



STEP CHANGE: ACCELERATING ADAPTATION TO CLIMATE CHANGE

Strengthening the CAPacity of the extension system to use proven knowledge and technologies to sustain equitable Locally IEd adaptation among smallholder farmers (SCALE)

Fourth Technical Progress Report

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Executive Summary

The SCALE project achieved substantial milestones during this period, primarily executing Work Package 2 (WP2): Targeted Technical Support and Capacity Strengthening. The core achievement was the successful delivery of the Phase 1 Capacity-Strengthening Training in Nigeria (Abakaliki, Ebonyi State, and Nsukka, Enugu State) on August 12–13 and August 18–19, 2025. The training empowered 307 key actors (156 smallholder farmers, 91 extension agents, and 60 researchers) with proven LLA technologies and knowledge. A key result was the measurable increase in knowledge: average pre-assessment scores of 45% rose noticeably to 78% after training. The training directly addressed identified needs through modules on Digital Platforms & ICT, Smart Agriculture Practices, Climate Financing, and Gender Equity, Social Inclusion (GESI) in Adaptation. The outcome was a strengthened "Research-Extension-Farmer" triad with a commitment to adopt new practices and use the WhatsApp platform for continuous knowledge sharing. In Customised Technical Support (WP2), the project leveraged a critical policy window in Senegal by developing a concept note for On-Demand Support to integrate equitable LLA and GESI principles into the Government's new National Agricultural Extension Policy (NAEP). IDRC approved this additional support to Senegal within the reporting period. This activity strategically positions SCALE to drive systemic change by enabling inclusive policies and practices as found in objective 5. Challenges included minor delays in implementing the 1st phase of the capacity-building workshop in Senegal, which is ongoing as of the time of writing this report. Key priorities for the next period are implementing the Senegal NAEP support, continuing customised technical support, co-populating knowledge products on the Interactive Collaborative Environment (ICE) platform (WP3) for sustainable knowledge exchange, and planning and implementing the second phase of the capacity strengthening exercise in Nigeria and Senegal.

Project Management

Project coordination and governance, led by ATPS, IPAR, and WAGEDI, have maintained stability, with no reported changes in team composition or partnership structure since the last report. The core project activities progressed as planned, with a focus on the timely delivery of Work Package 2 interventions. A persistent management challenge in Senegal is the rising cost of living and inflation, which necessitated internal budget adjustments during this period to ensure activities are fully implemented. One key issue was the cost of travel from Dakar to Podor for the first-phase capacity-strengthening workshop. The project employed a collaborative management framework with monthly meetings to align efforts and refine strategies in real-time. The engagement with Senegal's NAEP development is a strategic management decision under the Customised Technical Support window (Activity 2.3), emphasising the demand-driven approach to policy support. The customized technical support ensures SCALE's influence is embedded into the official national process, aligning technical inputs with political will.

The successful completion of the Phase 1 training (Activity 2.2) in Nigeria demonstrated the project's ability to organise large-scale events at two sites with diverse stakeholders while handling minor logistical issues, such as power outages. Relying on WhatsApp for communication among the core team across countries has effectively reduced the risk of communication delays caused by language differences (English and French), an important aspect of the implementation plan.

Progress against Objectives and Next Steps

3.1 Progress towards objectives and/or work packages

For the period covered by the report, SCALE focused on *objectives 4 and 5*.

Objective 4 entails that *SCALE contributes to sustainable, equitable, and inclusive LLA among smallholder farming communities in the focus countries by strengthening the capacity of extension system actors to co-generate, co-transfer, and effectively utilise (research, extension, farmers) proven knowledge and technology*. This objective is addressed in Work Package 2: Co-designing and implementation of targeted technical support and capacity-strengthening interventions in the areas of need (WP2). The SCALE project ensures the co-development of the training modules that address the specific needs of the extension system.

The following are the key activities accomplished during the reporting period;

Activity 2.2: Co-development, co-design, and co-delivery of training programmes

Key Achievements: Completion of the seven training modules by experts who were trained as subject matter specialists. The Phase 1 Capacity-Strengthening Training was conducted in Nigeria, reaching 307 participants. Training modules covered Digital Platforms & ICT, Smart Agriculture Practices (Module 2), Climate Financing (Module 3), and GESI in Adaptation. A core component was the practical demonstration of an innovative, SMS-based irrigation system.

Key Progress towards Outcomes: The average score on knowledge assessments increased from 45% (pre-training) to 78% (post-training), with the highest improvement (+40%) observed in smart practices. The observed improvement in the knowledge of the actors directly addresses Immediate/Short-term Outcome 4.2 (*Extension system actors and smallholder farming communities demonstrate effective ownership and implementation of GESI-LLA-proven knowledge and technologies*), with results indicating 85% of participants could apply learned skills immediately. Lessons Learned: Participant feedback found in section 9.0 of the training report showed a strong demand to "Increase Practical, Hands-On Learning" and "Extend Duration and Follow-Up" to enhance skill application. This insight will be critical for co-designing the upcoming Senegal training (Activity 2.2).

Activity 2.3: Customised Technical Support

Key Achievement (Emerging Outcome): Policy Support in Senegal. The project formally engaged with the Senegalese government by submitting a concept note for On-Demand Support to develop the National Agricultural Extension Policy (NAEP). The proposed intervention directly addresses the documented policy gap in Senegal, where a comprehensive national extension policy is absent.

Progress towards Outcomes (Intermediate): This activity aligns with Intermediate Outcome 5.1.2 (*Number of cases where key actors demonstrate leadership to improve policy and practice for GESI-LLA*). By aiming to integrate GESI, climate resilience, and digital dimensions into the NAEP, IPAR is demonstrating leadership in improving national-level policy. The support focuses on institutionalising Locally Led Adaptation (LLA).

Objective 5 entails that SCALE project contributes to increased agricultural productivity and climate-resilient development by enabling inclusive policies and practices, knowledge sharing, exchange, and collaborations on equitable LLA through a digital platform. Work package 3, which is Knowledge exchange, networking, and collaboration (WP3) addresses this specific objective. The activities carried out were:

Activity 3.1: Development and management of an Interactive Collaborative Environment (ICE)

Key Achievement (Bridging Activity): Following the Nigeria training, the team committed to using the WhatsApp platform for ongoing knowledge sharing among the Research-Extension-Farmer triad. This action immediately initiates the Knowledge Exchange function envisioned by the ICE platform by creating a Community of Practice, serving as an early success indicator for Immediate/Short-term Outcome 4.3 (*Strengthened relationships, collaborations and networks among actors...*). In addition, the ICE platform was developed to support knowledge exchange among stakeholders. The platform is constantly being populated with outputs from the scale project.

3.2 Next Steps / Priorities going forward

The next reporting period will focus on the following core activities:

1. NAEP On-Demand Support in Senegal (WP2.3): Execute the policy support, including technical backstopping, stakeholder consultations, and contributing to the NAEP draft, ensuring the integration of GESI and climate resilience.
2. Phase 2 Training in Nigeria and Senegal (WP2.2): Co-deliver the capacity-strengthening training in Nigeria and Senegal, utilizing the finalized modules and incorporating lessons learned from Nigeria (e.g., maximizing hands-on, practical training).
3. ICE Platform Co-Development (WP3.1): continue the co-development of the full Interactive Collaborative Environment (ICE) platform to establish a sustainable, non-discriminatory knowledge exchange hub for GESI-LLA.
4. Field-Based Follow-Ups (WP2.3/Sustainability): Integrate more field-based follow-ups and monitor adoption rates of resilient practices by farmers in Nigeria and Senegal (within 3-6 months) to sustain outcomes.
5. Disseminate project findings in journal publication, webinars, and newsletters

Gender Equality and Social Inclusion (GESI)

GESI integration was successfully achieved as planned, with a gender-responsive approach yielding measurable results.

What Worked: The Nigeria training achieved inclusive representation, with 184 female participants (60% of the total). Crucially, the approach led to an enhanced understanding, with 90% of participants reporting a better grasp of gender-inclusive adaptation. The training builds on earlier successful validation workshops, where separating men and women ensured distinct needs were captured, with women prioritising training in financial literacy and organic pest/disease management. Capacity Enhancement (GESI): The inclusion of sessions on Capacity building in GESI-responsive research designs and the emphasis on the concept of intersectionality as a valuable strength strengthen the capacity of researchers and extension agents to conduct ethical, inclusive research and outreach. Changes to Approach (Policy): The project is shifting its GESI efforts toward systemic change by positioning for the NAEP support in Senegal. The policy explicitly aims to ensure that gender equality and social inclusion are integrated into its content and structure, seeking to address the structural exclusion of women in extension roles (only 12% of agents are women in Senegal).

Capacity Strengthening

The SCALE Project team members, including partners, participated in the Step Change outcome harvesting workshop held on 8th October 2025. The Outcomes Harvesting Workshop was designed to build teams' capacity to identify and document project progress, leading to more informed decision-making. It was an interactive engagement, with active participation from all project partners. The SCALE project team was strengthening its ability to identify and report outcome cases with clear, verifiable evidence.

Ethics, Security, and Safeguarding.

The project continues to uphold its commitment to research ethics and safeguarding protocols. Informed consent was a mandatory process for all validation workshops and technical support activities, ensuring participants were fully aware of the objectives and their rights. In terms of security, the project has faced no major risks, enabling all events in both countries to proceed successfully. The mitigation strategy of leveraging local partners (WAGEDI and IPAR) and ATPS National Chapter Coordinators remains effective in monitoring the security environment. Minor, localised logistical challenges, such as power outages, were recorded during the Nigeria training but were managed without major disruptions. The team's use of ethical transdisciplinary practices focuses on building strong ethical relationships among researchers, community partners, and members of the institutional ethics board.

Monitoring, Evaluation, and Learning (MEL).

MEL activities focused on quantifying the success of the Phase 1 training through the mandatory pre- and post-training assessments, successfully measuring a significant knowledge gain. Learning derived from the Training Feedback Surveys is being immediately applied to the co-design of future activities, specifically to increase practical, hands-on learning. This adaptive management approach is central to the project's Theory of Change. The MEL Consultant continues to be supported by the dedicated Step Change fund. Work is ongoing to populate the MEL dashboard, and the framework is being refined to better capture the number and stories of innovations adopted by food systems actors (KPI 2.1.2) to reflect the project's outcome-based nature.

Collaboration within and beyond Step Change

External collaborations initiated and deepened during this period were highly strategic. Some of these were:

1. NAEP Support (Senegal): The new, critical partnership with the Senegalese Government's national technical committee for NAEP development provides a direct, impactful link to national policy change.
- Nigeria Linkages: Extensive collaboration continued with the University of Nigeria, Nsukka's Department of Agricultural and Bioresources Engineering, Enugu State Ministry of Agriculture and the Enugu State Government. This engagement was vital for co-designing the training, adapting knowledge systems, and ensuring buy-in from the research component.
- Cross-Sectoral Engagement: Preliminary discussions with FARM Radio are ongoing, aiming to leverage their extensive reach to scale the dissemination of project findings, especially in Senegal. These collaborations are essential to ensuring that the project's knowledge brokering mandate reaches the last mile, addressing the low extension agent-to-farmer ratio.

Reflections on the Budget

The project's overall financial health is sound, and implementation remains on course. However, financial adaptive management was necessary during this period. The project utilised flexibility within the budget lines to mitigate the financial risk associated with the rising cost of living in Senegal and to address under-allocated budgets for the capacity-strengthening workshop. The most significant budget impact is the current request for supplemental funding to implement the NAEP On-Demand Support in Senegal, which has been approved. This investment is justified as it moves the project beyond training outputs to a systemic policy outcome. It leverages a narrow political window to embed GESI-LLA principles into a national policy framework, representing a high-value opportunity not foreseen in the original work plan for that period.

Risk Management

Project risks have remained generally low or have been effectively managed, as outlined in the risk register.

Mitigation Successes: The risk of communication gaps is consistently managed through the effective use of the WhatsApp translation tool. The technical support provided is continually being co-developed with the extension system actors, mitigating the risk of non-cooperation.

Materialised Risks: The risk of financial constraints due to inflation in Senegal has materialised, requiring reallocation of budget lines to maintain activity integrity.

- **New Strategic Risk:** The engagement with the NAEP in Senegal introduces a performance risk linked to the external political/policy process, specifically the risk that the policy may not ultimately reflect the project's intended GESI-LLA principles. This is being managed by adopting an embedded approach and positioning IPAR, a trusted national policy expert, at the center of the advisory process.

IATI Reporting Update

The project has not yet completed its reporting on the IATI reporting platform. There is an ongoing arrangement to post the financial status on the platform. The project team will ensure that both the MEL platform is populated and the financial data necessary for IATI reporting are compiled for the scheduled sense-making meeting, in line with the lead organization's commitment to transparency.

Annexes

Annex 1: List of Outputs Developed during the Reporting Period

Output	Level of Achievement	Openness and Accessibility	Variance Explanation	Evidence
Nigeria Training Modules	Completed	Available for internal use/future open access after review	Developed based on validated needs for Phase 1 & 2 training	https://drive.google.com/drive/folders/1HWT8nSKr3w9XUeudbWyyIbN0_KxTOoow?usp=sharing
Phase 1 Capacity-Strengthening Training Report (Nigeria)	Fully Completed	Available internally	Documented training Report, attendance list, and feedback	https://drive.google.com/drive/folders/18MvhY19huPZQdVlBk98cHRWFgrHWqV6W?usp=sharing
Pre- & Post-Training Assessment Reports (Nigeria)	Fully Completed	Available internally	Showcased knowledge gain (45% to 78%)	
Concept Note for On-Demand Support for NAEP (Senegal)	Fully Completed	Available internally	New policy-focused technical support output	Concept note approved by IDRC
Co-developed training programme content	Fully Completed	Available internally	Tailored content for Phase 1 training	
Technical reports and knowledge products (Policy briefs, Journal articles, extension materials)	Planned	N/A	Timeline for this output has not yet reached/will be developed in WP3	
Interactive Collaborative Environment (ICE) Platform and database	Planned	N/A	Full development and management is an ongoing activity in WP3	
Policy dialogue workshop proceedings and policy briefs	Planned/Modified	N/A	Original plan modified to On-Demand NAEP support	

Annex 2: List of Outcome Cases

Outcome case title: Farmers Initiate Formal Platform for Co-Design and Collaboration with Researchers (Nigeria)

Description of change: During the "Building Indigenous Leadership in Co-Developing Climate Resilient Technologies for Sustainable Agri-Food System" workshop (July 23-24, 2025, UNN), the farmer participants, a primary stakeholder group, actively demonstrated an enhanced capacity to drive the research agenda by proposing the creation of a regular, biannual meeting platform with researchers and extension agents. This commitment to institutionalizing ongoing dialogue moves the relationship from episodic training to sustained, farmer-led co-design and knowledge brokering.

Relevant indicator: 2.1.2 Key actors demonstrate enhanced capacity to implement locally-led adaptation

Significance of change: The proposal by the farmers to institutionalize biannual meetings signifies a pivotal change in behavior from passive recipients of knowledge to active, empowered leaders in the Research-Extension-Farmer (REF) triad. The low extension agent-to-farmer ratio in Nigeria necessitates a sustained, collaborative model for Locally Led Adaptation (LLA). By creating this demand for a formal, frequent collaboration channel, the farmers are directly strengthening the extension system's capacity for dialogue and co-design. This ensures that future technological interventions (such as the Smart Irrigation System or the digital tools demonstrated at the workshop) are demand-driven, context-specific, and more likely to be adopted equitably, which is vital to the SCALE project's systemic impact on climate resilience.

Significance rating: Highly significant

Contribution of Step Change-funded project: The SCALE project contributed to this change through the strategic design and facilitation of a two-day workshop, funded by dedicated funds. The methodology explicitly employed a participatory, co-design approach, including a dedicated Panel Discussion on Inclusivity and practical sessions on Collaborative Problem Prioritization. The project's intentional focus on empowering the voices of farmers and indigenous leaders created the safe, structured environment needed for farmers to assert their leadership and propose this sustained collaborative mechanism. Furthermore, the workshop's climax—the Presentation of the Draft Nigeria Co-Development Charter—provided the tangible institutional and policy framework that encouraged participants to formalize their partnership commitment.

Contribution rating: Medium

Sources: Field observations and direct notes from the Panel Discussion and Q&A sessions at the "Building Indigenous Leadership in Co-Developing Climate Resilient Technologies for Sustainable Agri-Food System" Workshop (July 23-24, 2025). Workshop Communiqué report.

Action areas: Gender equality and social inclusion

Describe action area focus: The change focuses on **Gender Equality and Social Inclusion** by establishing a more equitable power dynamic in the knowledge system. When farmers (who include marginalized women and youth) are elevated to co-creators of knowledge through a formal meeting platform, it addresses the systemic exclusion of their perspectives. The workshop's commitment to using a "gender equality and inclusion lens" ensured the voices of these groups were heard and formalized into a sustained partnership model.

Outcome case title: Farmers and Extension Agents Adopt Digital and Smart Systems for Real-Time Climate and Disease Management

Description of change: At the July 23–24, 2025 workshop in Nsukka, Nigeria, 207 participants (farmers, extension agents, and students) received hands-on training in using new digital tools for climate-smart farming. They learned to operate AI-based crop disease diagnostic apps (such as an on-farm disease detection app, APWEN Farm, and the mobile app Plantix). They observed demonstrations of low-cost smart farming technologies (SMS-based smart irrigation systems and advanced NPK soil sensors). By the end of the workshop, participants committed to immediately start using these digital and smart systems to manage crop diseases and climate risks.

Relevant indicator: 2.1.2 Key actors demonstrate enhanced capacity to implement locally-led adaptation

Significance of change: This change is Highly Significant because it directly addresses the critical climate challenge of crop loss from disease, pests, and poor water management—issues expected to reduce yields in the region severely. By enabling smallholder farmers and extension agents to use free AI diagnostic apps and low-cost SMS-based smart irrigation, the project provides scalable tools that mitigate risks and safeguard livelihoods. This technological empowerment is vital for improving agricultural productivity and strengthening the region's climate resilience, transforming key actors from reactive to proactive decision-makers. The success demonstrated affirms the project's strategy of integrating research outputs with the extension system's capacity.

Significance rating: Highly significant

Contribution of Step Change-funded project: The SCALE project's contribution is rated as Medium. The project coordinated the workshop's content (WP2: Activity 2.2) and drew on the expertise of its partners (ABE Department/AI4AFS PI) to provide practical demonstrations of these advanced, climate-smart systems, including the Smart Irrigation prototype. The project deliberately facilitated knowledge transfer by translating complex AI technology into immediate, actionable training for farmers and extension agents, directly addressing a documented capacity need. This activity ensures that the technology, which had already been developed, is now effectively transferred and incorporated into the LLA strategies of the key actors.

Contribution rating: Medium

Sources: Field observations and direct notes from Training Session: Inclusive Design Pathways (Module 1, Day 1) and Training Session: Smart Agriculture Practices (Module 4, Day 2) at the workshop (July 23–24, 2025). Workshop Communiqué (Day 1, Sections 4 & 5).

Action areas: None of the above (Digital Technology for Climate-Smart Agriculture)

Describe action area focus: This outcome centres on Digital Technology for Climate-Smart Agriculture. It highlights how the project enhances technical capacity by integrating information and communication technology (ICT) and Internet of Things (IoT) applications—such as AI-powered mobile apps and smart sensors—into the extension system's toolkit to boost climate resilience and improve local-level agricultural decision-making. Farmers and Extension Agents Adopt Digital and Smart Systems for Real-Time Climate and Disease Management

Description of change: Farmers, extension agents, and students (207 participants) at the July 2025 workshop in Nsukka, Nigeria, demonstrated an enhanced capacity for technology adoption by receiving hands-on training and committing to the immediate use of new digital and smart systems. Specifically, participants learned to use AI applications (e.g., on-farm 2-class AI disease detection system, APWEN

Farm, and PLANTIX) for instant crop disease detection. They witnessed the operation of SMS-based Smart Irrigation Systems and Advanced NPK Sensors, fundamentally shifting their capacity toward real-time, data-driven management of climate risks.

Relevant indicator: 2.1.2 Key actors demonstrate enhanced capacity to implement locally-led adaptation

Significance of change: This change is Highly Significant because it directly addresses the critical climate challenge of crop loss due to disease, pests, and poor water management—issues projected to reduce yields in the region severely. By enabling smallholder farmers and extension agents to use free AI diagnostic apps and low-cost SMS-based smart irrigation, the project provides scalable tools that mitigate risks and secure livelihoods. This technological empowerment is essential for improving agricultural productivity and enhancing the region's climate resilience, transforming key actors from reactive to proactive decision-makers. The demonstrated success validates the project's strategy of integrating research outputs with the extension system's capacity.

Significance rating: Highly significant

Contribution of Step Change funded project: The SCALE project's contribution is rated as Medium. The project orchestrated the workshop's content (WP2: Activity 2.2) and leveraged the expertise of its partners (ABE Department/AI4AFS PI) to provide practical demonstrations of these cutting-edge, climate-smart systems, including the Smart Irrigation prototype. The project intentionally brokered knowledge by translating complex AI technology into immediate, actionable training for farmers and extension agents, directly addressing a documented capacity need. This activity ensures that the technology, which has already been developed, is effectively transferred and integrated into the LLA strategies of the key actors.

Contribution rating: Medium

Sources: Field observations and direct notes from Training Session: Inclusive Design Pathways (Module 1, Day 1) and Training Session: Smart Agriculture Practices (Module 4, Day 2) at the workshop (July 23-24, 2025). Workshop Communiqué (Day 1, Sections 4 & 5).

Action areas: None of the above (**Digital Technology for Climate-Smart Agriculture**)

Describe action area focus: This outcome focuses on Digital Technology for Climate-Smart Agriculture. It emphasizes how the project strengthens technical capacity by integrating information and communication technology (ICT) and Internet of Things (IoT) applications—such as AI-powered mobile apps and smart sensors—into the extension system's toolkit for accelerating climate resilience and improving agricultural decision-making at the local level.

Outcome case title: 307 Key Actors Achieve 33% Capacity Uplift and Commit to Adopting Climate-Resilient Practices

Description of change: The 307 participants (farmers, extension agents, and researchers) in the Phase 1 Capacity-Strengthening Training in Nigeria (August 2025) demonstrated a significant, measurable change in knowledge, with average pre-assessment scores of 45% rising to 78% post-training. This 33-point increase confirms an enhanced technical capacity in LLA. Furthermore, 90% of participants reported a better understanding of gender-inclusive adaptation, and farmers committed to immediately adopting resilient practices (e.g., smart irrigation, agroforestry).

Relevant indicator: 2.1.2 Key actors demonstrate enhanced capacity to implement locally-led adaptation

Significance of change: This change is Highly Significant because it quantifies the project's success in bridging the knowledge gap in a system where extension agent-to-farmer ratios are critically low (1:5,000). The commitment by farmers to adopt at least three new resilient practices demonstrates a direct and scalable behavioral change that will increase their adaptive capacity against threats like drought and soil degradation. The improved GESI understanding ensures that this knowledge transfer is equitable, reaching and empowering vulnerable groups, such as the 95 female farmers who attended, making the capacity uplift sustainable and inclusive —a core mandate of Step Change.

Significance rating: Highly significant

Contribution of Step Change funded project: The project's contribution is rated as High. The significant knowledge gain was a direct result of the SCALE project's co-designed, context-specific curriculum (WP2.2) that addressed validated needs (Digital Tools, Smart Agriculture, Climate Financing, and GESI). The use of participatory methodology, digital labs, and a field demonstration of smart irrigation technology were critical project inputs. These interventions provided the proven knowledge and practical skills that enabled participants to achieve a 78% post-training average and to make concrete commitments for on-farm adoption.

Contribution rating: High

Sources: Technical Training Report for Phase 1 Capacity-Strengthening Training (August 12-19, 2025), Nigeria: Executive Summary (Section 1), Pre- and Post-Training Assessments (Section 7), and Key Outcomes and Achievements (Section 8).

Action areas: Gender equality and social inclusion

Describe action area focus: This outcome focuses on Gender Equality and Social Inclusion by demonstrating that the capacity-building intervention was not only effective (measurable knowledge gain) but also equitable (90% GESI understanding). By designing the training with a GESI focus, the project directly addressed the disproportionate impact of climate change on marginalized groups, ensuring that the 184 female participants (60% of total attendance) are now better positioned to lead and implement LLA in their communities.

Outcome case title: Extension Agents and Researchers Commit to Scaling Climate Advisories to 500+ Farmers via Digital Platform

Description of change: Following the Phase 1 Capacity-Strengthening Training (August 2025, Nigeria), extension agents (EAs) and researchers demonstrated behavioral change by committing to immediately utilize the newly established WhatsApp platform and other digital tools to reach an additional 500+ farmers with climate advisories. This commitment strengthens the Research-Extension-Farmer triad's knowledge brokering function and initiates a scalable digital strategy for sustained, real-time knowledge exchange.

Relevant indicator: 2.1.2 Key actors demonstrate enhanced capacity to implement locally-led adaptation

Significance of change: This change is Highly Significant, as it directly addresses the systemic barrier posed by the extremely low extension agent-to-farmer ratio (1:5,000 in Nigeria). The commitment by EAs and researchers to adopt a digital, platform-based approach institutionalizes a low-cost, high-reach knowledge brokering model that will accelerate the dissemination of proven LLA technologies (like smart farming and drought-tolerant crops) far beyond the original 307 participants. This shift towards leveraging the WhatsApp platform for continuous communication is an early, auspicious step toward realizing the Interactive Collaborative Environment (ICE) platform vision outlined in WP3.

Significance rating: Highly significant

Contribution of Step Change-funded project: The project's contribution is rated as High. The commitment to using the digital platform was a direct outcome of Module 1: Digital Platforms & ICT sessions, which demonstrated the practical utility of mobile apps and platforms for information access and dissemination. By showcasing the power of these digital tools for Knowledge Exchange and by actively establishing the WhatsApp platform during the training, the project provided the necessary motivation, capacity, and tools for key actors to scale their efforts and achieve this systemic change, which was highly dependent on the project's intervention.

Contribution rating: High

Sources: Technical Training Report for Phase 1 Capacity-Strengthening Training (August 12-19, 2025), Nigeria: Key Outcomes and Achievements (Section 8), and Participants Plan to Apply the Knowledge Gained (Section 10).

Action areas: None of the above

Describe action area focus: This outcome focuses on Digital Technology for Knowledge Brokering. It highlights the behavioural change among extension agents and researchers toward using digital platforms and ICT tools for continuous, scalable knowledge dissemination and for strengthening the functionality of the extension system for sustained Locally Led Adaptation.