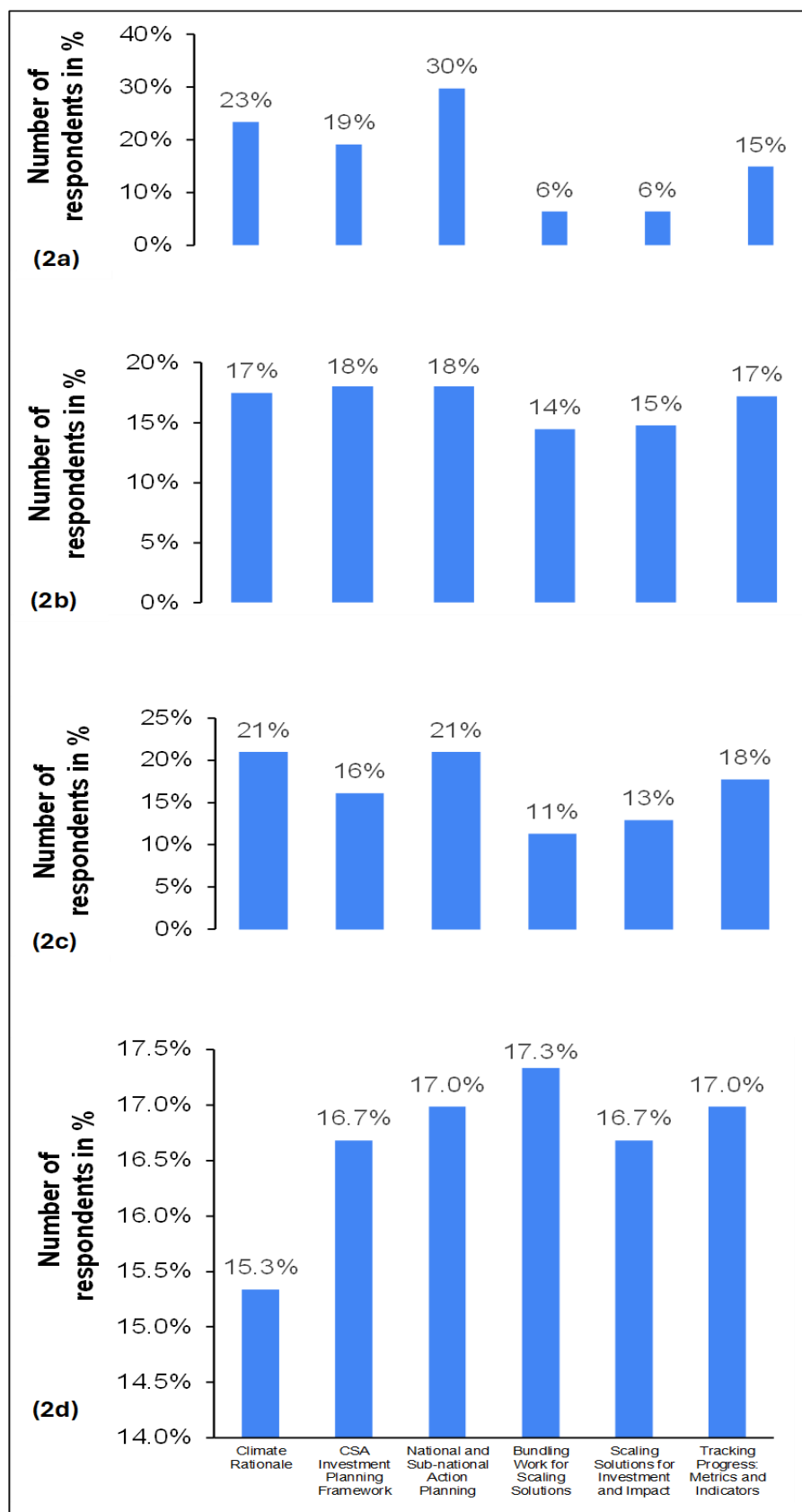


Figure 2. Participants' Responses on Scaling Innovative Tools for Climate Change Adaptation: (2a) Experience with the Tools, (2b) Relevance of the Tools, (2c) Willingness to Implement the Tools, and (2d) Capacity Building Needs.



The strength of the statistical relationships between the participants' ratings on the relevance of the scaling innovation tools to their contexts and their capacity-building needs (dependent variables) and explanatory factors (gender identity and professional position) are presented in Tables 1 and 2. The *RC* column is for regression coefficients (the larger the value, the more positively or negatively determining the factor is). The P-value column shows the probability that the observed relationships could have been due to random effects (the smaller the probability, the "better").

Tables 1 and 2 reveal that the relevance and capacity-building needs of the scaling innovation tools depend on the gender and professional position of the participants. Government officials ($RC > 3$, $p\text{-Value} < 0.05$) and women ($RC > 2$, $p\text{-Value} \sim 0.05$) find all the tools relevant to their contexts. Based on Table 1, *government administrative officers*, both female and male participants, rated the relevance of the scaling innovation tools at least three points higher than the other categories of the participants. Similarly, the relevance of the tools to their countries' contexts are at least three points higher than others'. The results also show that government administrative officers, regardless of their gender, and women (holding any of the professional leadership positions) need more capacity-building on all the scaling innovation tools ($RC > 2.3$, $p\text{-Value} \sim 0.05$); compared to the other categories, the ratings of government administrative officers and women are at least two points higher.



Table 1. Relevance of the climate adaptation and resilience knowledge tools to the participants' contexts

Scaling innovation tools for climate change adaptation and resilience	Regression Model	Participants who are researchers	Participants who are government administrative officers (policy/planning)	Other participants	Female participants
Climate Rationale	Regression Coefficient	-2.250	4.333	4.125	3.750
	Standard Error	2.257	1.548	1.223	1.223
	t-static	-0.997	2.799	1.021	3.063
	p-Value	0.336	0.014	0.324	0.008
CSAIP	Regression Coefficient	-2.125	4.333	0.875	3.625
	Standard Error	2.126	1.458	1.152	1.153
	t-static	-1.000	2.972	0.759	3.144
	p-Value	0.334	0.010	0.460	0.007
National and Sub national action planning	Regression Coefficient	-1.417	4.333	0.917	3.416
	Standard Error	2.325	1.595	1.260	1.260
	t-static	-0.609	2.717	0.727	2.710
	p-Value	0.552	0.017	0.479	0.017
Bundling for scaling	Regression Coefficient	-0.958	3.667	0.708	2.458
	Standard Error	2.122	1.455	1.150	1.150
	t-static	-0.452	2.519	0.615	2.136
	p-Value	0.658	0.025	0.548	0.050
Scaling for impact and investment	Regression Coefficient	-1.125	3.333	0.875	2.625
	Standard Error	2.308	1.583	1.251	1.251
	t-static	-0.487	2.105	0.699	2.097
	p-Value	0.634	0.054	0.495	0.054
Tracking progress	Regression Coefficient	-1.125	4.000	1.375	3.125
	Standard Error	2.371	1.627	1.285	1.285
	t-static	-0.474	2.459	1.069	2.430
	p-Value	0.642	0.028	0.303	0.029



Table 2. Capacity building needs of the participants for the climate adaptation and resilience knowledge tools

Scaling innovation tools for climate change adaptation and resilience	Regression Model	Participants who are researchers	Participants who government administrative officers (policy/planning)	Other participants	Female participants
Climate Rationale	Regression Coefficient	-2.083	4.333	1.083	2.583
	Standard Error	1.965	1.348	1.066	1.066
	t-static	-1.060	3.214	1.017	2.424
	p-Value	0.307	0.006	0.327	0.029
CSAIP	Regression Coefficient	-2.083	4.667	1.083	2.583
	Standard Error	2.102	1.442	1.140	1.140
	t-static	-0.991	3.236	0.950	2.266
	p-Value	0.338	0.006	0.358	0.040
National and Sub national action planning	Regression Coefficient	-3.250	4.000	1.250	3.750
	Standard Error	1.827	1.254	0.991	0.991
	t-static	-1.779	3.191	1.261	3.784
	p-Value	0.097	0.007	0.228	0.002
Bundling for scaling	Regression Coefficient	-0.583	4.000	1.083	2.583
	Standard Error	2.285	1.567	1.239	1.239
	t-static	-0.255	2.552	0.874	2.085
	p-Value	0.802	0.023	0.397	0.056
Scaling for impact and investment	Regression Coefficient	-0.875	3.667	1.125	2.375
	Standard Error	2.207	1.514	1.197	1.197
	t-static	-0.396	2.422	0.940	1.984
	pValue	0.698	0.030	0.363	0.067
Tracking Progress	Regression Coefficient	-0.375	4.000	1.125	2.375
	Standard Error	2.284	1.567	1.239	1.239
	t-static	-0.164	2.553	0.908	1.917
	p-Value	0.872	0.023	0.379	0.076

4.3 Results discussion

For climate adaptation and resilience interventions to be relevant, efficient, and effective, they must be approached with a holistic understanding of the vulnerabilities faced by both humans and ecosystems. This approach should emphasize the importance of empowering climate actors with the necessary knowledge tools to drive positive, equitable, and inclusive impacts. The discussion section examines the climate adaptation implications of the AGNES pre-Cop 29 survey results. It focuses on the relevance of



various climate adaptation knowledge tools, such as the climate rationale, climate-smart agriculture investment planning framework, and action planning at national and subnational levels.

The section also addresses the capacity building needs of participants for these tools, considering their specific African contexts. The survey showed that participants understand the relevance of climate adaptation tools. Not surprisingly, they are willing to implement these tools to drive climate adaptation in their countries, highlighting their potential to address diverse climate needs. However, the survey also revealed that most “front-line” climate actors lack confidence in their knowledge of the tools. This limits their ability to design science-backed, inclusive adaptation interventions based on transparent indicators and metrics. These tools are needed to overcome environmental constraints and address the diverse needs of beneficiaries, investors, and partners in a cost-effective and efficient manner. The finding may imply that climate adaptation capacity-building systems are neither effective nor efficient, resulting in poor adaptation outcomes (UNFCCC, n.d.). According to Eriksen et al. (2021), “[poorly designed] adaptation interventions may reinforce, redistribute or create new vulnerability.” Equipping climate actors with climate adaptation knowledge tools can empower developing countries to contribute to global climate adaptation goals (Stender et al., 2020).

While women have the potential to substantially contribute to achieving a more climate resilient Africa (Huyer et al., 2021; Prakash et al., 2024), the survey found that women occupying various climate-related professional positions compared to men may lack adequate knowledge of the climate adaptation knowledge tools, spotlighting the need for woman-tailored climate adaptation capacity-building programs. Rao & Moharaj, (2023) maintain that empowering women with knowledge of climate-smart innovative technologies and practices is one of the most promising courses of action for developing an inclusive climate adaptation system.

5. Conclusions

To achieve Nationally Determined Contributions (NDCs) and the Global Goal of Adaptation, strategic capacity building programs are essential. These programs should empower climate actors, particularly women in leadership positions, with the necessary climate adaptation knowledge tools. These tools would enable climate actors to design and implement inclusively positively impactful climate adaptation interventions. The workshop provided a platform to foster collaboration and capacity-building among various stakeholders. The session created an inclusive environment for knowledge exchange and collaboration to solve pressing issues by bringing together individuals from various professional backgrounds, areas of expertise, and institutions, ranging from government bodies and NGOs (Non-Governmental Organizations) to private sector representatives and academic organizations. This collaboration was critical in solving the complex issues ensuring that the voices from various stakeholders are heard.



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APPENDICES: The program of the workshop

Monday 23 September 2024

TIME	SESSION	RESPONSIBILITY
The whole day	Arrival and check-in at Eka Hotel	AGNES

Tuesday 24 September 2024

TIME	SESSION	RESPONSIBILITY
08:30 – 09:00	Registration	AGNES
09:00 – 10:00	Introductions, Welcome Remarks, and Official Opening	▪ Dr George Wamukoya, OGW, Team Lead, AGNES ▪ Dr. Mithika Mwenda, Executive Director, PACJA ▪ Hon. GUIRIOULOU Emile, Chair, Africa Network of Parliamentarians on Climate Change ▪ Dr. Rose Mwebaza, Director, Regional Office for Africa, UNEP ▪ Official Opening by Dr. Festus Ng'eno, Principal Secretary, Ministry of Environment and Climate Change
10:00 – 10:30	GROUP PHOTO AND TEA/COFFEE BREAK	
10:30 – 10:45	Organization of work	AGNES
10:30 – 13:00	Scaling of climate innovations that drive resilience of communities against current and future climate shocks	Alliance of Biodiversity and CIAT
13:00 – 14:00	LUNCH BREAK	
14:00 – 16:00	Scaling of climate innovations that drive resilience of communities against current and future climate shocks	Alliance of Biodiversity and CIAT
16:00 – 16:30	TEA/COFFEE BREAK	
16:30 – 17:30	Scaling of climate innovations that drive resilience of communities against current and future climate shocks	Alliance of Biodiversity and CIAT
17:30	CLOSE OF DAY	