



INITIATIVE ON

Diversification in East
and Southern Africa

Report of the training workshop on responsible and inclusive scaling of agricultural innovations using the GenderUp Methodology with scaling partners in Zambia

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Contents

Abbreviations and Acronyms	3
Executive Summary	4
Day 1 Monday 11th November, 2024	5
Welcome and opening remarks	5
Introductions, participants' expectations and scaled innovations	6
Training objectives	7
Training ground rules and norms	8
Introduction to Ukama Ustawi Initiative WP5: Empower and Engage.....	8
Introduction to GenderUp Methodology for Responsible and Inclusive Scaling..	9
Pre-Survey on GenderUp.....	10
Introduction to scaling: overview and concepts.....	11
Stage 1: Scaling Ambition/Strategy.....	13
Stage 2: Exploring Relevant Social Dimensions/ Intersectionality.....	16
Contrasting impacts of agricultural innovation for one layer of social dimension: Gender.....	17
Contrasting impacts of agricultural innovation with additional layers of social dimension: Wealth, education and age.....	17
Relevant Social Dimensions Survey.....	18
Day 2 Tuesday 12th November, 2024	23
Reflections and recap from day one training.....	23
Stage 3: Understanding the implications of intersectionality	23
Persona activity	27
Stage 3b: Understanding the implications of intersectionality.....	29
Stage 4: Mitigating consequences and embracing opportunities	31
Stage 5: Integrating GenderUp into project management	35
Summary of emergent themes across the four groups.....	39
Post-Survey on GenderUp.....	39
Training evaluation.....	40
Wrap up of the GenderUp training and closing remarks	42
Annexes	44
Annex 1: Summary of group work output for Stage 1a on defining scaling ambition and strategy	44
Annex 2: Summary of group work output for Stage 1b on outlining existing scaling strategy.....	46
Annex 3: List of trainees.....	48
Annex 4: Schedule for the GenderUp training program	49
Annex 5: Evaluation form for the training on responsible and inclusive scaling using GenderUp	50

Abbreviations and Acronyms

ACASA	Understanding and Enhancing Adoption of Conservation Agriculture in Smallholder Farming Systems of Southern Africa
AICCRA	Accelerating Impacts of CGIAR Climate Research for Africa
AID-I	Accelerated Innovation Delivery Initiative
CA	Conservation Agriculture
CGIAR	Consultative Group on International Agricultural Research
CIMMYT	International Maize and Wheat Improvement Center
CRS	Catholic Relief Services
CSA	Climate-Smart Agriculture
CTDO	Community Technology Development Organization
ESA	East and Southern Africa
GAP	Good Agricultural Practices
GESI	Gender Equality and social Inclusion
IITA	International Institute for Tropical Agriculture
IWMI	International Water Management Institute
NARS	National Agricultural Research System
NASFAZ	National Association of Smallholder Farmers in Zambia
NGO	Non-Governmental Organization
R4D	Research for Development
SARAH	Southern Africa Research and Administrative Hub
SCCI	Seed Certification and Control Institute
SMEs	Small and Medium Enterprises
SAWBO	Scientific Animations Without Borders
SDGs	Sustainable Development Goals
UNZA	University of Zambia
UU	Ukama Ustawi
WP	Work Package
MoA	Ministry of Agriculture
ZARI	Zambia Agriculture Research Institute
ZAPD	Zambia Agency for Persons with Disabilities

Executive Summary

The Ukama Ustawi(UU) Initiative's Work Package 5 (WP5) team held a training workshop on inclusive and responsible scaling of agricultural innovations using the GenderUp methodology. This was held from 11th to 12th November, 2024 at the Radisson Blu Hotel in Lusaka, Zambia. The training was organized by the International Institute of Tropical Agriculture (IITA), by bringing together a diverse group of stakeholders from various active scaling projects in Zambia for collaboration and shared learning on inclusive scaling. A total of 23 participants (11 women, 12 men) including representatives from organizations such as International Institute for Tropical Agriculture (IITA), International Maize and Wheat Improvement Center (CIMMYT), International Water Management Institute (IWMI), Catholic Relief Services (CRS), Zambia Agriculture Research Institute (ZARI), University of Zambia (UNZA), National Association of Smallholder Farmers in Zambia (NASFAZ), Hopeways farms, SeedCo, Rainbow Health Solutions and the Conservation Farming Unit attended the two-day training workshop (See Annex 3 for list of Participants).

In his welcome and opening remarks, Dr. David Chikoye, the One CGIAR Country Convener for Zambia, the IITA UU lead, and Director for IITA Southern Africa Research and Administrative Hub highlighted the Ukama Ustawi Initiative's focus on supporting smallholder farmers in East and Southern Africa to intensify, diversify, and reduce risks in maize-based farming through improved services, SMEs, governance, and gender-inclusive investments. He emphasized the importance of responsible, inclusive scaling of agricultural innovations, urging participants to consider both social outcomes and actionable strategies aligned with CGIAR's new 2025–2030 Research Portfolio.

The workshop commenced with an introduction to the Ukama Ustawi Initiative, with specific emphasis on WP5 work on “Empower and Engage” as fostering sustainable agricultural development through inclusive diversification strategies of mixed maize systems across the East and Southern Africa. This was followed by an introduction to concepts of scaling. Thereafter, the methodology for responsible and inclusive scaling of agricultural innovations, known as GenderUp was introduced and discussed. The presentation provided a detailed explanation of what is GenderUp, why it was developed, and its focus on responsible and effective scaling. The participants were guided through the five steps of the GenderUp methodology which includes: (i) defining the scaling ambition, (ii) exploring relevant social dimensions, (iii) understanding the implications of intersectionality, (iv) mitigating any negative impacts, and (v) integrating GenderUp into the scaling process to ensure sustainability and inclusivity. The five stages of the GenderUp approach were discussed in-depth by the participants who were organized into four innovation working groups consisting of (i) conservation agriculture, (ii) improved cowpea seed; (iii) aquaculture; and (iv) digital tools. During the plenary sessions, all the four innovation working groups agreed on the importance of inclusivity and tailored communication, local engagement and partnerships, resource constraints and mitigation and budget and funding as key areas to successful scaling.

Day 1| Monday 11th November, 2024

Welcome and opening remarks

Dr. David Chikoye, the One CGIAR Country Convener for Zambia, the IITA UU lead, and Director for IITA Southern Africa Research and Administrative Hub (SARAH), began the workshop by welcoming the participants to Zambia and to the training. In his opening remarks, he provided an overview of the UU Initiative, a One CGIAR Initiative focused on diversification strategies toward resilient agri-food systems in East and Southern Africa (ESA). He explained that the Initiative, which has been operational since 2022, aims to promote climate-resilient agriculture and improve livelihoods across 12 countries in the ESA region. The countries of focus are Zambia, Kenya, Rwanda, Ethiopia, Zimbabwe, Malawi, Uganda, Tanzania, South Africa, Mozambique, Madagascar, and Eswatini. Dr. Chikoye emphasized that UU specifically focuses on helping smallholder farmers intensify, diversify, and reduce risks in maize-based farming through improved extension services, the development of small and medium enterprises (SMEs), governance support, and gender-inclusive investments.

He further outlined that UU operates in collaboration with other CGIAR centers, national agricultural research systems (NARS), governments, the private sector, and farmer organizations in each respective country. The initiative is organized into six work packages (WPs), which address different aspects of agricultural innovation, including WP1 (Diversity and Intensification), WP2 (Derisking and Digitalizing Value Chains), WP3 (Support and Acceleration), WP4 (Enabling Governance), WP5 (Empower and Engage), and WP6 (Scale and Coordinate). Dr. Chikoye specifically highlighted that WP5 focuses on empowering and engaging women, youth, and marginalized groups, and it intersects with all other WPs of the initiative.

He explained that in 2024, one of the key mandates for the WP5 "Empower and engage" team is to support WP6 in developing inclusive scaling strategies and plans as part of scaling readiness efforts. This, he noted, is the purpose of the two-day training workshop, which has brought together various active scaling projects and partners in Zambia, such as UU, Accelerating Impacts of CGIAR Climate Research for Africa (AICCRA), CIMMYT Accelerated Innovation Delivery Initiative (AID-I), and Understanding and Enhancing Adoption of Conservation Agriculture in Smallholder Farming Systems of Southern Africa (ACASA).

Dr. Chikoye went on to discuss the importance of focusing on responsible and inclusive scaling of agricultural innovations. Specifically, he stated that:

"Scaling has become a buzzword, with many institutions claiming to scale various innovations or technologies, often without considering the social implications. In most instances, we tend to consider scaling primarily as a measure of success based on the number of farmers reached, without giving due attention to how these innovations might create positive or negative social outcomes for different farmer groups and individual households. He warned that this can lead to some farmers becoming privileged while others are disadvantaged, depending on the innovations and strategies used to scale them to farmers" (Dr. David Chikoye).

In closing, Dr. Chikoye emphasized that CGIAR is evolving, with its new Research Portfolio for 2025-2030 placing greater emphasis on inclusive scaling as part of the Scaling for Impact Science Program. He expressed hope that the workshop would deepen participants' understanding of how to promote socially inclusive scaling science and actionable strategies in agricultural innovations. He concluded by reaffirming the importance of this workshop in advancing the Sustainable Development Goal (SDG) 5, which aims to ensure that no one is left behind in the pursuit of inclusive and sustainable development.



Dr. David Chikoye (standing in the middle) addressing the participants. (Photo credit: E. Mundia/Agricomm media)

Introductions, participants' expectations and scaled innovations

Before diving into the workshop objectives and sessions, participants were asked to first outline their own expectations of the training as well as the agricultural innovations that they were currently scaling. They were given two assorted cards - yellow and pink colors – and asked to write on it one main expectation of the training (yellow card); one agricultural innovation that they were currently scaling (pink card). Thereafter, the cards were exchanged with each participant on the right-hand side. Each participant introduced themselves to by the name, institution they are coming from, their role in scaling, and read out what was written on the two cards. The content on the cards is presented in Figure 1 and summarized in Table 1 below.

Table 1: Participants' expectations and agricultural innovations being scaled

Participants' expectations	Innovations being scaled
1) To learn about gender inclusion and assessing responsiveness 2) To learn more on the applications of the GenderUp tool for inclusive scaling 3) To learn more about how best the women sell their products 4) Gender dynamics in scaling agricultural technologies and how to overcome. 5) How best to adequately be gender inclusive/social inclusive in research	1) Scaling digital tools and business to business (B2B) in rural areas 2) Production of different crops and linkage to the market with emphasis of women participation 3) Bundled climate smart innovation and climate information 4) 400 Ha of land to grow crops to feed patients in hospitals in Northern Province 5) Fish farming agro dealer. 6) Conservation Agriculture (CA)

- | | |
|--|--|
| 6) Rural development including advocating for rural tourism and climate change
7) Full knowledge of scaling
8) Fully understand the application of the GenderUp in rural setups
9) To learn best ways of integrating GenderUp methodology in the activities
10) Learn about GenderUp methodology and see how they can apply it in their work.
11) Learn how to mainstream gender in the implementation of AID-I activities
12) Learn how GenderUP helps in enhancing conservation Agriculture scaling
13) Interact with more of participants working on gender. | 7) Climate Smart Seeds
8) Bundled Models for attaining sustainable seed systems of vegetatively propagated crops
9) Work with Self Help Africa to improve their farm productive and business skills and support entry into the national and international markets for the farm products.
10) Crop diversification
11) Inoculant production
12) Pest management
13) Transfer of verified argic technologies to improve productivity
14) Climate smart agriculture technologies
15) Integration of GESI in all projects especially for people living with disability
16) Scaling up adoption of improved legume varieties in small holder farmers
17) Support scaling of improved and drought tolerant maize, cowpea and pigeon pea seeds
18) Gender in IPM in the agroecological areas |
|--|--|

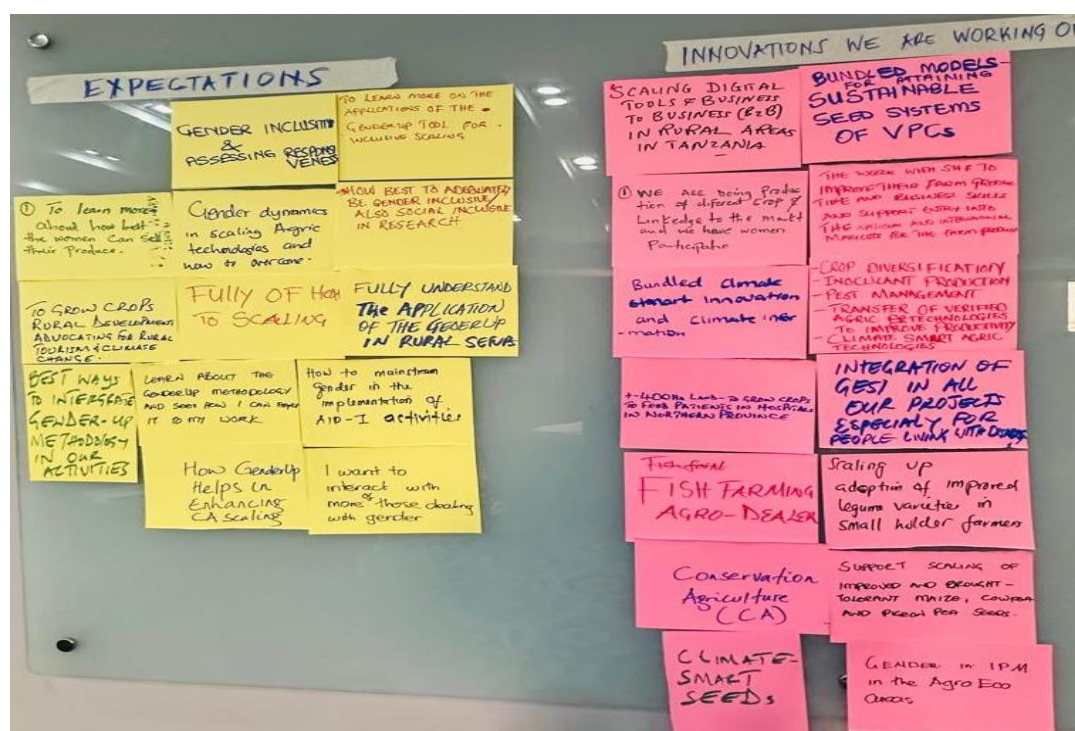


Figure 1: An image showing the cards of participants' expectations and innovations being scaled

Training objectives

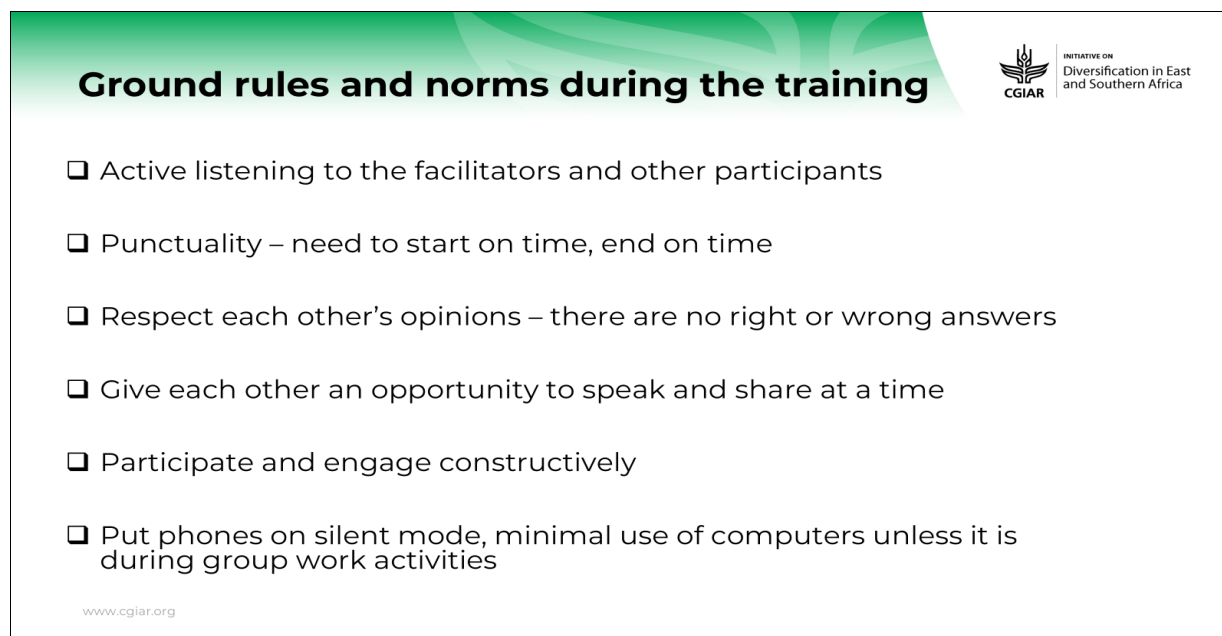
After discussing expectations, participants were guided through the objectives of the training, which were outlined below:

1. Understanding social dimensions relevant to innovation users in Zambia's scaling context.
2. Identify how gender intersects with these social dimensions to impact the experience to marginalized social groups with scaled innovation in Zambia.
3. Collaboratively develop activities that mitigate negative impacts on these social groups.

4. Create new and improved scaling strategies that reach and benefit all intended innovation users equitably.

Training ground rules and norms

Before commencing the training, the facilitators shared a set of group training rules and norms for participants to adhere to during the workshop to foster a safe learning environment for all and ensure the training runs smoothly. These are as provided in Figure 2 below:



Ground rules and norms during the training

- ☐ Active listening to the facilitators and other participants
- ☐ Punctuality – need to start on time, end on time
- ☐ Respect each other's opinions – there are no right or wrong answers
- ☐ Give each other an opportunity to speak and share at a time
- ☐ Participate and engage constructively
- ☐ Put phones on silent mode, minimal use of computers unless it is during group work activities

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Figure 2: A slide showing the training ground rules and norms

Introduction to Ukama Ustawi Initiative WP5: Empower and Engage

This session was led by Dr. Millicent Liani, a Gender and Social Inclusion Researcher at IITA and lead facilitator of the workshop. She noted that the term 'Ukama Ustawi' is a bilingual word derived from the Shona and Kiswahili languages respectively. In Shona, 'Ukama' refers to partnerships, and in Kiswahili, 'Ustawi' means well-being and development. Collectively, they represent the initiative's vision to achieve system-level development through innovative partnerships that support climate-resilient agriculture and livelihoods across 12 ESA countries through gender inclusive investments. In her presentation, she emphasized that WP5: Empower and Engage is a cross-cutting work on Gender Equality and Social Inclusion (GESI) which supports all the other UU WPs. Specifically, this GenderUp training workshop was to support 'WP6 work on scale and coordinate' towards embracing responsible and inclusive approaches to effective scaling of agricultural innovations as highlighted in Figure 3 below.

WP5: Empower and Engage

- Enabling diversification and productivity, reducing risks, accelerating sustainable enterprises: *socially inclusive and gender equitable!*
- Cross-cutting: Gender Equality and Social Inclusion

WP5 TEAM

Karen Nortje (lead - IWMI), Deepa Joshi, Everisto Mapedza and Ojong Baa (IWMI); Kristin Davis (IFPRI); Rahma Adam (WorldFish); Millicent Liani (IITA); and Eileen Nchanji (Alliance Bioversity-CIAT)

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Figure 3: Cross-cutting role of Ukama Ustawi WP5 Empower and Engage team in supporting other WPs

Millicent guided the participants through a detailed exploration of the state of knowledge on Innovation Scaling in CGIAR with insights borrowed from the [CGIAR annual performance report 2021](#), providing insights into current research and practices within the CGIAR framework that inform scaling strategies. Following this, the session addressed the critical theme of ‘Why Responsible and Inclusive Scaling matters’, highlighting the need for scaling agricultural innovations in ways that are equitable, ethical, and inclusive of marginalized groups. Millicent also presented ‘Key scaling processes for responsible and inclusive scaling of agricultural innovations’, emphasizing the importance of carefully managed processes that consider local contexts and community involvement. Finally, she shared insights on the dimensions of responsible and inclusive scaling including different approaches to scaling out, up and deep, identifying the various factors—such as social, environmental, and economic considerations—that influence the successful and ethical scaling of agricultural innovations. This session provided a comprehensive foundation for understanding the challenges and strategies of scaling innovations in a responsible and inclusive manner.

Introduction to GenderUp Methodology for Responsible and Inclusive Scaling

Ms. [Hanna Ewell](#), co-facilitator and Research Specialist with the Alliance Bioversity-CIAT, went on to discuss a methodology for the responsible and inclusive scaling of agricultural innovations, known as [GenderUp](#). In her presentation, she provided a detailed explanation of what GenderUp is, why it was developed, and its focus on responsible and effective scaling. Thereafter, she introduced the five stages of the GenderUp approach. The first stage involves defining the scaling ambition, followed by the second stage, which focuses on exploring relevant social dimensions. The third stage emphasizes understanding the implications of intersectionality, while the fourth stage is dedicated to mitigating any negative impacts. Finally, the fifth stage centers on integrating GenderUp into project management processes to ensure sustainability and inclusivity within scaling strategy implementation. The five stages are summarized as presented in Figure 4 below.

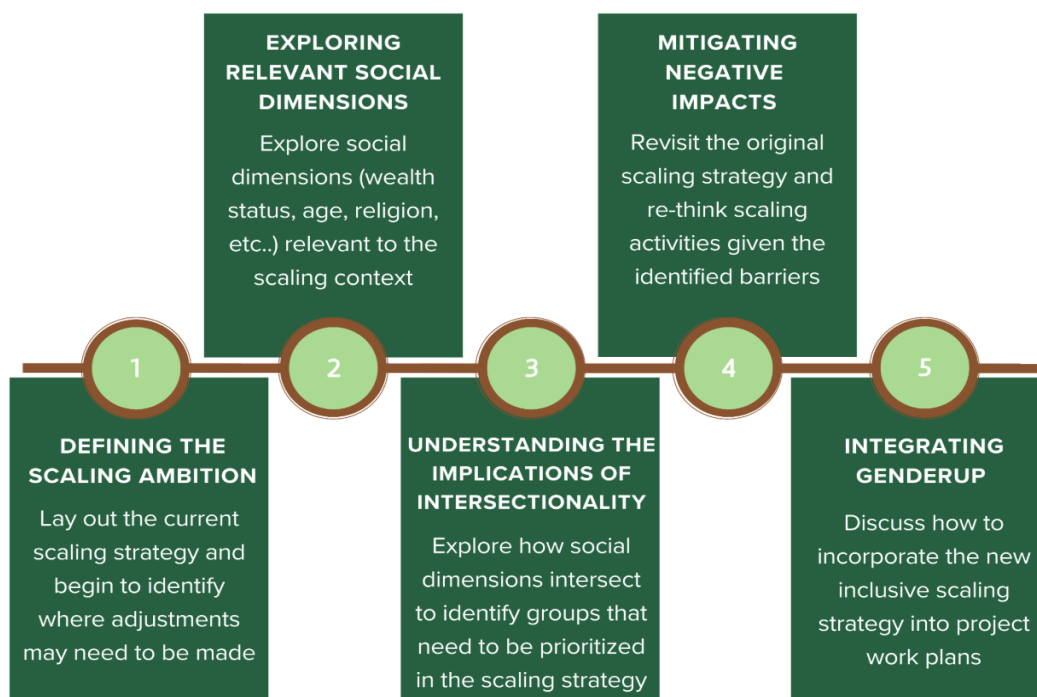


Figure 4: Depiction of the five stages of the GenderUp methodology (source: <https://genderup.ucdavis.edu/>)

Pre-Survey on GenderUp

Following the completion of the aforementioned sessions, an online pre survey was done to gauge the understanding of participants on inclusive scaling knowledge and skills. A total of nineteen (19) participants comprising of 10 women and 9 men completed the GenderUp Pre-Survey. The majority of the participants identified themselves as project/program officers, coordinators and seed system and scaling specialists and researchers. Most of them (17/19) noted that they do collect gender-disaggregated data in their projects. The majority of participants provided an average response (3/5) when asked about how familiar they are with scaling innovations and with issues concerning gender and scaling innovations. When asked about which socially marginalized groups they believe are restricted from accessing and/or utilizing their innovations, they mainly mentioned women, groups living with disabilities, low-income groups, and groups lacking primary/secondary education. The slightly more than half of the participants were somewhat aware of the idea of "complementary innovations"- which are innovations that enable the core innovation to have impact at scale. The complementary innovations reported included digital support tools, extension and advisory services, and training on good agronomic practices. When asked about what they hoped to gain from using the GenderUp scaling tool, the responses were summarized in box 1 below.

Box 1: Summary of what participants hoped to gain from the GenderUp Scaling tool

- 1) To learn how to contribute positively to gender issues in scaling
- 2) How to support marginalized people in society
- 3) How to enhance more involvement of women in innovation scaling
- 4) How more women will use innovative ways of doing their work
- 5) To empower and integrate young women into growing organic foods
- 6) It should be able to help me implement my activities better
- 7) More knowledge about the tool
- 8) Identify key indicators to assess vulnerability and strategies to mitigate them
- 9) Gender and social inclusion in agricultural research
- 10) Mainstreaming gender in the implementing of project activities
- 11) New methods to integrate gender issues in design and implementation of activities

- 12) Knowledge to implement scaling up activities in the right way
- 13) Scaling Innovation using digital tools
- 14) Inclusivity and tools to assess responsiveness
- 15) Understand how gender sensitive is the gender scaling up
- 16) Enhanced scaling knowledge
- 17) Increase and create real impact on gender participation, equality and inclusion

More detailed information on the outcome of the pre-survey can be assessed on [this link](#).

Introduction to scaling: overview and concepts

This session was led by Ms. Hanna Ewell. In the presentation introducing scaling, key concepts around scaling innovations were discussed, focusing on the multifaceted nature of both innovation and scaling.

Innovation was defined as the development of novel practices, products, services, models, or institutional arrangements that provide social and/or economic value to society. Innovations can range from technological advancements to social systems or governance models. Effective innovation is inherently complex, with both social and technical dimensions. For an innovation to succeed, it must work well in the specific context in which it is deployed, taking into account the local environment, societal needs, and existing systems.

A key point emphasized in the discussion was the need for multi-disciplinary teams when developing innovations. These teams should bring together expertise in both the technical and social dimensions to ensure the innovation functions effectively across both areas. Equal attention should be given to both aspects to create a balanced solution that equitably benefits all participants or stakeholders.

Scaling: The process of expanding innovation

The concept of scaling was discussed as being the process of increasing or expanding the use of a specific innovation, whether by reaching new geographies, addressing additional use cases, or expanding the scope of the innovation. Scaling involves both expanding the impact of innovation and adapting it to meet the diverse needs of users.

An important point raised was that scaling can involve diversifying the options available to users in a manner that reflects their varied needs and preferences. This involves combining multiple innovations into a socio-technical bundle, which includes technical components, social systems, and institutional structures to meet broader goals.

Scaling Strategy: Key components and framework

To successfully scale an innovation, a scaling strategy must be developed. This strategy should consist of a coherent set of activities, an understanding of the stakeholders involved, and engagement models that address and overcome potential scaling bottlenecks. The strategy should consider the why, what, for whom, where, how, by whom, and when—essentially answering the strategic questions that define the scope, direction, and approach to scaling.

Why – The purpose of scaling the innovation (e.g., economic development, environmental sustainability).

What – The specific innovation or set of innovations being scaled.

For Whom – The target audience or beneficiaries of the scaling effort.

Where – The geographical scope or context in which the innovation will be deployed.

How – The mechanisms or processes through which scaling will occur.

By Whom – The stakeholders responsible for driving the scaling efforts (e.g., innovators, governments, NGOs).

When – The timeline or phases of scaling.

A successful scaling strategy needs to be flexible and adaptable, taking into account the evolving nature of innovation and its context.

Inclusive scaling: Achieving social outcomes

The concept of inclusive scaling emphasizes the importance of scaling innovations to achieve specific social development outcomes. The focus is not only on the technological replication of innovation but also on creating sustainable systems change. The aim should be to ensure that scaling efforts contribute to broad, long-term positive impacts rather than simply increasing the reach or use of technology.

To achieve these social outcomes, several principles must be considered:

1. ***Sustainable Systems Change*** – Scaling should aim to create lasting changes that lead to better social, economic, or environmental systems, not just short-term solutions or one-off technology adoptions.
2. ***Stakeholder Inclusion*** – All relevant stakeholders should be involved in the scaling process. This includes those who are directly affected by the innovation, as well as those who can support or hinder the scaling effort.
3. ***Contextual Considerations*** – It is crucial to take into account the local context, including traditional knowledge, socio-cultural factors, and local practices. Innovations must be adapted to meet the specific needs and conditions of the communities they are being scaled to.
4. ***Equitable Benefit Distribution*** – Efforts must be made to ensure that the benefits of scaling are distributed equitably across all groups, and that potential negative impacts are identified and addressed early.
5. ***Iteration and Feedback*** – Scaling should be an iterative process, with ongoing feedback loops to adapt and refine innovations. Continuous learning and adjustments are necessary to ensure the innovation remains relevant and effective as it scales.

Technology access is multifaceted, and addressing the challenges in each of these areas is essential for creating an inclusive digital environment. While affordability and availability are often the most immediate barriers, ability, awareness, and autonomy play a crucial role in ensuring that technology is used to its full potential. Effective policies and initiatives must address all five aspects to ensure that technology benefits everyone, regardless of their socioeconomic status, geographic location, or personal circumstances.

Constraints for women farmers to adopt or benefit from innovations

At this point in the discussion, the facilitators highlighted the key constraints that women farmers face in adopting or benefiting from innovations. These include:

- a. ***Access to Resources***: Limited availability of capital, land, credit, and information.
- b. ***Decision-Making Power***: Women's limited influence in agricultural decision-making processes.
- c. ***Market Access***: Barriers to reaching profitable markets and buyers.
- d. ***Social Norms***: Societal expectations and accepted gender roles that restrict women's participation.
- e. ***Labor and Time***: The heavy workload and time constraints women face in balancing farm and household responsibilities.

The facilitator shared the case study of Tanzania on the scaling of sweet potato storage structures, which illustrates a key issue with technology adoption that fails to account for underlying social dynamics. While the introduction of these structures was intended to improve food storage and reduce post-harvest losses, it inadvertently reinforced existing gender inequalities.

Key issues highlighted include in the Tanzania Case Study:

1. **Increased Reliance on Men:** The technology, which involved the construction of storage facilities, often required technical skills and labor that were typically associated with male roles in the community. As a result, women became increasingly dependent on men for the building and maintenance of the potato storage structures.
2. **Loss of Autonomy and Control:** Prior to the introduction of the storage structures, women were more directly involved in the production, storage, and sale of their crops, giving them a sense of ownership and control over their income. However, with the new technology, the control shifted toward men, who were responsible for the physical construction and upkeep of the storage units. This shift eroded women's autonomy in managing their own agricultural operations and finances.
3. **Reinforcement of Social Inequalities:** Rather than challenging existing gender norms, the "improved" technology reinforced them. Women's roles were relegated to secondary positions, and the social power dynamics between women and men remained unchanged, or even worsened.

This example highlights a critical point: technology adoption and scaling must be accompanied by an understanding of the social context, including gender dynamics. Without considering these factors, technology can inadvertently exacerbate existing inequalities and undermine its intended benefits.

The conclusion was summarized as a goal: To transform existing power structures by adopting people-centered approaches to scaling that account for social constraints.

Basket of options rather than predefined innovation packages

According to a recent paper highlighting the need to provide a "basket of options" (Pircher et al., 2022)¹, farmers' decisions in East Africa were primarily influenced by their aspirations—such as improving nutrition and income—along with the challenges they faced, like low prices and soil erosion. Additionally, personal preferences, such as the taste of different vegetable varieties, played a role in their choices. The researchers found that a "pre-defined" innovation package was limiting, as it did not allow farmers to adapt practices according to their own specific needs and circumstances. Instead, the researchers offered a more flexible approach: a "basket of options" that empowered farmers to select the most suitable practices based on their individual situations, thus increasing their agency in decision-making.

The project recommended mixed cropping systems and crop rotation to enhance soil fertility, encouraged solar drying for preserving fruits and vegetables, and promoted cooking practices aimed at increasing food diversity and nutrition. Farmers, however, adapted these suggestions by incorporating local practices and methods. For example, they used pumpkin and field peas to prevent soil erosion and intercropped eucalyptus and kales, which were local crops not identified by the project. They also employed a unique technique of sun-drying vegetables on grain sacks on rooftops, a method different from the project's recommendations. Additionally, to improve children's nutrition, they thickened porridge with milk and banana, a local adjustment to enhance the meal's value.

Stage 1: Scaling Ambition/Strategy

Following the discussion on mapping and prioritization of core innovations in which the participants selected four key innovations to focus on for the duration of the workshop, Stage 1 was introduced. The first stage of GenderUp involves defining the scaling ambition, outlining the current scaling strategy, and identifying areas where adjustments may be necessary.

¹ Pircher, T., Nertinger, M., Goss, L., Hilger, T., Karungi-Tumutegereize, J., Waswa, L., & Knierim, A. (2022). Farmer-centered and structural perspectives on innovation and scaling: a study on sustainable agriculture and nutrition in East Africa. *The Journal of Agricultural Education and Extension*, 30(1), 137–158. <https://doi.org/10.1080/1389224X.2022.2156894>

The facilitator explained that by the end of Stage 1, the team should have achieved the following goals:

1. Documented the current scaling strategy for their innovation.
2. Gained a clear understanding of the existing pathway to scaling.
3. Developed an understanding of gender concepts and recognized the importance of integrating gender considerations into the scaling process.

After the discussion of these topics, attendees delved into the critical topic of scaling innovations in agriculture. Participants were divided into four groups for focused discussions and brainstorming sessions throughout the two-day training:

Group one: Focused on conservation agriculture (CA), exploring sustainable practices and their applications.

Group two: Focused on improved cowpea seeds and associated business models, analyzing market opportunities.

Group three: Investigated bundled climate-smart agriculture (CSA) and climate information services (CIS), discussing aquaculture as an integration strategy.

Group four: Discussed the role of digital tools in enhancing agricultural efficiency and outreach, focusing on a digital video-based extension tool

Insights from the group discussions and plenary presentations from the four working groups are depicted in Figure 5 below.



Figure 5: Group work presentation on Stage 1: Scaling ambition and strategy

The key insights based on the group presentations and plenary discussions as per Figure 5 for both stage 1a and 1b are as highlighted below. Content from Figure 5 is summarized and presented in Annexes 1 and 2.

Group 1: Conservation Agriculture

Group one presented a conservation agriculture innovation aimed at combating soil degradation, improving soil fertility, and addressing food insecurity. They proposed practices such as zero tillage, crop residue retention, and crop rotation. Their goal is to increase farm productivity, promote food security, and create sustainable farming systems at a low cost. The group highlighted the importance of incorporating digital tools for monitoring and data collection, as well as providing financial support for farmers. The proposed to create awareness about the benefits of conservation agriculture, focusing on climate resilience, and GESI. While the potential benefits are clear, a key challenge identified was the risk of pest outbreaks due to crop

residue retention, and the group suggested developing contingency plans of plant protection to manage this issue.

Group 2: Improved Cowpea Seeds

Group 2 focused on scaling improved cowpea seed varieties. Their innovation aims to address low yields, poor resistance to environmental stress, and inadequate food security. By scaling the adoption of high-quality, improved cowpea varieties, they hope to boost food security, improve nutrition, and enhance the livelihoods of farmers, particularly women and youth. The group emphasized the need for training in good agronomic practices and creating demand for improved varieties. They proposed to use community meetings, demonstration plots, and media campaigns for awareness creation. With a projected scale of impact in three years, they hope to reach rural areas and support farmers in adopting new, more resilient cowpea seed varieties.

Group 3: Aquaculture

The third group introduced an aquaculture-based innovation to address the depletion of local fish populations and to reduce Zambia's reliance on imported fish. Their innovation aims to build resilience to climate change, enhance food security, and improve income through sustainable fish farming. The group highlighted the need for training in fish seed (fingerlings) production, aquaculture management, and fish processing. They also emphasized the importance of engaging local communities and stakeholders, including fish farmers, traders, and policy makers, to create a broad base of support. Their solution targets rural and national levels, with an expected time frame of five to ten years for impact.

Group 4: Digital Tools

The discussion for group four covered several agricultural innovations aimed at addressing key challenges in Zambia's farming sector. They presented a digital extension innovation to address the high ratio of extension officers to farmers, which currently stands at about 1:1,000 respectively in Zambia. This creates barriers to the dissemination of updated farming information. Their solution involves using digital tools, such as shareable videos on flash drives, to deliver updated information on GAP and improved crop varieties, such as iron-rich beans. The goal is to enhance the knowledge of farmers and extension officers, allowing them to reach and educate more farmers, particularly in rural areas. This digital innovation is designed to complement existing agricultural technologies and improve farming productivity and nutrition. The initiative targets extension workers, farmers, and stakeholders in the agricultural value chains, with the expected impact in five years.

Stage 2: Exploring Relevant Social Dimensions/ Intersectionality

Stage two (2) involved exploring the relevant social dimensions of diversity. The facilitator emphasized that by the end of Stage 2, the goal for each group was to understand why it is important for teams to consider various social dimensions when scaling. They should also learn how these dimensions interact and intersect with gender to shape disadvantages or privileges for certain social groups, explore the composition of their team, and reflect on the new perspectives that diverse voices bring to the table.

The facilitators explained the concepts of social dimensions and intersectionality in relation to innovation, noting that social dimensions refer to aspects or attributes along which people differ, such as wealth, age, gender, education, or social status. They provided an in-depth explanation of how aspect or attribute along which people differ, for example on the basis of wealth and age, and can be categorized in groups such as rich or poor/young or old.

The facilitator emphasized that people can be categorized along multiple social dimensions simultaneously, which means a person might belong to several groups based on factors like their age, income, and education level.

The concept of intersectionality was introduced, which refers to how various social dimensions intersect and overlap, affecting people's experiences and opportunities in different ways. This concept is crucial because it highlights that individuals do not experience the world in isolation along a single dimension. For example, a young woman from a low-income background may experience challenges differently than an older man with similar economic status due to the intersecting effects of gender, age, and wealth. Emphasis on the importance of considering these differing social conditions when developing and implementing innovations was made. It was clear that innovations may have different impacts on people depending on their social dimensions, and failing to consider these differences could result in unequal benefits. For example, farmers from varying social backgrounds may have distinct preferences for new farming technologies. Wealthier farmers might prefer high-tech, costly innovations, while poorer farmers might prioritize affordable, easy-to-use tools that require less capital. Additionally, a farmer's age could influence their openness to adopting new technologies as older farmers may be more resistant to change compared to younger, more tech-savvy individuals. Thus, understanding and addressing the varying social dimensions is essential to ensure that innovations are inclusive and beneficial to diverse groups, preventing any community from being left behind.

The facilitator encouraged the teams to reflect on how the social identities of team members could influence which areas of expertise are prioritized, potentially leading to blind spots in the scaling strategy. It was emphasized that such multiple social identities could also introduce power dynamics, particularly between funders, implementers, and innovation users. The facilitator stressed the importance of being mindful of these dynamics to ensure that all voices are heard and considered in the scaling process.

Contrasting impacts of agricultural innovation for one layer of social dimension: Gender

The facilitator highlighted the contrasting impacts of agricultural innovations on women and men, particularly in terms of gender dynamics. For instance, when it comes to microfinance loans, men typically tend to use the loans to purchase productive agricultural assets, which they have control over, enabling them to invest in and expand their operations. In contrast, women also use loans to acquire productive assets, but often lack control over these assets, which hampers their ability to repay the loans. This results in women sacrificing their time and control over family resources². Similarly, the introduction of forage chopping machines has had different gendered effects. Men, influenced by social norms that associate mechanization with male work, have taken over the operation of these machines³. While the technology has alleviated some of the labor burden on women, it has also created a dependency on male labor or hired help, limiting women's autonomy and continuing their reliance on others for key agricultural tasks.

Contrasting impacts of agricultural innovation with additional layers of social dimension: Wealth, education and age

The facilitator provided additional examples of how various social dimensions, such as wealth, education, and age, can impact individuals' experiences with specific contracts or services. For instance, in the case

² Garikipati, S. (2008). The Impact of Lending to Women on Household Vulnerability and Women's Empowerment: Evidence from India. *World Development*, 36(12), 2620-2642. <https://doi.org/10.1016/j.worlddev.2007.11.008>

³ Fischer, G., Wittich, S., Malima, G., Sikumba, G., Lukuyu, B., Ngunga, D., & Rugalabam, J. (2018). Gender and mechanization: Exploring the sustainability of mechanized forage chopping in Tanzania. *Journal of Rural Studies*, 64, 112-122. <https://doi.org/10.1016/j.jrurstud.2018.09.012>

of crop insurance, highly educated women were reported to understand the terms of the contract and continued signing up each year, knowing that losses would be covered in the event of a bad year.⁴ In contrast, low-educated women did not fully grasp the terms and, after failing to receive a payout in the first year, stopped signing up, ultimately losing their capital. Similarly, in the horticulture marketplace application, young, digitally literate women were connected to a new network of buyers, enabling them to expand their market opportunities. However, elderly women, who often lacked digital literacy, were excluded from accessing this new marketplace and thus could not sell their produce to the new buyers.

The facilitator highlighted the contrasting impacts of agricultural innovations across gender and other social dimensions, emphasizing the importance of a nuanced understanding of these intersections when scaling innovations. She pointed out that the more social dimensions are considered, the more complex it becomes to ensure positive outcomes for all users and non-users. She emphasized the need to identify the social dimensions that are most relevant to the widespread adoption and benefits of these innovations.

Relevant Social Dimensions Survey

The participants were tasked to explore the various social dimensions relevant to the broader social context, including factors such as wealth, social status, and other related issues based on their innovations as per the four working groups. They were asked to complete a group survey on the social dimensions of diversity within 30 minutes. The results of the survey were presented and discussed in plenary. Table 2 below summarizes the presentations made by the four working groups. More detailed information on the outcome of the relevant social dimensions survey can be assessed on [this link](#).

Table 2: Outcome of group work discussions on the relevant social dimensions of diversity/intersectionality

Survey questions	Group 1: Conservation agriculture	Group 2: Improved cowpea seed	Group 3: Aquaculture	Group 4: Digital tools
Section 1: Ability to use innovation				
According to the survey results, what are the 3 to 4 most relevant resources (e.g land, labor) required to utilize the innovation	-Land -Financial resources -Market linkages -Agriculture inputs -Technical skills/knowledge	-Agricultural inputs -Technical skills/knowledge -Market linkages -Land -Labor	-Land -Water -Technical skills and knowledge -Market linkages -Agricultural inputs	-Technical skills -Extension advisory services -Utilities- internet -Time -Smart phone (other resources)
What are the 3-5 social dimensions (e.g wealth status, education, religion) that most influence access to each of these	-Wealth status -Education -Land ownership -Gender & disability	-Land ownership -Age group -Gender	-Wealth status -Household structure -Age group -Geography	-Disability -Gender -Location -Marital status -Education

⁴ Timu, A. G., & Kramer, B. (2023). Gender-inclusive, -responsive, and -transformative agricultural insurance: A literature review. *Global Food Security*, 36, 100672. <https://doi.org/10.1016/j.gfs.2023.100672>

Does gender relate to these social dimensions and affect access to these resources (Yes, no, maybe)	Yes	Yes	Yes	Yes
Section 2: Potential negative impacts for intended users and people who interact directly with a user				
What the 3-5 most significant potential negative impacts for intended users and people who directly interact with the user, based on the survey results	-Increase economic risk Unemployment/reduced demand for labor -Pest infestation due to residue -Less autonomy or decision making	-Decreased ability to sell or buy from local markets -Less autonomy or decision-making power -Increased social risk	-Crowding out -Health risks -increased labor burden -increased social risks -Economic risks	-Extra financial cost
What social dimensions (e.g. wealth status, education, region) are most influential in determining who may experience each of these impacts	-Wealth status -Education -Land ownership -Gender & disability	-Wealth status -Education -Land ownership -Age group	-Wealth status -Household structure -Age group -Geography	-Gender -Age group -Marital status -Wealth status -Location
Does gender intersect with these social dimensions to influence these negative impacts (YES, NO, MAYBE)	Yes	Yes	Yes	Yes for All. Maybe for marital status
Section 3: Potential negative impacts on the community due to large scale adoption				
What are 3-5 most significant impacts for those living in a community where innovation is introduced, according to the survey results?	A shift in the community or household power dynamics (example, market control, influence over resources)	-A shift in community or household power dynamics -Increased market risks -Decreased food security	-Increased market risks -Environmental health risks	Shift in power dynamic
What social dimensions (e.g. economic status, education, religion) are most influential in determining who in the community may experience each of these impacts?	-Wealth status -Disability - Education -Location	-Wealth status -Education -Location	-Wealth -Land ownership Location	ALL BUT -land ownership -Disability -Other social dimensions

Goes gender relate to these social dimensions to influence these negative impacts (Yes, NO, MAYBE)	Yes	Yes	Yes	<u>Yes</u>
				-Household structure -Other job -age group -Mobility -location
				<u>Maybe</u>
				-Wealth status -Education -Marital -Religion -Migrant
				<u>No</u>
				Ethnicity

Below are some of the key points and insights shared during the plenary discussions.

Group 1: Conservation Agriculture

The first group focused on conservation agriculture and the resources required to successfully implement it. They identified five key resources which included land, financial resources, market linkages, agricultural inputs, and technical skills and knowledge. In their discussion, they highlighted the significant social dimensions that influence access to these resources, including wealth status, education, land ownership, disability status, and location. Gender was also noted as an important factor, influencing access to agricultural resources and opportunities.

In terms of potential negative impacts, the group identified several challenges for the intended users and people directly interacting with them. They noted that unemployment or reduced demand for labor could occur, especially if automation or new farming methods decrease the need for traditional labor. They also mentioned the risk of pest infections due to agricultural residues left behind, which could potentially harm the environment. Furthermore, they discussed the potential loss of autonomy in decision-making for farmers, particularly women, who may have limited control over land and resource use. Wealth status and education were mentioned as key social dimensions influencing who might be affected by these impacts, with land ownership and age group also playing a role.

When discussing the broader community impacts, the group recognized the possible shift in household power dynamics as a result of large-scale adoption of conservation agriculture. Market control and access to resources might shift, leading to social tensions or increased inequality. The group also acknowledged the potential risks to food security and community cohesion. Once again, wealth status, education, and location were seen as the most influential social dimensions. Gender, as in earlier sections, was recognized as a significant factor in determining who experiences these negative community impacts and what degree/extend of impact.

Group 2: Improved Cowpea Seed

The second group discussed the improved cowpea seed as a core innovation aimed at enhancing agricultural productivity in local communities. The key resources they identified for utilizing this innovation included agricultural inputs, technical skills, market linkages, land, and labor. They emphasized the role of gender, location, land ownership, age group, and education in determining access to these resources.

Gender was particularly significant, as it influences who owns land, who receives education, and who has access to farming inputs. Further gender has influence on the social networks that can (dis)able farmers to acquire the improved cowpea seeds

For the potential negative impacts on intended users and their interactions with others, the group mentioned crowding out, where one type of agricultural innovation (e.g., improved seeds) may displace other practices, potentially reducing diversity in farming systems. They also raised concerns about water access, given the rising demand for water for irrigation and domestic purposes in the prevailing changing weather patterns of droughts and floods. The increased social risk associated with introducing new agricultural practices was highlighted, particularly for women and children, who may face heightened exposure to social risks such as gender-based violence or exploitation in market spaces. The group discussed how wealth status, education, and location influence who will be most affected by these issues.

When considering the broader community impacts, the group identified market risks and environmental risks as major concerns. Market risks could arise if the large-scale adoption of improved seeds leads to an oversupply, reducing the price of the produce. Environmental risks, such as water scarcity and pollution, were also highlighted, especially in communities where water resources are already limited. Again, location, wealth status, and education were identified as key social dimensions that would determine which members of the community might experience these negative impacts. Gender was noted as influencing how these risks are distributed, as women and marginalized groups often bear the brunt of environmental and social stresses. Women and children have limited abilities to independently migrate to areas that have better weather patterns for their livelihoods.

Group 3: Aquaculture

The third group's focus was on aquaculture, particularly the role of fish farming in community livelihoods. They discussed key resources such as technical skills, extension services, access to utilities (e.g., electricity, internet), and time as being essential for the success of aquaculture innovations. They identified several social dimensions as influencing access to these resources, including disability, gender, location, market access, marital status, and education.

One of the most significant negative impacts the group foresaw was the financial costs associated with adopting new aquaculture technologies. The costs of acquiring smartphones and internet connectivity, as well as the financial investment in fish farming infrastructure, could create a barrier for many potential users especially women, persons with disabilities and youth. The group also noted that gender, age group, marital status, and location are key social dimensions that determine who is likely to face these financial burdens.

In terms of the community-level impacts, the group focused on shifts in power dynamics within households and the community. They acknowledged that the adoption of new technologies could change local power structures, particularly in terms of control over land and resources. Additionally, the mobility of people in the community could be affected, with some individuals shifting from traditional agriculture to aquaculture or moving to urban areas for better market access. Location and marital status were highlighted as important social dimensions in determining who experiences these shifts. Gender, once again, was acknowledged as a significant factor in how power dynamics shift and how risks are distributed, particularly in terms of who owns or controls land, water, and resources.

Group 4: Digital Tools for Agriculture

The fourth group focused on the role of digital tools in enhancing agricultural productivity, particularly through the use of mobile phones and internet-based resources. The key resources identified for this innovation were technical skills, extension services, internet access, electricity, and time, as these are necessary for farmers to access digital tools and training. Smartphones were also seen as a crucial resource for farmers to receive advice and information through digital platforms.

Social dimensions discussed in relation to access to these resources included disability, gender, location, marital status, and education. The group stressed that gender plays a crucial role in determining who has access to digital tools, as women in many communities have less access to phones and internet services than men. Additionally, the location of the farmers, along with their wealth and education levels, were seen as important in determining who can make use of digital innovations.

The group also noted the potential negative impact of extra financial costs, particularly for farmers who need to purchase smartphones or pay for internet access. They discussed how gender, age group, marital status, and location could influence who bears these costs, noting that women and older individuals may face greater financial challenges in accessing these tools.

Finally, in terms of community-level impacts, the group discussed the potential for shifts in power dynamics as new digital tools empower certain individuals or groups with more knowledge and control over their farming practices. Location, disability, and wealth status were seen as key factors that would influence who in the community could benefit from these changes. Some rural communities have limited or no access to cell phone connectivity and radio signals hence limiting their ability to participate in the digital innovations. Gender was again recognized as a significant factor in determining who might be excluded or marginalized from the benefits of digital tools, especially if women have limited access to technology or the necessary skills to use it.

In summary, all four groups explored the complexities of how social dimensions such as gender, wealth status, education, location, and land ownership intersect with access to resources, the potential negative impacts of innovations, and the broader community implications. Each group recognized the importance of tailoring strategies to account for these factors, as they can significantly influence the success and equity of innovation adoption. The discussions emphasized the need for inclusive and context-sensitive approaches to ensure that innovations benefit all members of society, especially those who are traditionally marginalized or excluded.

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Day 2| Tuesday 12th November, 2024

Reflections and recap from day one training

The second day started with a recap of the key takeaways from the previous session. Participants reviewed the main concepts discussed as well as shared their reflections on the previous day's sessions and the key takeaways. Many participants mentioned that they had gained a clearer understanding of GenderUp, a methodology designed to assess how gender is integrated into different development strategies. This new knowledge helped them see the importance of considering gender when scaling innovations, ensuring that such initiatives are inclusive and empower women and other excluded citizens. The participants highlighted how the exercise on understanding relevant social dimensions of diversity allowed them to view things from a different perspective. They shared that while digital tools are essential for scaling innovations, the exercise also made them realize the implications of using these tools, such as the need for reliable internet access, which could limit the accessibility of certain innovations for marginalized groups.

The participants also emphasized the importance of understanding the key components of scaling innovations, stressing that scaling is not just about expanding, but about doing so responsibly. They pointed out that scaling innovations must also take into account social and gender dimensions, ensuring that no one, especially women, youth and persons with disabilities are left behind.

The role of stakeholder engagement was also a major discussion point. Participants noted that involving local leaders, such as village headmen and chiefs, is critical for ensuring that innovations are relevant and sustainable at the community level. There was also a strong focus on the need for policy advocacy to push for government support and create an enabling environment for empowering women and other marginalized groups.

Several participants noted how the discussions helped them understand that scaling innovations is not just a technical challenge, but also a social responsibility. They agreed that the exercise made it clear that scaling innovations without considering the social dimensions can lead to negative consequences, as many important factors may be overlooked.

Stage 3: Understanding the implications of intersectionality

Stage 3 focuses on understanding the implications of intersectionality. This stage explores how various social dimensions, such as race, gender, class, and other identities, intersect to reveal different layers of disadvantage or privilege. By recognizing these intersections, the aim is to identify and prioritize groups that may be most marginalized or overlooked in the scaling strategy, ensuring that interventions are inclusive and address the unique challenges faced by these groups.

The facilitator emphasized that by the end of Stage 3, the team's goals should be to identify which intersectional groups are most vulnerable to negative impacts and to explore the reasons why these groups either do not benefit or experience negative consequences.

The participants were asked to regroup in their respective work teams and discuss the implications of intersectionality, focusing on the vulnerability of different intersectional groups to negative impacts. They

were tasked with identifying which groups are most at risk and exploring the reasons why these groups either do not benefit from societal advantages or are more likely to experience negative consequences. Table 3 below summarizes the key points discussed by the participants in their group discussions on understanding the implications of intersectionality.

Table 3: Stage 3a Identifying intersectional groups

Priority dimensions			Priority intersections	
Group 1: Conservation Agriculture	What are the three relevant social dimensions that we should take into account when scaling innovation?	Which group within each social dimension might not benefit or might be prone to experience negative impacts? i.e old or young, rural or urban, low or high income, etc)	Does gender intersect with these social groups to amplify the negative impacts a person may experience?	Which intersectional groups are most vulnerable to experiencing negative impacts? (i.e. landless, widows. Uneducated young women, migrant men, etc?
	Relevant Social Dimension 1: Land ownership	-Low income -People with disability -People living in urban areas -Women	-Yes Because it is more difficult to own land if you are a female, without income, disabled and living in urban/rural areas	-Landless -disabled women -Uneducated women -Men with low social status -Men with low income
	Relevant Social Dimension 2: Education	Education -Low income -rural setting -people with disability -Household structure (Child headed)	Yes Because it is more difficult to attain education if you are a child (female) heading a family -Culture norm/beliefs may hinder female to access education	-Uneducated married women in a rural setup -Uneducated person from disability headed household -Uneducated person with less mobility (lacks transport)
	Relevant Social Dimension 3: Wealth status	Wealth status -Low income -People with disability -household structure (Child headed) -household structure (Child headed)	-Yes -Because it is even difficult to be wealth when you are a female/child heading a family	INTERSECTIONAL GROUP 3 -Low income -widow -Unemployed youth -Low-income -people with disability
Group 2: Improved Cowpea Seed	Relevant Social Dimension 1: Land ownership	Landless people/ Individuals	-Yes it does because women do not have ownership over land -Social/Cultural norms where women have less say/Acquisition	-Landless widows -Young who are landless
	Relevant Social Dimension 2: Aged group	-Young -Old	-Elderly women -Young/male youth may not be interested	-Elderly women -Male youth
	Relevant Social Dimension 3: Gender	- Men may consider cowpea as a women's crop as a result may not want to participate	- Yes	
Group3: Aquaculture	Relevant Social Dimension 1: Land ownership	Women and men Widows and widowers -Low-income earners	Yes	-Youth -Landless widows
	Relevant Social Dimension 2: Wealth status	-Women and men -Widows & widowers -Low-income earners	Yes	-Youth -Low-income earners
	Relevant Social Dimension 3: Household structure	-Children -Youth -widows and widowers	Yes	-Children -Youth -Widows and widowers

Relevant Social Dimension 1: Gender	-Low-income group -Old age	Yes Women in low-income groups maybe affected	-Less resourced married women -Disability
Relevant Social Dimension 2: Location	-Low-income group -Rural (remote)	YES -Limited access to mobile services	-Women with low resources and located in remote rural areas
Relevant Social Dimension 3: Age group	-Low income -Disability	YES -Elderly people with disabilities may not be able to use digital tool	-Aged with disability and low income

Group 1: Conservation Agriculture

The discussion on conservation agriculture by group 1 emphasized the need to consider land ownership, education, and wealth status as key social dimensions when scaling the innovation. It was noted that individuals without land, particularly landless women, people with disabilities, and those from low-income backgrounds, would face significant challenges in adopting conservation agriculture practices. These groups often lack the financial resources to acquire land or the agricultural inputs necessary for implementing conservation agriculture methods, such as improved seeds and tools.

Education was also identified as a barrier, with uneducated women and youth in rural areas being less likely to adopt conservation agriculture practices due to limited access to training and knowledge. Moreover, low-income households were highlighted as particularly vulnerable, as they often lack the capital to invest in the upfront costs associated with conservation agriculture.

The intersection of gender with these social dimensions was highlighted, particularly the exclusion of women from land ownership in many regions, making it harder for them to benefit from innovations in agriculture and adopt long term investments due to uncertainty of land tenure and in ability to get financing from banks. Disabled women, uneducated women, and elderly women were singled out as especially vulnerable, as they may face additional physical and social barriers to adopting new practices.

While conservation agriculture can provide significant benefits such as increased yields, improved nutrition, and better climate resilience, the group also pointed out that these benefits are often inaccessible to the most vulnerable. Without land ownership, many women and marginalized individuals may be left behind in the implementation of such innovations.

Group 2: Improved Cowpeas Seed

The discussion by the improved cowpeas seed revolved around the importance of land ownership, age, and gender as critical factors in determining who would benefit from the adoption of better cowpea varieties. Landless individuals, particularly young people and widows were identified as those most at risk of being excluded from the innovation, as they may lack access to land to plant the improved seeds.

The role of age in this context was also discussed, with both young people and elderly individuals seen as potentially disadvantaged. Younger men, for instance, may not be interested in growing cowpeas, perceiving it as a crop for women, which limits the adoption of the innovation. Elderly women, in particular, were considered vulnerable, as they may have physical limitations that make it difficult to engage in farming activities that require labor-intensive processes like planting, weeding and harvesting.

The discussion highlighted that gender norms play a significant role in the adoption of cowpea farming. Men, particularly in male-dominated agricultural communities, may resist adopting the crop because of cultural beliefs that associate it with women's work. Women without land ownership or access to financial resources face compounded barriers, making it harder for them to adopt improved seed varieties.

Despite these challenges, the improved cowpeas offer clear benefits, such as increased yield, better nutrition, and higher income. However, for the most marginalized groups, such as landless widows and young men, these benefits may remain out of reach due to social and economic constraints.

Group 3: Aquaculture

The plenary discussion around aquaculture by group 3 centered on land ownership, wealth status, and household structure as critical factors that could determine access to innovations. Landless individuals, especially those without access to water resources, were considered less likely to benefit from aquaculture. This is particularly true for landless widows or youth, who may lack both the resources and knowledge required to start fish farming.

The issue of wealth status was also raised, with low-income individuals, including both low earning men and women, potentially excluded from the benefits of aquaculture due to the high initial investment required for establishing fish farms. Additionally, household structure, such as child-headed households or households led by widows, could pose additional challenges, as these groups may not have the physical or financial capacity to engage in aquaculture.

The intersection of gender with these social dimensions was noted, with women and persons with disabilities often being the most vulnerable. Women in rural areas may be excluded from aquaculture due to gendered expectations around household labor, and disabled individuals may find it difficult to manage the physical demands of fish farming.

Although aquaculture presents an opportunity to improve income and food security through increased fish production, the significant initial costs and physical labor required may limit its adoption among the most vulnerable, such as elderly individuals or women in rural areas with disabilities.

Group 4: Go Farm Digital

The discussion on Go Farm Digital highlighted the importance of gender, location, and age as determining factors for access to digital farming tools. It was recognized that low-income women in rural and remote areas would likely face challenges in accessing digital tools due to limited access to technology and lack of digital literacy. Additionally, elderly individuals and those living with disabilities were seen as particularly vulnerable, as they may struggle to navigate digital platforms due to both technological barriers and physical limitations.

Gender was highlighted as a key factor, with women in low-resource settings facing additional challenges, particularly when social norms limit their ability to own mobile phones or use digital platforms. This gender gap in technology access often leaves women at a disadvantage, missing out on opportunities to enhance their productivity and income through digital tools.

The location factor was also significant, with individuals in remote rural areas facing challenges related to internet connectivity and access to mobile services. For women in these areas, especially those with limited resources, the lack of access to Go Farm Digital could further deepen their marginalization.

While Go Farm Digital can provide market access, financial services, and training that can improve agricultural productivity, its benefits are largely inaccessible to marginalized groups, particularly low-income women, elderly individuals, and those with disabilities. These groups may struggle to engage with the platform, either due to lack of access to smartphones, poor network coverage, or limited digital skills.

Persona activity

The facilitators introduced the persona activity, which aims at exploring the potential impacts of the innovation on each identified "intersectional groups". The purpose of this activity is to help innovation teams better envision the users and non-users within these groups, as identified in Stage 3a. By examining the demographics and possible experiences of these individuals with the innovation, the team can gain a deeper understanding of how each group might benefit from, or face challenges with, the innovation.

The facilitator instructed the participants use their respective working groups, with each group assigned to focus on one of the "intersectional groups" identified in Stage 3a. They were also tasked with filling in each section of the Persona Map for a user they envisioned to be part of the assigned intersectional group. The summary of presentations is highlighted below:

Group 1: Conservation agriculture

GROUP 1: CONSERVATION AGRICULTURE

Persona Activity

Priority Group #1 CONSERVE FOR THE FUTURE Description: <u>uneducated young farmer</u>	Name: <u>CHABOTA</u>
Demographics: Age: <u>27</u> Gender: <u>FEMALE</u> # of Children: <u>3</u> Region/Country: <u>ZAMBIA, Chipata</u> Location: <u>Rural</u> Peri-Urban Urban	Dimensions of Diversity: Wealth Status: <u>Low wealth status</u> Level of Education: <u>She has completed 6 years of Primary education.</u> Ethnicity: <u>Tonga</u> Land Ownership: <u>She manages 2 ha farmland, which is a family land</u> Marital Status: <u>Single mother of 3, living with her mother</u> Household Structure: <u>She is single mother living with her aged-widowed mother</u> Religion: <u>Christian</u> Migrant Status: <u>not migrant</u> Disabilities: <u>no disability</u>
Livelihood Activities <u>(crops grown, livestock raised, off-farm jobs):</u> <u>Grows maize, soya beans, groundnuts and raises some chickens village</u>	Goals for the Future: <u>To increase yield, reduce cost of fertilizer, increase income, enhance nutrition</u> Challenges Faced: <u>Low productivity, high input cost, low input cost, low income etc</u>
Other: <u>She doesn't belong to any farming cooperative. She only has a analog phone, she only uses a hoe for farming.</u>	

The first group presented a persona of a 27-year-old woman farmer named Chabota, a single mother of three children from Tonga ethnic group in Chipata Province in Zambia. Chabota practices agriculture on family land, growing soybeans, groundnuts, and rearing chickens. Her primary goal is to increase yields, reduce input costs, and improve household nutrition. However, her challenges include low productivity, high input costs, and limited education (only completing six years of primary school). The innovation proposed was conservation agriculture, which has the potential to increase yields, lower input costs, and improve nutrition. However, challenges such as limited understanding of technology and increased labor requirements were discussed, particularly in the short term. The group noted that Chabota's low level of education could limit her ability to fully understand and implement new agricultural technologies, and she might not be willing to take on the initial risk of transitioning to conservation agriculture, despite the long-term benefits.

Group 2: Improved cowpea seed

GROUP 2: IMPROVED COWPEA SEED

"BETTER SEED"

Persona Activity

Priority Group #1 Description: <u>LANDLESS WINDOW</u>	Name: <u>UKAMA BANDA</u>
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Demographics: Age: <u>40</u> Gender: <u>WOMAN</u> # of Children: <u>4</u> Region/Country: <u>ZAMBIA</u> Location: <u>Rural</u> ☐ <u>Peri-Urban</u> ☐ <u>Urban</u> ☐	Dimensions of Diversity: Wealth Status: <u>LOW WEALTH STATUS NOT SUFFICIENT TO EDUCATE HER CHILDREN</u> Level of Education: <u>PRIMARY EDUCATION (7 YEARS)</u> Ethnicity: <u>NGONI</u> Land Ownership: <u>RENTED 1HA OF LAND</u> Marital Status: <u>WIDOW</u> Household Structure: <u>SINGLE MOTHER LIVING IN A RENTED LAND WITH HER 4 CHILDREN</u> Religion: <u>CHRISTIAN</u> Migrant Status: <u>NOT A MIGRANT</u> Disabilities: <u>NONE</u> Other: <u>UKAMA LIVING IN A TWO BEDROOMED HOUSE TOGETHER WITH ALL THE 4 CHILDREN IN ONE HOUSE</u>
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Livelihood Activities (crops grown, livestock raised, off-farm jobs): <u>SHE IS A FARMER, GROWS MAIZE, COWPEAS, CASSAVA, VILLAGE CHICKENS</u>
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Goals for the Future: <u>INTENDS TO EDUCATE HER CHILDREN USING PROCEEDS FROM HER FARM</u> Challenges Faced: <u>LOW PRODUCTIVITY, LIMITED ACCESS TO LAND</u> <u>* LACK OF RESOURCES FOR INPUTS</u>

The second group presented a persona of a widow, Mama Ukama Banda, a 40-year-old woman with four children, who comes from Ngoni ethnic group in Zambia. She is landless and rents land for farming, growing maize, cowpeas, and cassava. She is also involved in raising village chickens. Mama Ukama Banda's primary goal is to educate her children using income from her farm. Her challenges include low productivity due to limited access to land and financial resources to purchase inputs. The innovation presented was the introduction of improved cowpea seed, which offers high yields, disease resistance, and resilience to climate change. This innovation could improve her income and nutritional security, particularly for her children. However, it could also reduce the diversity of crops she grows, as she may prioritize cowpeas over other crops. Additionally, the cost of input for the new seeds could be a significant barrier for her, given her limited financial resources. The group highlighted the trade-off between increased productivity and the potential for reduced diversification, as well as the challenge of affording necessary input.

Group 3: Aquaculture

GROUP 3: CSA & CIS - AQUACULTURE

Persona Activity

Priority Group #1 <u>CSA & CIS</u> Description: <u>Aqua Culture</u>	Name: <u>Kasongo</u>
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Demographics: Age: <u>31</u> Gender: <u>M</u> # of Children: <u>3</u> Region/Country: <u>Zambia</u> Location: <u>Rural</u> ☐ <u>Peri-Urban</u> ☐ <u>Urban</u> ☐	Dimensions of Diversity: Wealth Status: <u>Low income: Limited cashflow due to depleted fish & cannot access loans</u> Level of Education: <u>GRADE 9</u> Ethnicity: <u>Bemba from Chilubi Island</u> Land Ownership: <u>Family Land</u> Marital Status: <u>M</u> Household Structure: <u>Three Children, wife</u> Religion: <u>Christian</u> Migrant Status: <u>Not a Migrant</u> Disabilities: <u>None</u> Other: <u>Owns a bicycle and a Canoe. He owns a feature phones. He leaves in his fathers compound.</u>
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Livelihood Activities (crops grown, livestock raised, off-farm jobs): <u>Fish farming (fisher man)</u>

Goals for the Future: <u>To become a Commercial fish Producer</u> Challenges Faced: <u>- Capital</u> <u>- Mobility</u> <u>- Limited land size</u>
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The third group discussed the persona of Kasongo, a young fisherman based on Chilubi Island of Luapula province in northern Zambia. Kasongo inherited his fishing skills from his father and lives on family land, where he practices fishing. He owns a bicycle for transporting fish to the market and uses a canoe to fish in the nearby water body. Kasongo's primary goal is to improve his income and nutrition. His challenges include limited capital, labor shortages, and the impacts of climate change on his fishing activities. The innovation proposed was aquaculture, which could provide a more stable and sustainable source of income and nutrition. However, the group noted potential negative impacts such as increased labor demands, particularly as Kasongo cannot rely on his children to help with work, and the risks posed by water scarcity, which could be exacerbated by climate change. Additionally, Kasongo's limited access to capital could hinder his ability to invest in the necessary infrastructure for aquaculture.

Group 4: Digital Farm

GROUP 4: DIGITAL TOOLS

Persona Activity

Priority Group #1 Description: <i>Less resourced, married woman</i>	Name: <i>CHILUPA</i>
Demographics: Age: <i>42</i> Gender: <i>married woman, 6 children</i> # of Children: <i>6</i> Region/Country: <i>Zambia</i> Location: <i>Rural</i> <i>Peri-Urban</i> <i>Urban</i> <i>CHINSALI</i> Livelihood Activities <i>crop growing, livestock raising, off-farm labor, agricultural production</i> Goals for the Future: <i>Increase productivity in her 2 lines</i> <i>Improved food and security</i> <i>Malnutrition</i> Challenges Faced: <i>No smart phone</i> <i>Very remote location 15km away from Agric office</i> <i>Low bean yield</i> <i>Malnourished children (5)</i> <i>Low level of education (Grade 5)</i>	Dimensions of Diversity: Wealth Status: <i>5 ha, bicycle, chickens - all these owned by husband</i> Level of Education: <i>Grade 5 - Low</i> Ethnicity: <i>Bemba</i> Land Ownership: <i>2 lines (1/2 ha) - growing beans - margin land / low fertility</i> Marital Status: <i>married</i> Household Structure: <i>Wife, husband, 6 children</i> <i>1 drop out - married, 3 school</i> Religion: <i>Christian</i> Migrant Status: <i>Not migrant</i> Disabilities: <i>None / No disability</i> Other: <i>Can use husband's smart phone in the evening</i>

The fourth group focused on a persona of a 42-year-old farmer from Bemba ethnic group in Chinsali community in Zambia, who is married with six children. She is involved in agricultural production and manages two hectares of family land. She wants to increase productivity and improve food security for her children, two of whom suffer from malnutrition. She lives in a remote area, 15 kilometers from the nearest agriculture office, and has no smartphone, relying instead on her husband's phone. The proposed innovation was a digital farm platform aimed at improving her access to agricultural information, market prices, and weather forecasts. However, the group highlighted that her lack of direct access to the smartphone and limited connectivity could pose significant barriers to her adoption of digital tools. Additionally, her remote location and low level of education could further hinder her ability to fully benefit from the digital platform, despite its potential to improve productivity and nutrition.

Team members were encouraged to recognize and discuss the differences between their personas and those created by other teams, which were likely influenced by varying focuses on "priority social dimensions." It was emphasized that this exercise would help participants develop a more defined understanding of each user group.

Stage 3b: Understanding the implications of intersectionality

Following the persona activity, the teams were asked to discuss and complete the questions regarding how the intersectional group will benefit or not benefit from the innovation, and negative impacts they might experience; as well as provide reasons behind their response. They were advised to keep these personas in mind while filling in the template for Stage 3b as presented in Figure 6, whose content is summarized in Table 4 below.

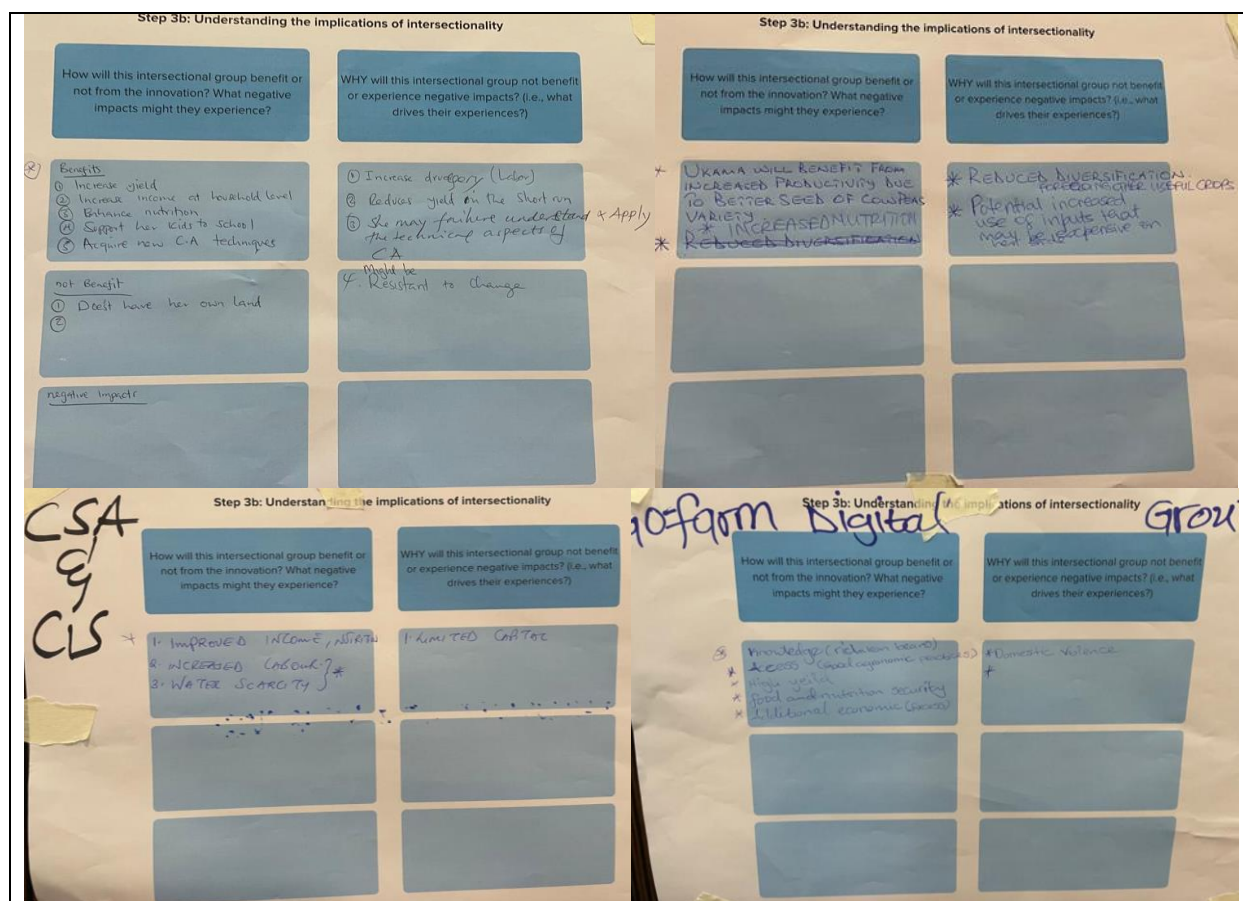


Figure 6: Group work activity on understanding the implications of intersectionality

Table 4: Summary of responses on group work activity on understanding the implications of intersectionality at stage 3b

How will this intersectional group benefit or not from the innovation? What negative impacts might they experience?	Group 1: Conservation agriculture	Group 2: Improved cowpea seed	Group 3: Aquaculture	Group 4: Digital tools
	Benefits -Increase yield -Increase income at household level -Enhance nutrition -Support her kids to school -Acquire new conservation agriculture techniques Not benefit -Those who do not own land	-Mama Ukama Banda will benefit from increased productivity due to better seed of cowpeas variety. -Increased nutrition.	-Improved income, nutrition. -Increased labor burden. -Water scarcity.	-Knowledge of rich iron beans. -Access to good agronomic practices. -High yield and increased income. -Food and nutrition security enhanced.
Why will this intersectional group not benefit or experience negative impacts (i.e., what drives their experiences)	-Increased labour burden. -Reduced yield in the short run. -Failure to understand the technical aspect of conservation agriculture. -Might be resistant to change.	-Reduced diversification focusing on other useful crops. -Potential increased use of inputs that might be expensive for her.	Limited capital.	Increased incidences of domestic violence

During the plenary session, there was extensive discussion on the challenges and potential negative impacts of the innovations presented, particularly in rural contexts. Key points included:

- Access to inputs and capital:** Several personas faced barriers in accessing the necessary inputs to benefit from the innovations, particularly due to limited capital. For example, Mama Ukama Banda's inability to afford inputs for the improved cowpea seed was a major concern. Similarly, Kasongo's limited access to capital for aquaculture infrastructure was highlighted.

- b) **Labor constraints:** A common theme across all the personas was increased labor burden, mainly affecting women. Most of the personas had limited household labor, particularly since children were often too young to help. This could lead to increased labor demands, especially when the adoption of new technologies requires more work in the short term.
- c) **Education and technology adoption:** Several personas had low levels of formal education, which could hinder their understanding and adoption of more complex technologies like digital platforms or conservation agriculture. There were concerns about whether these technologies could be fully understood and properly implemented by individuals with limited educational backgrounds.
- d) **Social and gender dynamics:** Gender roles and household dynamics were discussed. For example, the persona of the woman from Chinsali had to rely on her husband's phone, which could limit her ability to access digital tools independently. The group emphasized the importance of considering social and gender dynamics when designing innovations, especially in rural contexts where experiences of gender-based violence are common.
- e) **Short-term risks vs. long-term benefits:** Many of the innovations, such as conservation agriculture and aquaculture, involved some short-term risks such as increased labor intensity and financial investment that might discourage adoption, despite the promise of long-term benefits. This raised the question of how to mitigate risks and provide support for adoption in the short term.
- f) **Need for success stories:** The participants highlighted that while many rural communities face numerous challenges, there are also successful examples that can offer valuable lessons. It was pointed out that understanding what works in certain rural communities—such as families with higher nutrition rates—could provide insights into scaling solutions effectively.
- g) **Cultural sensitivity:** A discussion on the importance of cultural sensitivity in the design of scaling strategies and their implementation was emphasized. Innovations should be tailored to the local context and should not overlook existing local knowledge and practices. The group emphasized the need for thorough social and gender analysis to understand household dynamics, especially when it comes to ownership and control over productive resources and decision-making power.

In conclusion, while the innovations proposed for each persona offered significant benefits, the plenary discussions highlighted the importance of addressing challenges such as access to inputs, labor constraints, education, and social dynamics to ensure successful and sustainable outcomes. Additionally, understanding local successes and leveraging existing knowledge in rural communities could enhance the effectiveness of scaling agricultural innovations.

Bibliography materials for Stage 3 of GenderUp

The Alliance Bioversity and CIAT's Rapid inclusivity assessment for digital agriculture services. Resources from the assessment can be found here: <https://cgspace.cgiar.org/handle/10568/128173>

Stage 4: Mitigating consequences and embracing opportunities

Building on the identified potential negative impacts from stage 3, stage 4 focuses on mitigating these. By the end of this stage, it was envisioned that each team should have:

1. Identified interventions to prevent, mitigate, or minimize any negative impacts.
2. Developed a scaling strategy informed by the information gathered from the three intersectional groups in Stage 3.
3. Gained a clear understanding of how to avoid potentially harmful unintended impacts on vulnerable intersectional groups, ensuring they are now prepared for responsible and inclusive scaling.

The facilitator discussed the importance of mitigating activities in the context of innovation implementation. These activities are crucial for minimizing any unintended negative impacts that could affect both users and non-users of the innovation. Mitigation strategies are often tailored to specific groups to address their unique needs and challenges. For example, downstream changes may include introducing complementary innovations, adjusting training schedules, or using different communication channels to ensure effective engagement. Additionally, upstream changes could involve seeking inclusive partnerships or revising budgets to ensure equitable access and support for all stakeholders. By carefully planning and implementing these mitigating activities, the potential negative consequences of innovation can be reduced, fostering a more inclusive and positive overall impact.

The facilitator gave one example of a mitigating activity that was offering training sessions for both women and men on household dynamics to help build the confidence of both parties in adopting new innovations. She explained the importance of making these trainings more accessible and inclusive for women by adjusting factors such as training times, locations, and content. Additionally, providing transportation services or childcare during the sessions could further enhance women's participation.

The facilitator provided an additional example of mitigating activities, emphasizing the importance of partnerships. These partnerships can be formed with various stakeholders such as cooperatives, the private sector, government entities, micro-finance institutions, and NGOs. The objective is to collaborate with these groups to better understand local challenges and effectively address constraints faced by social groups in the community. This approach aims to leverage the resources, expertise, and networks of each partner to create more impactful and sustainable solutions.

The facilitator explained that one way to mitigate communication barriers is by developing a video or drama to share important information about how to use an innovation, rather than relying on written or printed materials. This approach caters to different literacy levels and can be more engaging. The facilitator also suggested utilizing popular and accessible social media platforms like WhatsApp or Facebook for communication. Additionally, for illiterate farmers, the use of interactive voice response systems was recommended instead of SMS, as it allows for audio messages that are easier to understand and follow.

Core and complementary innovations

The facilitator explained that core innovations are central to initiatives or interventions and are expected to drive transformation and have a significant impact at scale. They are the key innovations that directly contribute to the desired outcomes. On the other hand, complementary innovations are additional changes needed to support the core innovations. These often focus on the broader environment and aim to create conditions that make the environment more enabling, thereby helping the core innovations achieve their intended impact at scale. The facilitator explained that complementary innovations are a key component of the overall mitigation strategy. They help integrate a core innovation into the broader enabling conditions required for scaling. These innovations are often new in their specific context of use, non-technical in nature such as policies or systems and may have already existed in other contexts for a long time.

Examples of complementary innovations

The facilitators explained the concept of complementary innovations using the example of core innovation on a new potato variety. They highlighted several complementary innovations that support the adoption and success of the new potato variety, including adapted pest management strategies, weed control practices, and a novel ploughing or ridging technique. Additionally, they mentioned the need for a license to release the variety, a seed potato multiplication arrangement, and a certification and quality control system. They also emphasized the importance of an inclusive business model for extension services and pro-poor credit arrangements to ensure accessibility and sustainability.

A second example focused on Horticultural Marketplace Application as the core innovation. To scale this core innovation, complementary innovations associated with this may include cell phones, cell phone chargers, the internet, and the power required to charge the phones. Additionally, sales policies or contracts that govern transactions on the app, as well as certification and quality control systems for

horticultural produce were mentioned as crucial supporting elements for the successful implementation of the marketplace innovation.

The facilitator explained that bundling the core innovation with the associated complementary innovations results to an **'innovation package'** which consists of combinations of interrelated innovations and enabling conditions that, when combined, can lead to transformation and large-scale impact. These packages are specific to the context, desired outcomes, and user groups, and their potential to drive outcomes and impact may evolve over time. The facilitator highlighted that an innovation package is considered not ready or mature if the core innovation, or any of the complementary innovations, are not ready for use or have not been developed in the appropriate context. This could lead to bottlenecks for **'innovation package readiness'** that should be addressed in the scaling strategy.

Dichotomy of equality vs. equity to enable identification of mitigation measure on negative consequences

The facilitator explained the difference between equality and equity using a visual analogy. She described how introducing a core innovation might offer equal access to the innovation itself (picture on the left). However, she emphasized that when those core innovations are integrated into an inclusive innovation package, the innovation can be scaled to provide equitable access to the benefits it offers (picture on the right).

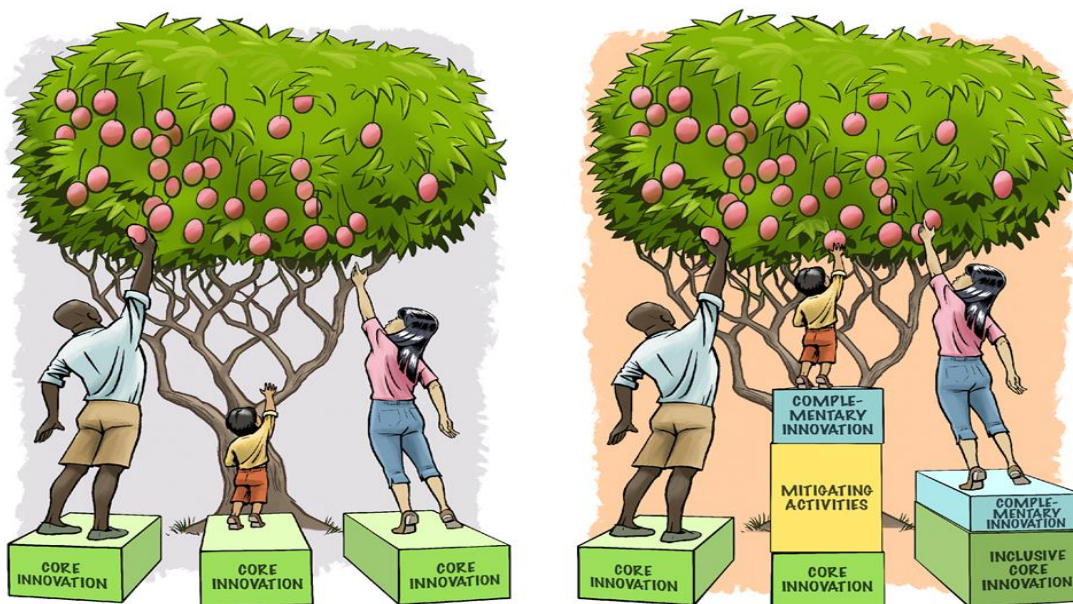


Figure 7: Visual analogy for equality and equity (source: <https://genderup.ucdavis.edu/>)

Thereafter, the participants were asked to use their working groups to discuss and fill out the content in the Figure 8 below on mitigation measures for addressing the negative consequences for diverse vulnerable groups.

Fill out the whiteboard for stage 4

Step 4: Mitigating negative consequences for vulnerable cross-sector groups



Figure 8: Template for identifying tailored scaling strategies for mitigating negative consequences for vulnerable cross-sector groups

The responses are summarized in Table 5 below.

Table 5: Responses from group work on tailored scaling strategy for mitigating negative impacts of the scaled innovations

Components of a tailored scaling strategy	Group 1: Conservation agriculture	Group 2: Improved cowpea seeds	Group 3: Aquaculture	Group 4: Go digital farm
What barriers need to be addressed to mitigate negative impacts	-Financial constraint -Burden of drudgery -Low yield in short run -Technical knowledge about CA	-Reduced crop diversification -Potential increased use of inputs that maybe expensive	- Capital - Limited land - Mobility	Not sidelining other members of the household's e.g. the man, husband share innovation/technology on his crop of interest. Animate video on GAP for maize
What needs to be changed in the training plan?	-Our plan will involve a bottom-up approach where we -Engage the farmers -Use of local language in trainings -Farmers will be trained	-Training should be tailor-made to a specific age/gender -Training to be inclined with cultural practices	-Financial literate -Farm management -SACCOS (Savings Credit Organizations) -Policy Land awareness -Land use intensification -Supply chain mgt -Cold storage	Include other members of the household
How should communication strategies and media use be changed?	-Use of local influencers. -e.g traditional leaders or lead farmers. -Actual demonstration plots in different localities. -Roadshows and dramas for mobilization and awareness creation. -Use of pictorial images and braille	-Use of communication media that is affordable and easily accessible -Use of communication media that is affordable and easily accessible	-Radio -Star link -Extension -Local GVT -NAIS -House of chiefs -extension agents -Radio -Phones	Target everyone in the household

What other mitigation activities (i.e complementary innovations) should be implemented	-Providing transportation services and childcare during training for women and disabled people -2-wheel tractor services -Providing agriculture inputs	-Training (GAPS) -CA training -Seed quality -Loan facility -Out grower schemes -Contract Farming	-Feed formulation -Capacity building -Business plan/scaling mentorship -Integrated farming -climate smart agriculture -Canoes -Dryers -Smokers	Input/output market linkages
What new partnerships do we need to establish in light of modified scaling strategy?	-Micro-finance institutions -Seed companies -ZAPD -Donors partners -Media -Community leadership	-Cooperatives -Families -NGO's (CFU) -Government (SSCI) -Government extension officers -CBOs -External funding (USAID)	-Fish-input suppliers -Micro-finance -ZNBS-Building society -House of Chiefs -MOA -MOF and ministry of lands -Transport sector -Micro-finance -Commercial banks	Partnerships with community leadership

Stage 5: Integrating GenderUp into project management

The final stage of GenderUp includes integrating the mitigation strategies determined within Stage 4 into the existing project management and staff structures. The teams were also expected to have developed concrete next steps for a more inclusive scaling strategy.

The facilitator emphasized the importance of integrating a critical gender and inclusion lens across various aspects of the team's work. This includes ensuring diverse team composition and capabilities, implementing a gender-sensitive budget, engaging in collaborative goal setting, and developing a data collection model that considers gender and inclusion factors. Additionally, the facilitator highlighted the need to design interventions that are inclusive and gender-sensitive, formulate evaluation questions that address gender and inclusion dynamics, and adopt dissemination methods that are accessible and equitable.

Using their working groups, the participants were asked to discuss and fill out the table as depicted in the figure 9 below on integrating GenderUp into project management.



Figure 9: Template on steps taken for integrating GenderUp into project management

The responses from stage 5 group wrk activities as depicted in Figure 9 are summarized in Table 6 below.

Table 6: Group work responses on integrating GenderUp into project management

Fundamental Questions	What needs to be changed in the training plan?	How should communication strategies and media use be changed?	What other mitigation activities (i.e. complementary innovations) should be implemented?	What new partnerships do we need to establish in light of our modified scaling strategy?
What can we do to achieve this? (i.e. collect data, connect with other stakeholders, etc)	Group 1: Conservation Agriculture -Needs assessment survey -Connect with stakeholders such as Zambia Agency for Persons with Disabilities (ZAPD). -Preparation of training materials	Group 1: Conservation Agriculture -Prepare scrips for influencers -Collect data on farmers -Partners with a printing institution -Media	Group 1: Conservation Agriculture -Collect data on household structures -Connecting with transportation stakeholders. Train conservation agriculture agents to help with actual demonstrations and trainings.	Group 1: Conservation Agriculture -Stakeholder mapping -Stakeholder engagement
	Group 2: Improved Cowpea Seed -One on one -Group Interview -Doing a transit walk	Group 2: Improved Cowpea Seed -Having meetings -Stakeholder communication plan	Group 2: Improved Cowpea Seed -Training on data collection and packaging	Group 2: Improved Cowpea Seed -Work closely with Zambia Statistics Agency (ZAMSTAT)
	Group 3: Aquaculture Financial literacy -Farm management	Group 3: Aquaculture -Tailored communication strategies	Group 3: Aquaculture Exchange visits	Group 3: Aquaculture - Engage consultants
	Group 4: Digital tools -Include members -Collect data about household structure and social norms	Group 4: Digital tools -Target everyone in the household	Group 4: Digital tools -Input/Output market linkages -Connect with other stakeholders	Group 4: Digital tools -Community leadership -Visit traditional leader and include extension on the ground in the project

Who should act? (i.e who in the project team, which team, which partner, is outside of your influence?)	Group 1: Conservation Agriculture -Project data collector -Traditional leaders -Project team	Group 1: Conservation Agriculture -Radio stations Printing institutions -Project team together with traditional leaders and ZAPD	Group 1: Conservation Agriculture -Project Team - ZAPD	Group 1: Conservation Agriculture -Project team
	Group 2: Improved Cowpea Seed -Capacity building expert	Group 2: Improved Cowpea Seed -Use of communication media that is affordable and easily accessible	Group 2: Improved Cowpea Seed -Training on GAP -CA training -Seed quality	Group 2: Improved Cowpea Seed -Cooperatives
	Group 3: Aquaculture -Higher learning institutions -Micro Finance institutions	Group 3: Aquaculture -Social media -National Agricultural Information Services	Group 3: Aquaculture -Lead farmer	Group 3: Aquaculture -Livestock and fishery services
	Group 4: Digital tools -Extension network	Group 4: Digital tools	Group 4: Digital tools -Project team	Group 4: Digital tools Project team and ministry of agriculture (MoA)
What is our timeline for implementing these new activities /adjustments?	Group 1 Conservation Agriculture 6 months – 1 year	Group 1 Conservation Agriculture 1 – 2 Months	Group 1 Conservation Agriculture 6 months – 1 year	Group 1 Conservation Agriculture 6 months – 1 year
	Group 2: Improved Cowpea Seed 6 months	Group 2: Improved Cowpea Seed 6 Months	Group 2: Improved Cowpea Seed 3 years	Group 2: Improved Cowpea Seed Identify and communicate - 3 months
	Group 3: Aquaculture 2 years	Group 3: Aquaculture 1 year	Group 3: Aquaculture 1 year	Group 3: Aquaculture 2 years
	Group 4: Digital tools 1 Month	Group 4: Digital tools	Group 4: Digital tools 12 Months	Group 4: Digital tools -Project Timeline

Within the four groups, the teams discussed both Stage 4 and 5 together on examining mitigation strategies and accompanying changes to their project management structure as summarized below.

Group 1: Conservation agriculture

Group 1 focused on addressing food and nutritional security through conservation agriculture. The group emphasized a bottom-up approach, recognizing that involving communities from the outset would facilitate better adoption of farming interventions, as opposed to imposing changes. They highlighted that working directly with local farmers in their areas and using local influencers, such as traditional leaders, would enhance engagement and ensure greater buy-in. They also planned to demonstrate farming techniques through demo plots to give practical examples of conservation farming. Communication would be achieved through radio shows, drama groups, pictorial images, and accessible tools like braille for individuals with disabilities.

The group also identified the need for transport services and childcare to reduce barriers to training attendance. They proposed one-on-one engagement with farmers in their households, creating more personalized and effective training experience. In terms of partners, they noted the importance of

microfinance institutions for offering soft loans, as well as seed companies for providing subsidized seeds. Additionally, they would collaborate with Zambia Agency for Persons with Disabilities (ZAPD) to support farmers with disabilities and involve donors for funding. Media and community leadership, such as chiefs, would also play a role in spreading the message about conservation farming. Finally, the group acknowledged that while donor funding would be needed initially, they would explore sustainable financing models and partnerships to reduce long-term reliance on donors. Village savings and internal lending community groups have proved to be accessible sources of investment capital for unbanked rural smallholder farmers in Zambia

Group 2: Improved cowpea seed

Group 2 worked on promoting improved cowpea seed varieties to address the challenges of reduced crop diversification and high input costs in farming. They focused on tailored training plans, with an emphasis on reaching the entire family, not just women or men, to avoid any intra-household conflict or jealousy, which could lead to gender-based violence. Their plan was to include all members of the household, ensuring that both women and men received the same education about the benefits of improved cowpea seed varieties and how to use them for better yield.

Communication strategies would involve creating inclusive videos and ensuring that materials were available in local languages for better accessibility. Market linkages were another key area, with a focus on helping farmers access markets for their products. Regarding partnerships, the group identified the need to work with NGOs, cooperatives, and the Ministry of Agriculture to create a network of support for the farmers. They also highlighted that financial support would be crucial, both in terms of improving seed access and supporting farmers with microloans. The group acknowledged that, in terms of costs, they would need extra funding to mobilize local resources, pay for transport to training areas, and implement communication strategies like radio programs.

Group 3: Aquaculture

Group 3 discussed the challenges and potential solutions for aquaculture in promoting food security, focusing on issues such as capital constraints, limited land, and mobility. To address the financial challenges, they suggested introducing financial literacy and farm management training to farmers, along with connecting them to savings and credit organizations. In terms of land use, the group emphasized the importance of land policy awareness and training farmers in land use intensification to maximize small plots. They also explored the idea of cold storage and supply chain management training to improve the transport and shelf life of fish, a key product in aquaculture.

The group also planned to establish partnerships with microfinancing organizations, banks, and local governments, particularly the house of chiefs, to address the limited land issue by facilitating long-term lease agreements for farmers. They would also collaborate with the Ministry of Agriculture and other stakeholders to ensure that fish can be transported effectively from farms to markets. Exchange visits would be another strategy to allow farmers to learn from those already successfully implementing aquaculture. To manage mobility, the group considered investing in better transportation and drying technologies to help farmers increase the shelf life of their fish. They acknowledged that these activities would require additional funding but believed that by leveraging existing communication channels like radio and extension services, they could reduce the need for significant new resources.

Group 4: Digital tools

For group 4, the key focus was on the importance of partnerships with mobile service providers and other organizations that already have access to valuable data about rural populations. The group emphasized how mobile operators, banks, and other community-based entities collect and profile information that can be leveraged for agricultural development. The idea was to customize this data for specific agricultural needs, which would be more efficient and impactful when integrated with existing systems. There was also a strong emphasis on the role of extension officers, who are seen as the key custodians of farmer registers. The extension officers not only manage this critical data but also ensure its accuracy, making

them central to any intervention. The group discussed how digital tools could help support extension services but cautioned that these tools must be evidence-based and checked against reliable sources to avoid misinformation. There was a recognition of the need for scalable, centralized systems to ensure the integrity of extension and advisory services, while also highlighting the role of both public and private sector players in improving agricultural support systems.

Summary of emergent themes across the four groups

Inclusivity and tailored communication: All four groups emphasized the importance of tailoring interventions to the specific needs of local communities, ensuring inclusivity of both women and men and addressing gender dynamics. Communication strategies should be designed to ensure messages are accessible, using local languages, media channels like radio, and visual aids like videos, with the understanding that the medium must be culturally appropriate and affordable.

Local engagement and partnerships: Each group identified the need for local partnerships with extension workers, community leadership (such as chiefs and village headpersons), and government agencies like the Ministry of Agriculture, Ministry of Community Development, Ministry of Small and Medium Scale Businesses. They also saw collaboration with NGOs, cooperatives, and microfinance institutions as essential to providing the financial and technical support needed to scale their interventions. The private sector (non-state actors) provides extension and advisory services that can be utilized in the inclusive scaling of innovations in Zambia and other ESA countries.

Resource constraints and mitigation: Across the groups, resource constraints including financial, natural and physical resources were central challenges. Solutions like microloans, market linkages, land use intensification, and improved technologies (e.g., cold storage, drying methods) were proposed to address these issues.

Budget and funding: All groups acknowledged that while there were significant costs associated with these interventions, particularly in terms of training, mobilization, and communications, they would need to seek additional funding from donors, government, or other partners. They also recognized the importance of exploring sustainable financing models for long-term success.

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Post-Survey on GenderUp

Following the completion of the training, a post survey was completed by participants to gauge their level of understanding on responsible and inclusive scaling of agricultural innovations. The feedback was deemed valuable to the GenderUp team in assessing the impact of these workshops and improving them for future participants and scaling efforts.

A total of seventeen (17) participants comprising of 8 women and 9 men completed the GenderUp post survey. Majority of the participants identified themselves as project/program officers, coordinators and seed system and scaling specialists and researchers. The majority of participants reported that they were very familiar (scores of 5) with scaling innovations, and they will pay strong attention on issues concerning

inclusive scaling of innovations. They all noted that they will endeavor to collect gender-and socially disaggregated data in their projects. When asked about which socially marginalized groups they believe are restricted from accessing and/or utilizing their innovations, they mainly mentioned women, groups living with disabilities, low-income groups, groups lacking primary/secondary education, single headed households, youth and elderly, and remote/hard to reach groups. Following the training, the majority of the participants were very familiar with idea of "complementary innovations"-which are innovations that enable the core innovation to have impact at scale. The complementary innovations reported included digital support tools, extension and advisory services, and training on good agronomic practices, financial services, markets, better policy environment, community engagement with traditional and local leaders, equitable partnerships with CBOs, NGOs, relevant ministries and private sector, social behavioral change interventions. When asked about what they had gained from the training using the GenderUp scaling tool, the responses are summarized in box 2 below.

Box 2: Summary of what participants gained from the training on GenderUp scaling tool

- 1) The power of going beyond counting numbers in innovation scaling. Understanding the family structure is very critical for accomplishing any successful innovations scaling.
- 2) This was a game-changer training. I had a great learning experience.
- 3) I have gained knowledge and skills on inclusive and responsible scaling. This was an eye opener on how to best we can use the GenderUp tool to engage different stakeholders.
- 4) Inclusivity, mapping and prioritization of socially marginalized groups, how to empower and engage different marginalized groups.
- 5) Knowledge on how to scale up including all the components of scaling strategies.
- 6) Knowledge, support and skills on scaling innovations responsibly and inclusively (3 times).
- 7) Methodology in gender inclusivity in the upscaling of agricultural technologies.
- 8) Critical analysis of gender and social dimensions is important to effective delivery, it helps ensure equitable benefits to beneficiaries.
- 9) Insights on the different stages when designing a product for scale for impact inclusively.
- 10) Additional knowledge on complementary innovations.
- 11) Knowing how I can actually use GenderUp to ensure inclusion of different categories of people.
- 12) Approach on scaling up, considerations of social dimensions that impact the innovation, negative impacts and mitigations of innovation on different social dimensions.
- 13) Knowledge on the social dimension of vulnerability.

More detailed information on the [outcome of the post-survey can be assessed here](#).

Training evaluation

Following the completion of the training on responsible and inclusive innovation scaling, participants were, in addition to the GenderUp post-survey that focuses on the contents, requested to provide feedback through a training evaluation form. This form rather included inquiries about their assessment of the organization and structure of the training. Ratings were assigned on a five-point Likert scale: 1=strongly disagree; 2=disagree; 3=neutral; 4=agree; 5=strongly agree. The aspects assessed included:

- (1) Objectives and expectations; (2) Relevance of the content to their work needs; (3) Adequacy of new information and knowledge; (4) Participation and interaction; (5) Recommendation of the training to other staff in similar positions; (6) Facilitators' knowledge about the topics; (7) Willingness to participate in a similar workshop in the future; (8) Sufficiency of the training duration; and (9) Training venue and facilities.

Participants were further prompted to indicate the main messages they intended to take away from the workshop, express areas they did not fully comprehend, and provide recommendations for enhancing future training workshops. The analysis showed that seventeen (17) participants (8 women and 9 men) out of 23 trainees (11 women and 12 men) completed the evaluation forms. The results show that most

participants strongly agreed that the training objectives and expectations were met; the amount of new information termed as good; facilitators were knowledgeable about the GESI topics and thus would like to attend similar trainings in future, as well recommend the training to their colleagues in their institutions. They also strongly agreed that the training encouraged participation and interactions, as well as facilities and venue were rated as good. Nonetheless, they score a rating of 4 (good) about the length of the training and time given for question-and-answer sessions summarized in Figure 10 below.

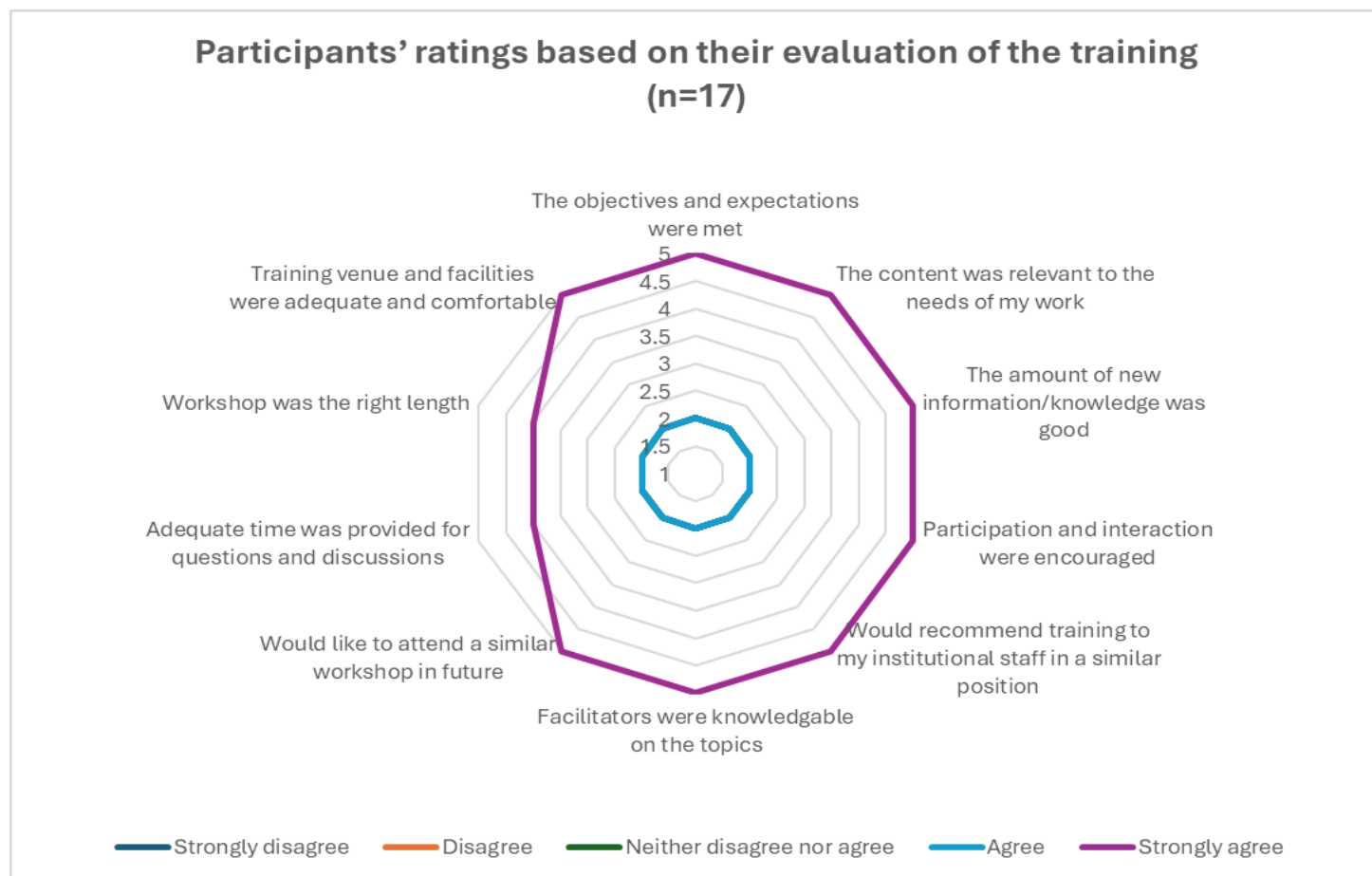


Figure 10: Participants' ratings based on their evaluation of the training (n=17)

Box 3 provides a Summary of participants' take-home messages, what they did not understand and recommendations for improvement of future workshops

Box 3: Participants' take away messages and recommendations for improvement of future GenderUp trainings
<u>Participants' take-home messages from the training workshop</u> • Methodology on gender inclusivity in the scaling of agricultural innovations • Need to involve all stakeholders in gender work • Role of GenderUp on scaling innovations • Intersectionality; GenderUp and inclusive scaling ambition and strategy development • How to improve gender knowledge on innovation scaling • Empower and Engage using all components of GenderUp for inclusive scaling strategies • Application of GenderUp; Dimensions to scaling- scaling up, out and deep; importance of considering how social dimensions intersect with gender and how they impact uptake and use of innovations • How to use innovations inclusively

- Understanding how social dimensions intersect when designing and implementing innovation scaling strategies is key.
- Empower and Engage using GenderUp
- Critical analysis of gender and social issues is important for equitable share of benefits of the innovations
- Every innovation needs to take into consideration inclusivity so that no one is left behind
- Importance of inclusive scaling strategy and its implication when designing innovation products towards positive impact
- There are so many social dimensions of diversity that impacts our beneficiaries
- Gender inclusivity is key for innovation scaling. Need for equity not equality
- Well organized training, rich in content with new knowledge
- Meaning of Ukama Ustawi - wellbeing, partnerships and relations

What participants did not understand well

- Linking gender to other social structures
- How best to involve grassroots women in scaling activities
- Mitigative measures and social dimensions relevant to innovation users
- To what extent do we choose the right impact without causing negative impacts on other social dimensions of gender and diversity?
- Monitoring framework on the GenderUp
- Sometimes the terminologies used were difficult to understand. Just need more time to comprehend the concepts (2)

Recommendations for improvement of future GenderUp workshops

- The training duration was too short for more comprehensive discussions. This should be increased to three to four days for more time for training especially for those who are not trained on gender to understand well the new concepts, methodologies and proper reflections for each stages of the GenderUp methodology (9 responses)
- More visuals and demonstrations
- In future, the group work should be organized according to the innovations, projects and organizations implementing the work.
- More participants from other seed companies should be invited

Wrap up of the GenderUp training and closing remarks

To begin with, Millicent asked the participants if the workshop had met their expectations. The participants noted that indeed the workshop was eye-opener by offering great learning curve to them on responsible and inclusive scaling. She encouraged everyone to embrace the GenderUp methodology and inclusive strategies discussed during their workshop and in their working groups. Concerning way forward with implementing the learnings, Millicent mentioned that from January 2025, the CGIAR Initiative will no longer be called 'Ukama Ustawi' instead, it is transitioning its scaling its efforts through the new "Scaling for Impact Science Program" from 2025 to 2030, which will be organized into five key work areas, for which responsible and inclusive scaling is a cross-cutting element. She expressed enthusiasm and hope that the work will continue in Zambia with the trained partners who will help steer the responsible and inclusive considerations in their innovation scaling work. Thereafter, Millicent requested few volunteers from different partners and scaling projects to share their reflections about the training. This was summarized using the bullets below:

- Dr. Regina Kapinga, the IITA co-lead of the West and Central Africa Regionally Integrated Initiative, expressed her gratitude to everyone involved and shared her appreciation for the learning she had gained from the workshop. She emphasized that the goal of scaling for impact cannot be achieved

through donor support alone. It requires engagement from governments and other stakeholders to ensure long-term success.

- Ms. Chiboola Milimo, Principal Agriculture Research Officer (PARO) who represented the Zambia Agricultural Research Institute (ZARI) noted that her expectations for the workshop had been fully met. Despite working with many partners, she found the experience valuable and appreciated the opportunity to learn. She encouraged participants to reach out to ZARI if they were interested in potential partnerships.
- CIMMYT Zambia through their representative Dr. Grace Musonda extended thanks the facilitators for their excellent work during the two-day workshop. She highlighted that one of their objectives had been achieved, but they still had more to learn, particularly regarding GenderUp methodology for responsible and inclusive scaling. They also suggested that future workshops could benefit from bringing together organizations with similar goals, as this would enhance the learning experience.
- IWMI Zambia, through their representative Dr. Munyaradzi Mutenje, also expressed her thanks to everyone, highlighting the positive interactions and the knowledge they had gained from the workshop.

Following the reflections from the above participants, Dr. Chikoye gave his closing remarks. He thanked all participants for their active involvement throughout the workshop. He mentioned that he will still find time to fully understand the GenderUp Methodology to ensure inclusivity and make sure that no one is left behind in the work being done. He took a moment to thank the facilitators for their excellent facilitation of the training. Dr. Chikoye encouraged everyone by emphasizing that moving forward, success of the work should not be measured by the number of farmers reached, but by the real impact that farmers reap from the scaled innovations. He concluded the session on a note of optimism for continued collaboration. Thereafter, he was asked to present the certificates to the participants as showcased in the pictures below, followed by official closure of the workshop.



Figure 11: Sample photos showing the award of training certificates (Photo credit: E.Mundia /Agricomm)

Annexes

Annex 1: Summary of group work output for Stage 1a on defining scaling ambition and strategy

Group type	Innovation		The context	
Group 1: Conservation Agriculture	What is the core innovation you aim to scale	-Minimum tillage -Crop residue Retention -Crop Association (Intercropping/Crop rotation)	Are there other innovations or changes that are necessary for your innovation to scale successfully	-Use of Digital tools for monitoring, data collection and assessment -mechanization -Financial support (loan/subsidy)
	Describe what problem the innovation is solving?	-Soil degradation -Food insecurity	Describe the context (social geographical, agricultural) where the innovation will be launched?	Rainfall regions 1 district - Region 1 1 district – Region 2 1 district – Region 3
	What is the purpose of scaling innovation?	-increase productivity -food security -Employment	Describe what your innovation will replace?	Traditional methods of farming
	Who will use the innovation?	Farmers	At what scale do you want to have an impact (Community, regional national)?	National Level
	Describe what Social change the innovation is intended to achieve?	-Improved incomes -Improved farming methods which are sustainable and low cost -Improved nutrition	What is the desired timeline for this impact to become a reality?	3-5 years
Group 2: Improved Cowpea Seed	What is the core innovation you aim to scale	-Improved seed (cowpea)	Are there other innovations or changes that are necessary for your innovation to scale successfully?	-Availability of improved varieties -Affordability/Accessibility - Demand creation -Provision of advisory services (agronomic practices)
	Describe what problem the innovation is solving?	-Low yield -low germination rate -low tolerance to biotic and abiotic stress -Nutrition (inadequate food security)	Describe the context (Social geographical, agricultural) where the innovation will be launched?	Social = youth and women Zambia = rural communities Agriculture= all Eastern province=Chipata
	What is the purpose of scaling innovation?	-To have quality seed varieties with good agronomic traits	Describe what your innovation will replace?	They will replace the old varieties which are low yielding

		-Increase adoption of improved cowpea varieties -Increase nutrition -address food security		
	Who will use the innovation?	Farmers	At what scale do you want to have an impact (Community, regional national)?	Regional
	Describe what Social change the innovation is intended to achieve?	-improved livelihood through food and nutrition security	What is the desired timeline for this impact to become a reality?	3 years
Group 3: Aquaculture	What is the core innovation you aim to scale	Aquaculture	Are there other innovations or changes that are necessary for your innovation to scale successfully?	-Obtaining water permits: ZABS, WARMA -Hatcheries -Changes in Climate -Government good will/diversification policies
	Describe what problem the innovation is solving?	-Malnutrition and poverty -depletion of fish in natural water bodies -vulnerability to climate change -Fish deficit	Describe the context (Social geographical, agricultural) where the innovation will be launched?	Where there are water bodies
	What is the purpose of scaling innovation?	-Building resilience to climate change shocks -Diversifying small holder systems -Improve food/nutritional security and income -Maintain fish populations/diversity -Employment creation	Describe what your innovation will replace?	-Depleted fish population -Income/nutrition diversification
	Who will use the innovation?	-Fish farmers -Fish traders -Feed/other input supplies -Policy makers -Fish processors -Consumers	At what scale do you want to have an impact (Community, regional national)?	Community, Regional, national
	Describe what Social change the innovation is intended to achieve?	Improved livelihood i.e income, gender equity, nutrition	What is the desired timeline for this impact to become a reality?	5-10 years National level
Group 4: Go Farm Digital	What is the core innovation you aim to scale	-Animated videos on improved seed varieties -Translated in local languages	Are there other innovations or changes that are necessary for your innovation to scale successfully?	-Smart phone (Farmers) -Projector (Extension staff)
	Describe what problem the	-High good agricultural practices (GAP) ratio	Describe the context (Social geographical,	-Geographically can be launched at all levels –

	<i>innovation is solving?</i>	-Farmer: Extension agent e.g 1000:1 e.g Zambia -Lack of updated information on GAP and improved crop varieties	<i>agricultural) where the innovation will be launched?</i>	Camp, zone, District etc -At farmer level
	<i>What is the purpose of scaling innovation?</i>	-Provide quality and timely information on farmers on improved crop varieties and GAP --Reach more farmers	<i>Describe what your innovation will replace?</i>	Compliments all other innovations
	<i>Who will use the innovation</i>	-Extension officers -Farmers -Other stakeholders like private sector	<i>At what scale do you want to have an impact (Community, regional national)?</i>	Community
	<i>Describe what Social change the innovation is intended to achieve?</i>	-Enhance farmer knowledge on GAP -Complement existing innovations -Attract youth	<i>What is the desired timeline for this impact to become a reality?</i>	Minimum 5 years

Annex 2: Summary of group work output for Stage 1b on outlining existing scaling strategy

Group type/responses to questions	Group 1 Conservation agriculture	Group 2 Improved cowpeas seed	Group 3 Aquaculture	Group 4 responses Digital tools
What type of innovation training is planned, who is delivering it, and who is it targeted for?	-Awareness creation on the advantages and disadvantages of conservation agriculture, GESI and climate adaptive techniques. WHO, CFU, CGIAR Targeting men, youth, women, people with disability	-Training in production of improved cowpea varieties -Stakeholders' NGO's -Government Agencies SCCI Extension services -Training in good agricultural practices -Training in post-harvest handling -targeted: farmers (Women& youth) Training business skills	-Fish seed production and multiplication -Fish management -Fish processing and value addition -Nutritional education for consumers	-Digital extension Training of extension staff and lead farmers -Stakeholders e.g. AID-I project/SAWBO team -Extension staff
What communication strategies are you using to promote innovation? Who is involved? What media?	-Community dialogue sessions -Radio -Farming cooperatives, stakeholders -Workshops	-Physical meetings -Demonstration plots -Food fairs -Farmer's field schools - Mobile messaging Social media	-Drama -Radio programs -Social media -Local extension	-Training workshop -Developers of technology - Stakeholders in value chains -Ministry of Agriculture -Call/Email/Invitations

		WhatsApp Stakeholders -Farmers -NGO's -media houses -seed companies -Government -Community leadership -Radio/TV/Phones		
What else are you doing to make it easier for people to access, use and benefit from your innovation?	-Advocacy -Providing financial support -Engagements with communities -Collaborations with various partners -feedback mechanism tool	-Providing advisory services through media -Seed fairs Repackaged feed into small packs	-Curriculum review of education -Working with nutritional advocates to teach the value of consuming fish -Capacity	-Shareable videos -Translated into local languages, -Provide flash drives -Phone memory cards -TV -Radio (Community)
What partners are you working with?	-Traditional leaders -Farmers -Media -Government -NGOs -Financial Institutions -Private Sector -Youth	-NGO's -Community based organizations -Government (ZARI, SCCI) Extension workers -Farmers -Community leadership	-Nutritionists -AGRO Dealers -Researchers -Farmers -Civil Society -Mobile service providers -NGOs	All stakeholders in the value chain
How will the intended users benefit from this innovation?	-Through yield increase -Nutritional improvement -Cost reduction -Increased income -Environmental sustainability -Behavioral change -GESI	-Improved yield -Improved income -Improved food and nutrition security -Cowpea improves animal health	-Increased food and nutritional security -Increased income -Increases fish populations -Reduced poverty Employment creation	-Enhanced knowledge -More farmers reached with advisory message -Improved nutrition -Increased productivity

Annex 3: List of trainees

S/N	Name	Gender W/M	Organization/ Institution	Position/ Expertise	Email Address	Consent to take pictures and use for publishabl e report (YES/NO)
1	Ireen Ntoka	Woman	Conservation farming unit	Administration and Human Resources	ireen@conservationfarming.org	Yes
2	Misozi Mkandawire	Woman	Lupiya	Agency agricultural manager	Misozi.mkandawire@lupiya.com	Yes
3	Jestone Mhango	Man	ZRDC	Researcher	morefoodzambia@gmail.com	Yes
4	Dennson Siame	Man	SeedCo	Agronomist	dennson.siame@seedcogroup.com	Yes
5	Mutinta Mubita	Woman	IITA	Intern	mmubita@earth.ac.cr	Yes
6	Sibeso Consent	Man	IITA	Youth Coordinator	C.Sibeso@cgiar.org	Yes
7	Munyaradzi Mutenje	Woman	IWMI	Scientist	M.Mutenje@cgiar.org	Yes
8	Chiboola Milimo Mildred	Woman	ZARI	PARO	Milimoboola@gmail.com	yes
9	Bernadette Chimai	Woman	UNZA	Researcher	bchimai@unza.zm	Yes
10	Stanley Mutale	Man	NASFAZ	Program Officer	drscmuta@gmail.com	Yes
11	James Chibwe	Man	NASFAZ	Extension Officer	Cherrubchibs@gmail.com	yes
12	Mundia Ernest	Man	Agricomm	Communication	Ernest@agricomm.media.com	Yes
13	Patrick Marwizi	Man	Rainbow Health Solution	Manager	patrickmarwizi@gmail.com	Yes
14	Willbroad Musanshi	man	Hopeways farms	Manager	Willbroadchabcela@gmail.com	Yes
15	Grace Musonda	Woman	CIMMYT	Seed system Specialist	g.musonda@cgiar.org	Yes
16	Davis Chipapa	Man	Catholic Relief Services (CRS)	Programs assistant	Davischipapa12@gmail.com	Yes
17	Yvonne Sakala	Woman	NASFAZ	District Coordinator	Yvonesakala@gmail.com	Yes
18	Mwanda Francisca	Woman	ZARI	Senior Researcher	Kankumwanda@gmail.com	Yes
19	Adane Tufa	Man	IITA	Agricultural economist	a.tufa@cgiar.org	Yes
20	Regina Kapinga	Woman	IITA	Advocacy & Resource Mobilization	r.kapinga@cgiar.org	Yes

21	Mutunga Japhet	Man	CIMMYT	Legume seed system associate	j.mutunga@cgiar.org	Yes
22	Mary Mumba	Woman	NASFAZ	Gender coordinator	Mumbamary6@gmail.com	Yes
23	Lembris Laizer	Man	IITA	Project officer	L.laizer@gmail.com	Yes

Annex 4: Schedule for the GenderUp training program

Time	Activity	Responsible person
Day 1 – Monday 11th November 2024		
8.30 – 9.00 am	Arrival and Registration	Beauty Liundi & Charity Simaundu
9.00 – 9.30 am	Welcome and Introductions	Millicent Liani
9.30 – 9.40 am	Opening Remarks	Dr. David Chikoye – One CGIAR Country Convener of Zambia, and UU IITA Lead
9.40 – 9.45 am	Setting up the scene	Millicent Liani
9.45 - 10.00 am	Introduction to Ukama Ustawi Initiative WP5 Empower and Engage; and the training objectives	Millicent Liani & Everisto Mapdeza
10.00 – 10.15 am	Introduction to GenderUp Methodology for Responsible and Inclusive Scaling	Hanna Ewell
10.15 -10.30 am	Pre-Survey	Hanna Ewell & Millicent Liani
10.30 – 11.00 am	Group Photo, followed by Tea/coffee break	Agricomm and All
11.00 – 11.40 am	Introduction to Scaling – Overview and Concepts	Hanna Ewell
11.40 – 12.00 pm	Mapping of Core Innovations and Prioritization	Millicent Liani and Hanna Ewell
12.00 – 12.30 pm	Developing Scaling Ambition – Group work activity	Millicent Liani and Hanna Ewell
12.30 – 13.00 am	Plenary Presentations and discussions of the Scaling Ambitions	Hanna Ewell & Vincent Akamandisa
13.00 – 14.00 pm	Lunch break	All
14.00 – 14.50 pm	Social Dimensions and Intersectionality	Hanna Ewell
14.50 – 15.40 pm	Social Dimensions Survey - Group work activity	Millicent Liani and Hanna Ewell
15.40 -16.00 pm	Tea/Coffee break	All
16.00 -16.50 pm	Plenary presentations and discussions on the social dimensions for each core innovation	Millicent Liani, Hanna Ewell & Vincent Akamandisa
16.50 – 17.00 pm	Wrap up of day one	Millicent Liani
18.00 – 20.00pm	Welcome Cocktail for all	Beauty Liundi & Charity Simaundu
Day 2 – Tuesday 12th November 2024		
8.30 - 9.00 am	Reflection and Recap of Day 1	Millicent Liani
9.00 – 9.40 am	Understanding Implications of Intersectionality - Group work activity	Hanna Ewell & Millicent Liani
9.40 – 10.20 am	Plenary Presentations and Discussions on the Implications of Intersectionality for each core innovation	Millicent Liani, Hanna Ewell & Vincent Akamandisa
10.20 – 10.50 am	Tea/coffee break	All

10.50 -11.20 am	Persona activity - Group work activity	Hanna Ewell
11.20 -12.00 pm	Mitigating Consequences and Embracing Opportunities -	Hanna Ewell & Millicent Liani
12.00 – 13.00 pm	Mitigating Measures - Group work activity	Hanna Ewell & Millicent Liani
13.00 – 14.00 pm	Lunch break	All
14.00 – 14.40 pm	Plenary Presentations and discussions on mitigating measures for each core innovation	Millicent Liani, Hanna Ewell & Vincent Akamandisa
14.40 – 15.50 pm	Integration GenderUp into Project Management - Group work activity, gallery walk and discussions	Hanna Ewell & Millicent Liani
15.50 -16.10 pm	Tea/Coffee break	All
16.10 – 16.35 pm	Post-Survey and Training Evaluation	Millicent Liani, Hanna Ewell & Vincent Akamandisa
16.35 -16.50 pm	Wrap up and Reflections	Millicent Liani & Everisto Mapedza
16.50 – 17.20 pm	Award of Training Certificates	Dr. David Chikoye, Hanna Ewell & Millicent Liani
17.20 – 17.30 pm	Closing Remarks	Dr. Regina Kapinga – RII WCA

Annex 5: Evaluation form for the training on responsible and inclusive scaling using GenderUp

Participant Name:

Gender:

Institution/organization:

Designation/job title.....

Country

Email address.....

- a) On a scale of 1-5 provided below, how would you rate the training workshop as per the following components?

1=Strongly disagree; 2=Disagree; 3=Neutral; 4=Agree; 5=Strongly agree

Component	Rating
1) The objectives and expectations were met	
2) The content was relevant to the needs of my work	
3) The amount of new information and knowledge was good	
4) Participation and interaction were encouraged	
5) Would recommend the training to my institutional staff in a similar position	
6) Facilitator/s were knowledgeable on the topics	
7) Would like to attend a similar workshop in future	

8) Adequate time was provided for questions and discussion	
9) Workshop was the right length	
10) The training venue and facilities were adequate and comfortable	

- b) What is your key take-home message/s from the workshop?
- c) What is it that you did not understand well?
- d) Please provide us with recommendations for improvement of future GenderUp workshop.



Millicent L. Liani, IITA, Dar es Salaam, Tanzania, M.Liani@cgiar.org

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Vincent M. Akamandisa, Independent Gender Consultant, Lusaka, Zambia,
vmakamandisa@gmail.com

Melita Lungu, Independent Gender Consultant, Lusaka, Zambia, Melitalungu@gmail.com

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