

SCALING SCAN REPORT:

Ghana Livestock Vaccine
Innovation Fund Project



RESEARCH
PROGRAM ON
Livestock



GHANA



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Acronyms & Abbreviations

ASAT	Agricultural Scalability Assessment Tool
CARE	Cooperative for Assistance and Relief Everywhere
CCPP	Contagious Caprine Cleuropneumonia
CGIAR	Consultative Group on International Agricultural Research
CIMMYT	International Maize and Wheat Improvement Center
COVID- 19	2019 novel Coronavirus disease
CRP	Consultative Group on International Agricultural Research Program
GAA	Gender Accommodative Approach
GTA	Gender Transformative Approach
I@S	Impact at Scale
IEC	Information and Communication Materials
ILRI	The International Livestock Research Institute
LVIF	Livestock Vaccine Innovation Fund
M&E	Monitoring and evaluation
ND	Newcastle Disease
PPP	Public Private Partnership
PPR	Peste Des Petits Ruminants
VSLA	Village Savings and Loan Associations

Executive Summary

This Scaling Scan Report analyses the ‘Transforming the vaccine delivery system in Ghana: identifying approaches that benefit women’ project, also known as the Women Rear project in Ghana, part of the Livestock Vaccine Innovation Fund (LVIF) Project Program of International Development Research Centre (IDRC) using the International Livestock Research Institute’s (ILRI) Scaling Scan Approach and Tools¹. The scaling scan assessment involved the Cooperative for Assistance and Relief Everywhere (CARE) International in Ghana, Cowtribe Technology in Ghana, ILRI, and the Ghanaian government’s District department of Agriculture. The scaling scan was conducted via a series of synchronous and asynchronous virtual sessions involving the project staff and other stakeholders.

The goal of this scaling scan is to help the project assess and monitor the scalability of transforming the vaccine delivery system under Women Rear project. This report highlights how the scaling scan process and its outcomes of helping the project team and stakeholders:



Appreciate the multiple dimensions of scaling



Develop a realistic scaling ambition for the project to continuously monitor



Understand the role non-technical factors play in scaling through their interaction with the scaling ingredients



Identify bottlenecks for scaling and provide recommendations to mitigate them



Develop a scaling mind-set

ILRI’s scaling approach is summarized in the [‘scaling better, together’](#), which is a modular approach with three possible “tracks”: a light, a standard, and an extended track. The light track employs an adapted version of the scaling scan tool developed by the PPPLAB and CIMMYT. The steps here are twofold: (1) preliminary interactions with the project team to introduce the work; the main output is a scaling study plan; (2) facilitated workshops that include introducing the approach, tools, and a visioning exercise; the main outputs are a scaling ambition, and scaling scan report. The standard track is an evidence-based deep-dive study employing the Scaling Readiness² characterized by a series of interviews with key project experts combined with a systematic evidence review of peer-reviewed resources such as journal articles, books, book chapters and rigorous technical reports of the project that yields a Complete Scaling Readiness Study. The extended track introduces and implements support to scaling guidelines and includes project management support and related activities such as data analysis and dashboards for advanced monitoring and evaluation (M&E) of innovation and scaling activities. This report is limited to the light track process of the ILRI Impact at Scale framework.

This Women Rear scaling scan, one in a series of 10 similar scans being done in the year 2021 across ILRI and the Livestock CRP portfolio, is organized into several sections, starting with a section that highlights the scaling approach adopted for the analysis. The second section gives an overview of the project under study, followed by the actual scaling scan process section that details the whole process, including the results of the various sub-sections, being scaling ambition, scaling ingredient survey, critical analysis of the scaling ingredients, potential opportunities, and bottlenecks. Finally, the report concludes with a summary and recommendations derived from the process.

1. ILRI’s Scaling Scan Approach and Tools was designed based on the original Scaling Scan Approach developed by PPPLAB and CGIAR CIMMYT. It includes tools and practices that enable the implementation of Scaling Scan remotely and increase the user friendliness of Scaling Scan.

2. Sartas, M., Schut, M., van Schagen, B., Velasco, C., Thiele, G., Proietti, C. and Leeuwis. 2020. Scaling readiness: Concepts, practices and implementation. CGIAR Research Program on Roots, Tubers and Bananas (RTB). January 2020, pp 217.

A facilitated participatory process involving the core project team, key public and private partners, and relevant government agencies was followed to develop a consolidated scaling ambition for the project. This scaling ambition was further reviewed using a set of 10 scaling ingredients and the ensuing results used to discuss potential opportunities and bottlenecks to achieving the scaling ambition, as well as the necessary actions.

A clear scaling ambition is the foundation for the work. After deliberations, the project agreed on the following scaling ambition:



Photo credits: Memunatu Salifu

By 2023, CARE, Cowtribe, and ILRI—together with other local partners (District Departments of Agriculture)—will facilitate the adoption of ND and PPR vaccines through a Gender Transformative Approach that supports the work of women animal health service providers from (the current) 20 communities to an additional 20 communities, targeting a total 4,000 women farmers in Pusiga and Bawku West districts of Upper East Region in Ghana. With this work, we also aim to improve animal health delivery policies that support women animal health service providers to reach women livestock keepers, ultimately improving farmers' livelihoods, reducing their poverty, and contributing to achieving gender equality. From 2023, leadership will be transitioned to the Department of Agriculture and Cowtribe to scale to different locations and reach more women livestock farmers.

The ambition, in summary, seeks to reach more targets by numbers and regions, impacting on relevant policy spheres (animal health delivery and women's participation and involvement) and working towards a norm change in vaccine delivery as observed from the project's objectives linked to the scaling ambition.

Through the scaling ingredients survey, we find knowledge and skills, technology and practice, and leadership and management to be the three scaling scan 'ingredients' that were highly scored by the group and are therefore the strongest of the ingredients that the project will look to exploit to enhance the chances of realizing the project's scaling ambition. Awareness and demand, collaboration, and business cases were the lowest-scored ingredients and therefore potential bottlenecks to reaching the scaling ambition. It is suggested that the group identifies these three as areas that require some intervention to enhance the chances of realizing the scaling ambition. Assessing demand for GTA is a question that has more than meets the eye; this is because "gender inequality is mostly rooted in lack of awareness of gender-based disadvantage" and therefore means it is not entirely unexpected when stakeholders think there is no demand for a gender-responsive intervention. However, the variance amongst categories was very small, which could be an indicator that because participants were not sure about the questions, they reverted to the average. For this reason, critical analysis went further to include highlighted sub-ingredients with abnormal scores.

SOME OF THE CONCLUSIONS AND RECOMMENDATIONS THAT EMERGE FROM THE SCAN INCLUDE:

- The project's availability of communication materials can facilitate the transfer of innovation knowledge
- Innovation in ICT-enabled vaccine value chain systems is relevant for women farmers and animal health workers.
- There's adequate leadership and management within the actors to drive the necessary efforts to reach the scaling ambition. However, the roles and responsibilities of individual stakeholders are unclear and may negatively impact accountability.
- Innovation provides viable business cases for relevant actors, which is a key incentive for women to participate and benefit. However, there is a lack of information to sharpen these business case which could negatively impact women's engagement in the value chain.
- The actors currently involved are relevant to reaching the stated scaling ambition. However, there is a missing link that facilitates the development of a joint strategic direction.
- Repurpose existing learning resources to better target different actors
- Establish and communicate the commercial viability of the role, women are encouraged to undertake.
- Optimize the delivery of this gendered vaccine system
- Align the expectations of all actors
- Create impactful collaboration through an actor platform.

LIMITATIONS OF THIS SCALING SCAN

- The approach is driven primarily by expert opinion.
- The ingredient scaling survey noted by all stakeholders assumes a similar level of awareness on all the innovation components by all participants.
- This scan is limited to the light track of the ILRI scaling framework.

Overview of the scaling study approach

Scaling in projects can be defined in numerous ways, considering the different dimensions of scaling³, focusing on more significant numbers (scaling out), transforming institutional conditions (scaling up), and/or cultural norms (scaling deep). The scaling out dimension refers to reaching more beneficiaries of a project’s innovation through activities, including training and awareness. Scaling up refers to the institutionalization of sustainable scaling up through policy changes, strategy improvements and development. The scaling deep dimension refers to the integration of norm change into the innovation being scaled for sustainability through, for example, capacity development and awareness-raising.

ILRI’s scaling work has adopted a working definition where scaling includes increasing the number of individual users of an innovation (novel products, services, technologies), the organizations for whom the users are working, the disciplines to which the users belong to, the changes to which the innovation contributes, the locations where the innovations are used and any other areas or fields in which the innovations are used. ILRI considers scaling achieved when the increase is no longer dependent on direct inputs by projects.

To make scaling concepts and tools more accessible to ILRI researchers and their partners, ILRI’s Impact at Scale program (I@S) reviewed the landscape of scaling to summarize relevant approaches and tools from which livestock projects could benefit and provided those projects with a detailed process on how they could scale more effectively. The resulting ILRI framework provides an overview of the steps, together with short summaries and assessments of nine tools related to the scalability assessment. Figure 1 below shows the various scaling tracks (light, standard and extended) available to a project, depending on the different project circumstances and preferences.

3. Scaling of innovations: 3 dimensions <https://hdl.handle.net/10883/19592>

Figure 1: ILRI scaling framework.



The light track (the focus of this report) utilizes the scaling scan tool developed by the PPPLAB and CIMMYT, centered around working with the project team to develop a scaling ambition and using the tool to determine strengths and weaknesses to achieve the scaling ambition. The tool is a 10-part survey comprising 40 questions usually scored by the project team, including stakeholders and other involved partners, to determine possible strengths and weaknesses in achieving the stated scaling ambition. The outputs from this track are a scaling plan, a realistic project scaling ambition and scaling ingredients' reports.

Women Rear Project: Overview

Launched in March 2019, the Women Rear project is led by CARE International, Ghana, with ILRI and Cowtribe Technology, Ghana, as the main partners.

The consortium seeks to transform vaccine delivery systems for chickens and goats in Ghana so that it can serve also the needs of women livestock keepers. The Women Rear project aims to increase the use of vaccines by women smallholder livestock farmers and enhance their ability to benefit from healthier livestock, improved livelihoods and increased empowerment. To achieve this goal, the project engages with both Gender Accommodative Approaches (GAA) and Gender Transformative Approaches (GTAs) and compares their performance in terms of making the vaccine delivery system gender-responsive.

The objectives as listed in the project proposal are:



To identify, test, and monitor two approaches—one gender accommodative and one gender transformative—to developing the vaccine delivery system for Newcastle disease in chickens (ND) and Peste des Petits Ruminants (PPR)/Contagious Caprine Pleuropneumonia (CCPP) in goats in selected districts of Ghana;



To create knowledge on institutional requirements for a vaccine delivery system that is responsive to the needs of both women animal health service providers and women farmers;



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To create knowledge on institutional requirements for a vaccine delivery system that is responsive to the needs of both women animal health service providers and women farmers;

At the core of the Women Rear project is the fact that approximately 63% of the extremely poor people in Ghana depend on agriculture, with women accounting for the majority. The project focuses on backyard poultry and goat production systems as they play a very significant role in women farmers' livelihoods and are owned mainly by women. Significant causes of death are ND in chickens, and PPR and CCPP in goats. According to the Women Rear project proposal, PPR vaccination is driven by the government. While vaccines are available, they often exclude women farmers as the vaccine campaigns and programs are not centered on the unique women's needs, preferences and capabilities necessary for access. Women, in fact, are generally unable to reach the vaccine and animal health support system of Ghana with adverse consequences on the health of the livestock kept by women, and on the livelihood and nutrition of these women and their households.



Photo credits: Prince Maxwell Etwire

While working to make vaccines more accessible to women farmers, the project further aims to identify, test and monitor the effectiveness of two gender approaches towards developing the vaccine delivery system for ND (poultry) and PPR/CCPP (goats) in specific districts. The two approaches are the gender accommodative approach (GAA - which works with the current social arrangements) and the gender transformative approach (GTA - which aims to engage with gender norms to address the root causes of gender-based disadvantage). An effective vaccine delivery system for women farmers would improve livelihoods and food security, and enhance women's empowerment in Ghana.

The Scaling Scan

Scaling ambition development

The Scaling Scan study kicked off on 9th December 2020 with the first virtual workshop to introduce ILRI's scaling approach and tools to a group of 13 project participants drawn from CARE International, ILRI, Cowtribe and the Ghanaian government district agricultural department staff.

To better assess the scaling ingredients of the Women Rear project, it was decided to first map out the landscape of the participants' familiarity with the concept of scaling as applied in research and development work. An anonymous "Mentimeter" quiz (an app used to create presentations with real-time feedback) was undertaken. Responses from the participants (see Figure 2) revealed that scaling was mostly understood as an increase in 'numbers reached' and/or reaching 'new or bigger regions' with an innovation proven to work. This showed an understanding bias of scaling to mean or refer to the 'scaling out' dimension. It underlined the importance of this scaling assessment and the scaling team in introducing the other two scaling dimensions (deep, up) that allow changes in policy, strategies and institutional norms for sustainable scaling of innovations. For the Women Rear project, scaling out through increasing the use of vaccines by women smallholder livestock farmers will be complemented by system improvement and changes to facilitate a better vaccine approach favorable to women livestock farmers (scale up) and norm changes in vaccine system delivery to include women animal health workers and farmers (scale deep). This scaling scan ensures the project does not stop at scaling out and that the other two necessary dimensions are considered in the scaling vision.

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Figure 2: Results of the meaning of scaling.

WHAT DOES "SCALING" MEAN TO YOU?

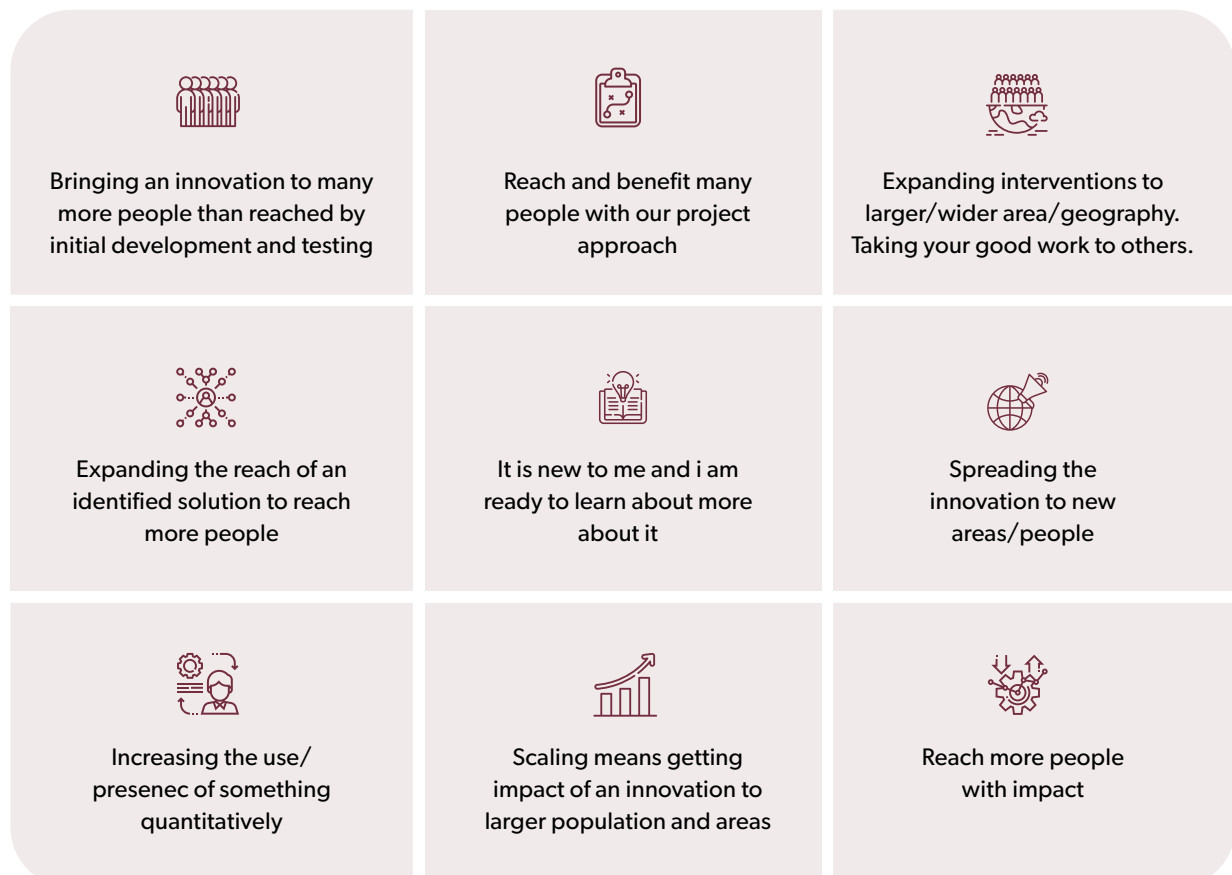
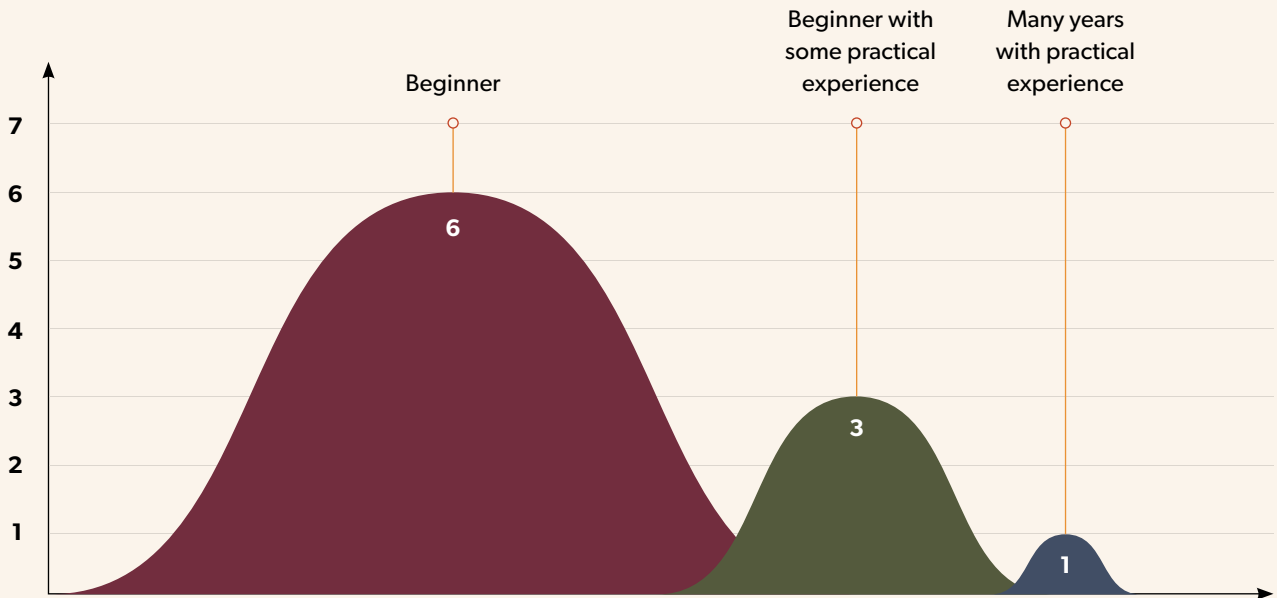
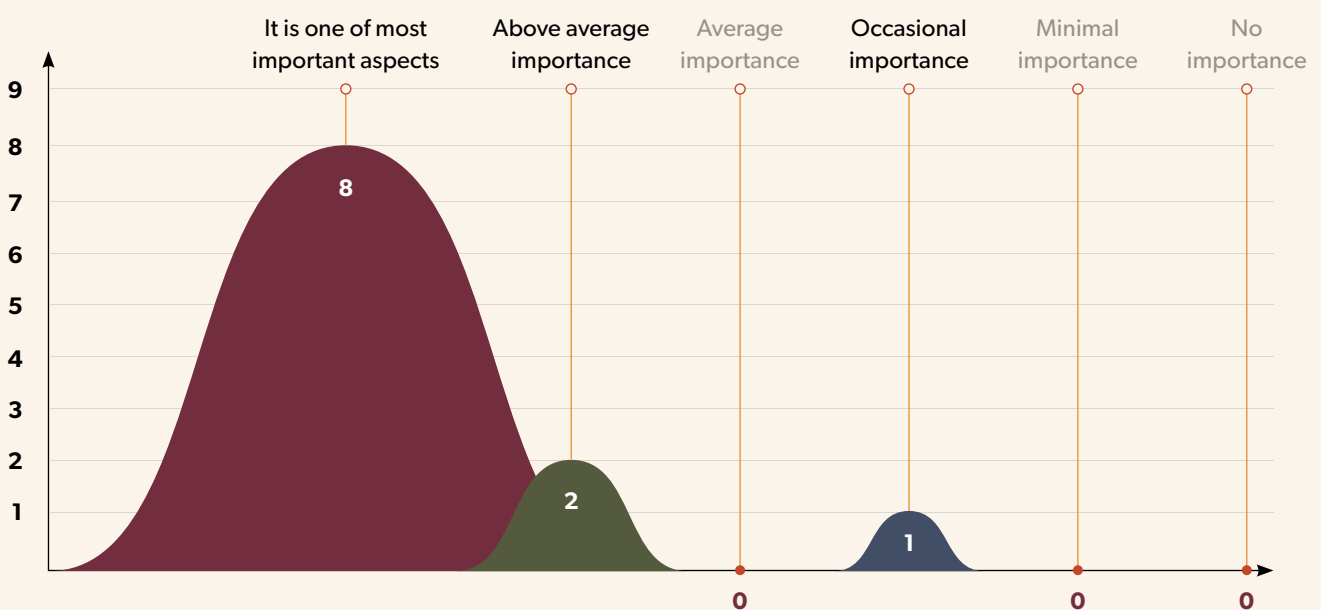


Figure 3: Results of experience with scaling.



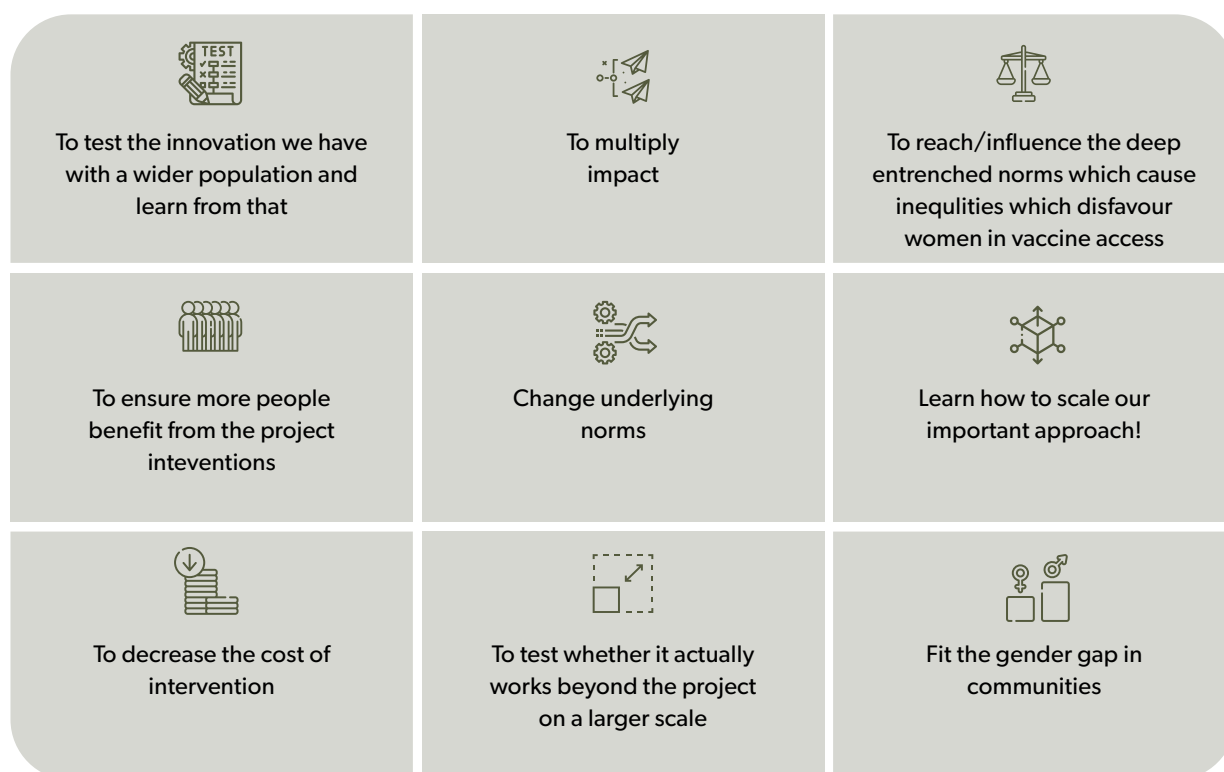
The group had relatively little prior experience with scaling concepts, with most self-reporting to be beginners (6 out of 10), some self-reporting as beginners with some field experience (3 out of 10) and only one person identifying as 'having many years of experience' with scaling concepts and practice.

Figure 4: Results of the importance of scaling.



While most participants seemed to have little experience or familiarity with scaling in their work, the majority (8 out of 10) agreed that scaling was one of the most critical aspects of their work.

Figure 5: Why would you bother to scale?



Of the primary reasons to consider scaling, the main reason was to increase impact and benefits from the project's innovation, with additional reasons being to learn, to change current norms that negatively impact women farmers and to enhance sustainability.

The workshop proceeded with the scaling facilitation team taking the participants through sessions that included an overview of scaling concepts and the ILRI I@S scaling approach, as well as covering scaling tools and a 'how to' session on developing a realistic scaling ambition as the first step of the scaling scan tool applied in the light track. A realistic scaling ambition should clearly define what is being scaled, who is doing what, where the innovation is being scaled and what elements in the system need changing to accommodate the scaling ambition. The latter includes a 'responsibility check' on the possible negative impact on society or the environment that the innovation might introduce, which needs to be addressed before implementing scaling activities.

The development of the scaling ambition began with the core project team preparing a first working draft and presenting it to the stakeholders in the workshop, followed by a quick debriefing session for participants to react to the draft. More time was then allocated for the stakeholders to provide their input in groups after the workshop via asynchronous group meetings. Afterward, the inputs were consolidated to inform the final version of the Women Rear scaling ambition. The whole process of scaling ambition ensured that the project and stakeholders take part in developing the scaling ambition to foster a sense of ownership and accountability, which is vital since the project's goal can only be achieved with contributions from all the relevant actors.

The Women Rear Scaling Ambition



By 2023, CARE, Cowtribe, and ILRI— together with other local partners (District Departments of Agriculture)— will facilitate the adoption of ND and PPR vaccines through a Gender Transformation Approach that supports the work of women animal health service providers, from (the current) 20 communities to an additional 20 communities, targeting a total 4,000 women farmers in Pusiga and Bawku West districts of Upper East Region. With this work, we also aim to improve animal health delivery policies that support women animal health service providers to reach women livestock keepers, to ultimately improve farmers' livelihoods, reduce their poverty and contribute to achieving gender equality. From 2023, leadership will be transitioned to the Department of Agriculture and Cowtribe to scale to different locations and reach more women livestock farmers.

Photo credits: Memunatu Salifu

From the final scaling ambition, we see a vision to double the reach in terms of communities previously reached, from 20 to an additional 20. The ambition aims to confront systematic pain points by improving animal health delivery policies to better accommodate women farmers and animal healthcare workers. Scaling out to increase numbers and regions is being pursued through the application of Cowtribe Technology's mobile-enabled vaccine management system that provides a unique ability to reach vaccine actors in hard-to-reach areas that are not currently adequately covered. To facilitate scaling up, CARE and ILRI have documented opportunities and constraints in the current vaccine delivery, including identifying the best ways of targeting women with these vaccines and seeking to test for the most appropriate gender-responsive approach to facilitate this desired change through implementing and assessing both GAA and GTA. These two approaches are an attempt to improve strategy and constitute scaling up through policy change or improvement. From the project's theory of change, there is a desire for vaccine actors to begin seeing women as valued customers and to ensure that women animal health service providers are supported. This change in norm constitutes scaling deep.

The scaling ambition addresses sustainability by planning from the outset to include and eventually hand over the work to the government's Department of Agriculture and Cowtribe Technology, Ghana, a major private player in the vaccine context under study. From the scaling scan workshops, there was government involvement in the process. To achieve this sustainability ambition, both community and country-level government bodies need to be involved in the project, which was not clear from the participation in the scaling workshops. In the short remaining project period, there needs to be more active participation of both levels of government in working towards the scaling ambition. Cowtribe has been involved in the scaling process from the start and is a key actor in the project. Consistency is critical in the remaining period to enhance the possibility of sustaining the project period alongside relevant government actors.

Scaling ingredients scoring

After the asynchronous work on the scaling ambition by the project team and stakeholders, a second virtual workshop was held on 15th January 2021.

Figure 6: Results of the group's visions.

YOUR VISION OF SUCCESS



In this workshop, the I@S team guided the participants through a 'visioning process' meant to ensure that the various stakeholders were working towards converging visions about the project's goal of increasing the use of vaccines for smallholder women livestock farmers in the selected districts in Ghana. The participants included relevant technical staff from Plan International Ghana, ILRI, Cowtribe and the government. The visioning session included asking participants what they considered as their vision of success concerning the Women Rear project and what actors they considered critical to this vision. The group's vision of success revolved around i) increasing access to critical vaccines by smallholder women livestock farmers, ii) enhancing the capacity of women animal health workers to distribute vaccines, iii) increasing the productivity of smallholder women livestock farmers, and iv) improving the current vaccine delivery system into a gender transformative one that includes female veterinary staff and women farmers.

Key actors identified as critical to the success of the vision of strengthening the opportunity for women's roles in vaccine delivery and use include:

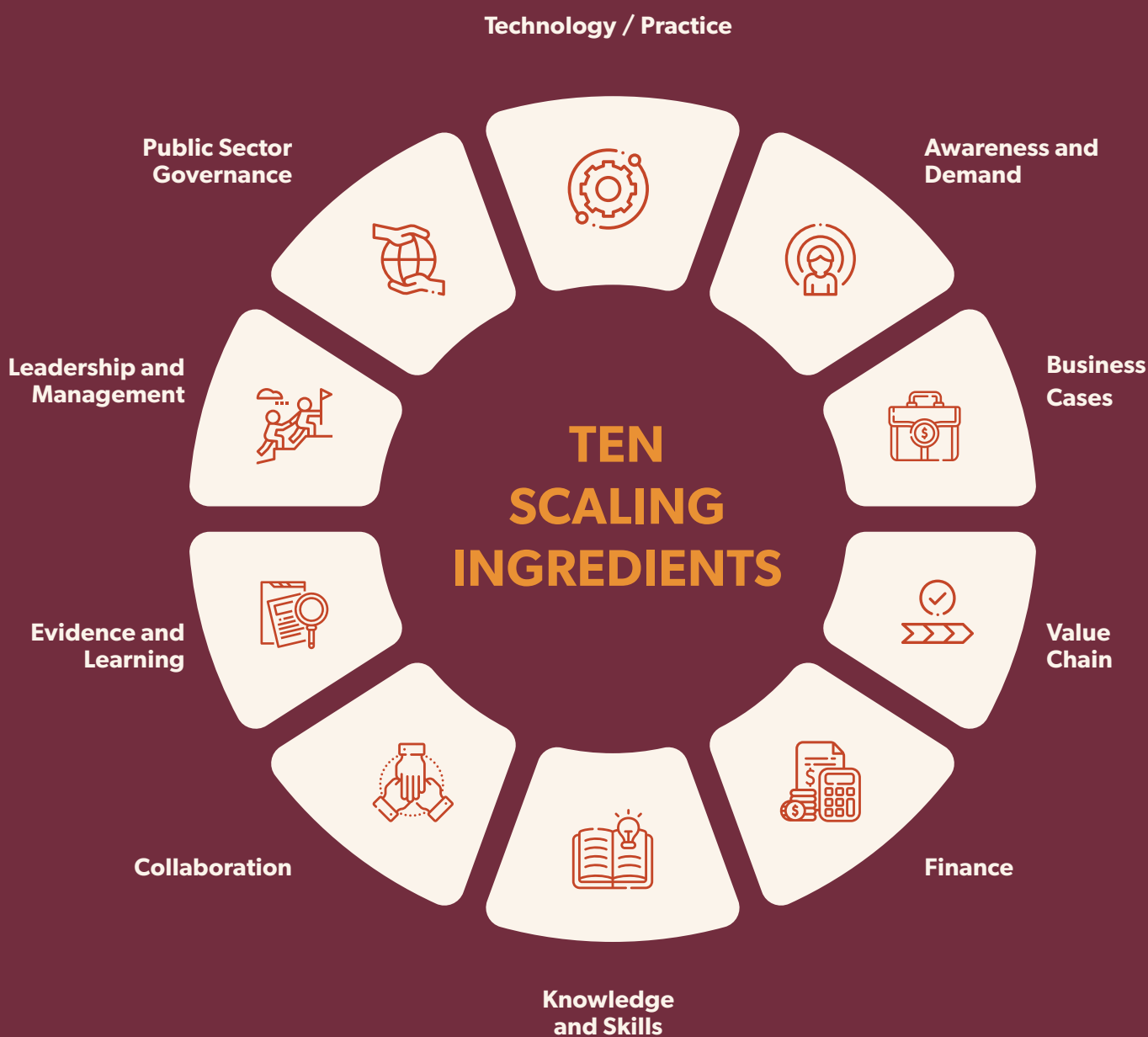
- Women farmers, communities with women farmers, men in the same households with women farmers, men farmers, community leaders.
- The Ghanaian government – Department of Agriculture, veterinary services directorate, district veterinary officers.
- Private veterinary service providers, women veterinarians.
- Livestock farmers.
- Private companies in the vaccine value chain.

Figure 7: Who are the key actors that need to play a role for us to succeed?



The focus of the second workshop was to introduce participants to the second step of the scaling scan tool. Step 2 of the scaling scan tool involves scoring the scaling Ingredients survey, which focuses on 10 ingredients that have proven useful in identifying strengths and weaknesses that might significantly impact the chances of the project realizing its scaling ambition.

Figure 8: Ten scaling ingredients⁶.



6. Scaling Scan CIMMYT/PPPLab

Participants were given an overview of the survey followed by a brief session to practice using the survey tool. It took less than an hour to complete scoring the scaling ingredients survey, which comprised Likert scale questions with a provision for open-ended text responses to rationalize the selected Likert score. The scaling ingredients survey evaluated the project against these 10 areas to achieve the stated scaling ambition (see Figure 8 above). Each of the 10 ingredients had 4 questions, cumulatively contributing to the specific ingredient overall score.

The Likert scale rankings used were:

1 = No, this is very uncertain OR not enough information to answer

2 = Serious doubts

3 = Some doubts/unsure

4 = Quite confident

5 = Yes, definitely, this is not an issue for my scaling case OR not applicable

After the workshop, the participants in groups of about four people set out to score the survey based on the information they had on the project and their understanding of the context of the innovation. After the asynchronous group discussions and scoring, the results were automatically consolidated to form the project's scaling ingredients results.

Scaling ingredients survey results

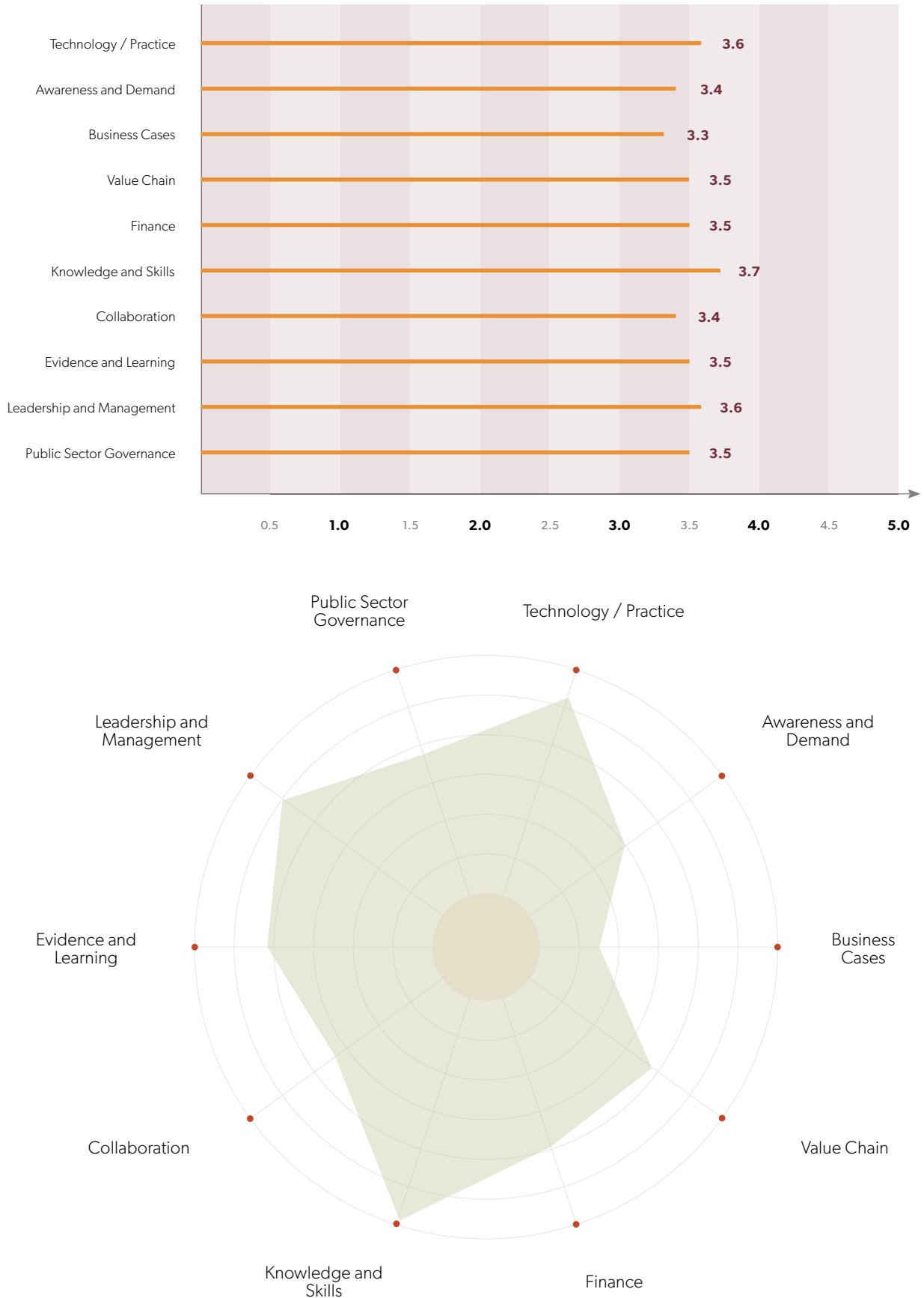


Photo credits: Memunatu Salifu

All 10 ingredients scored above average from the consolidated results. The lowest scoring ingredients were *Business Cases*, *Collaboration*, and *Awareness and Demand*. Although all ingredients scored above average, it is important to note that the survey was not evidence-based but instead based on self-assessment scoring by the group after deliberations. Therefore, while scoring above average suggests the group's general opinion was that most ingredients were on course to delivering the scaling ambition (3.5 and above), the three lowest-scored ingredients were indicative of ingredient sub-questions that received low scores, meaning that the group had some doubts or was unsure at the minimum as per the Likert scale used. This makes the ingredient and, most importantly, the underlying element/question in the ingredient with a 1, 2, 3 score, a potential bottleneck in the project's objective of achieving the stated ambition.



Figure 9: Scaling ingredients results - bar and spider charts.



Critical ingredients analysis

Table 1: Scaling ingredients results.

	Question 1	Question 2	Question 3	Question 4
Technology / Practice	4.3	3.5	3.0	3.8
Awareness and Demand	4.0	3.4	3.1	3.0
Business Cases	4.3	2.8	3.0	3.0
Value Chain	3.3	3.3	3.5	3.7
Finance	3.5	3.8	3.6	3.0
Knowledge and Skills	3.0	4.3	4.0	3.4
Collaboration	4.3	3.9	2.8	2.9
Evidence and Learning	2.5	4.0	3.9	3.8
Leadership and Management	4.0	3.5	3.0	3.9
Public Sector Governance	3.5	3.6	4.1	2.8

Most of the ingredients (7) were scored 3.5 or higher, meaning the group was primarily confident in these ingredients and their contribution towards achieving the stated scaling ambition. The margin difference between these seven ingredients was small. This kind of scoring (very low variance, no aggregate score above 4 or under 3), could typically also indicate that participants were not very confident in their scoring, so preferred to rank all areas similarly and close to the average. Therefore, it is necessary to dive deeper into some of the sub-ingredient components that scored higher than 4 and lower than 3 as done in the ingredients' analysis below as these are 'signals' to areas that the group felt were particularly strong or weak.

Potential opportunities



KNOWLEDGE AND SKILLS

The group was content that there were enough training materials to allow women livestock farmers, women animal health workers and other actors to adopt the innovation (score: 4.3). The group also agreed that the actors currently engaged were the right ones to provide and improve training programs on the sustainable adoption of the innovation (score: 4.0). To further exploit this scaling ingredient, the group suggested the following action points:

- Develop guides on GTA and GAA for gender champions and animal health service providers and the entire team and partners, including non-literate groups
- Plan for dissemination of the training materials through training
- Identify and engage local and national actors to build capacities, including through government routine activities
- Further engagement between the project's principal investigators and local universities
- Documentation of critical success factors and lessons learnt as evidence-based results



TECHNOLOGY

The gendered vaccination system (technology) being implemented was relevant to women livestock farmers and female animal health workers (score: 4.3).

The following additional activities were suggested to maximize benefits from this scaling ingredient:

- Use of existing platforms such as Village Savings and Loan Associations (VSLA) members as agents of change, including GTA in communities.
- Targeting of authorities including community leaders, women groups, men leaders, girls, and boys for engagements on GTA and other tools.
- Strategic linkages of platforms used by the value chain actors, e.g., VSLA and Cowtribe Mobile-Tech app.
- Recognize the potential of backlash from men and ensure they are engaged effectively from the beginning. This should include engagement with local and cultural leaders.
- Create safe spaces for dialogue between men and women to reflect on existing harmful norms and roles.
- Vaccine delivery from Cowtribe Technology should also target men.
- Work in collaboration with local and cultural authorities and communities on shifting towards the ultimate desired gender approach.



LEADERSHIP AND MANAGEMENT

The group was confident that the scaling process' day-to-day leadership was adequately established, recognized, and connected to the relevant actors (score: 4.0). The group was also confident in the existing leadership support for internal and external change management processes to achieve the required organization/institutional changes.

To translate this positive assessment on leadership and management into actions towards the scaling ambition, the following activities were suggested:

- Clarify the roles to be played by each partner to enhance sustainability beyond the project.
- Identify and nurture relationships with 'champions' beyond the implementation team, e.g., local, and cultural leaders, district assembly persons, religious leaders.
- Establish linkages with the media, e.g., use of radio both at district and regional level.

Potential bottlenecks



BUSINESS CASES

In Table 1 above, the group agreed that there are viable business cases for the actors within the value chain (score: 4.3). However, on the question of whether the project had sufficient information to develop and sharpen business cases for the vaccine system envisioned, the group scored 2.8, which vacillates between having severe doubts and some doubts on the existence of such information. Without documented business cases, the women-focused vaccine delivery system risks being unsustainable beyond the project timeline.

To mitigate this possibility, the group suggested:

- Start interaction with business people/entities from the beginning, leverage current partnership with Cowtribe to bring other relevant businesses on board.
- Ensure effective documentation of evidence from pilot to communicate the business case.
- Have Cowtribe lead in communicating the business cases for the innovation.



AWARENESS AND DEMAND

This ingredient was also amongst the three lowest-scored ingredients. Although the key stakeholders identified that an innovation (vaccine technology and gendered delivery) was necessary (score:4.0), from the sub-questions, the group was unsure that demand for innovation was real and growing as anticipated. This might suggest the demand was not as expected and/or that the growth was developing at an unacceptable (slow) pace. The group was also pessimistic of the possibility to segment the target group for effective marketing of the gendered vaccine system, which could be a significant bottleneck in adoption and therefore, scaling.

To mitigate awareness and demand becoming a significant bottleneck, the group suggested:

- Consistent engagement with target groups.
- Documentation and sharing of lessons with local leaders.
- Avail access to information on GAA and GTA to the communities and all relevant partners.
- Identify people who can be trained as gender champions to disseminate information about GTA and GAA.
- Ensure project visibility at all levels (communities, district to national).
- Develop a strategy that enables the team to use appropriate channels to communicate with different actors and interest groups.
- Ensure awareness about the innovation beyond the leadership of the Department of Agriculture, ensure that other field officers are well informed and participate in communicating the innovation/approach.
- Leverage on opportunities at the Department of Agriculture, e.g., the free airtime they have at local FM stations can be used for awareness creation.
- Segment and effectively target the information that the team will disseminate.



COLLABORATION

This scaling ingredient is another ingredient that scored relatively low. While the group felt the relevant actors in scaling the innovation had been engaged (score: 4.3), they were less confident that effective networks or sector platforms for joint strategic direction-setting, advocacy and creating buy-in on the desired vision of the scaling ambition, were present (score:2.8). Related to this, the group was also unsure of any existing parallel initiatives or policy processes that could serve to achieve the scaling ambition(score:2.9).

To shore up collaboration, the group suggested:

- The involvement of the community and local stakeholders is critical for the sustainability of the project.
- All involved partners to suggest sustainability plans of their roles in the innovation after the project has ended.
- Organization of periodic review sessions for feedback and action plans for improvement.
- Assigning clear roles and responsibilities, where necessary, among partners who play similar roles.
- Ensure participatory roles at all levels among key actors.
- Strengthen the relationship between Cowtribe Technology and the Department of Agriculture.
- Leverage on other platforms such as GALVmed-supported initiatives led by Cowtribe Technology and Public-Private Partnership engagements facilitated by the project to strengthen relationships with other institutions.



EVIDENCE AND LEARNING

The group felt there was effective use of modern data and IT tools to support the innovation (score: 4.0) through Cowtribe's technology and its application of data in demand planning to prevent stockouts. However, on the question of availability of useful and credible data on the impact and other parameters that could help in understanding the scaling process, the group scored 2.5, meaning they were doubtful.



PUBLIC SECTOR GOVERNANCE

The group scored the government efforts in supporting training high (score: 4.1), which provides for a conducive environment to introduce additional training on the innovation at hand (gender and vaccine technology). However, on the question of whether relevant government financing mechanisms (such as subsidies or tariffs) were smart and whether they could be applied to benefit scaling the innovation, the

Conclusions

The strengths and weaknesses identified and discussed in the critical ingredients section above differ by small margins (between 3.3 and 3.7). While there are no significant bottlenecks at the ingredient level, none of the ingredients scored higher than 4.0 (quite confident). Therefore, we focus on the sub-elements for the ingredients that scored less than 3.0 as they are potential bottlenecks that can hinder achieving the scaling ambition.

Repurposing learning resources

Under the knowledge and skills ingredient, one of the identified strengths was the availability of training material to facilitate knowledge transfer about the innovation. In contrast, pertaining to the awareness and demand ingredient, the project was uncertain that the demand for innovation was real and growing as expected. This was not entirely unexpected when dealing with an excluded group as is the case with women and vaccines in the target areas; demand is not always observable without years of related advocacy work on the same intervention. This is better captured by this food for thought by one of the project experts.



“Assessing demand for GTA is a tricky one. It entails awareness that there is a gender bias and that it comes from gender norms...if there was indeed such awareness, we would probably have no gender inequality...in other words gender inequality is mostly rooted in lack of awareness of gender-based disadvantage - which often means stakeholders think there is no need of a gender-responsive intervention.”

– Dr Alesandra Galie, Gender Expert - ILRI

Lack of demand (perceived or real) may be a potential bottleneck and needs to be addressed.

Optimizing delivery of a gendered vaccine system

Under the technology ingredient, the innovation of an ICT-accelerated vaccine value chain system was found to be relevant to women farmers and women animal health workers.

Align expectations

Leadership and management towards achieving the scaling ambition were found to be adequately established, recognized, and connected to the relevant actors. This positive assessment included support to internal and external change management processes. Unclear roles and responsibilities could affect accountability and become a bottleneck to achieving the scaling ambition by negatively affecting the achievement of key important roles in the value chain.

Building and communicating commercial viability

According to the project partners and stakeholders, the innovation has viable business cases for actors involved in the value chain. However, the group thinks there is insufficient information to develop and sharpen the business cases. Lack of documentation on the viability of business cases on the innovation weakens the project's ability to recruit women animal health workers into the value chain, which is one of the key objectives of the project.

Creating impactful collaboration

On the collaboration ingredient, the group agreed that the actors who have been engaged were relevant to achieving the scaling ambition. However, they feel that effective networks or sector platforms for joint strategic direction-setting are missing.

Recommendations

Repurposing learning resources

The project should adapt existing training materials into IEC resources for use in raising awareness and demand of the innovation amongst the various actors including women animal healthcare workers and farmers.

The project needs to see how these training materials can be repurposed to deal with some of the bottlenecks identified in the scan that include perceived lack of demand for the innovation.

These can be in the form of simple flyers and posters employing simple imagery and created in local languages to ensure the non-literate are also included. These materials can then be distributed through specific platforms identified by the project and partners as ideal in reaching key target groups necessary to raise demand. These platforms will include those preferred or used by women.

Building, and communicating commercial viability

It is recommended that the project should collect commercial viability information from existing businesses in the vaccine value chain, including Cowtribe Technology and those working with private companies, to develop business cases.

To do this, profiles should be created of the women being targeted, which could include some demographic elements, asset base information and education levels, and use these to model business cases for women.

Well communicated and targeted business cases, using validated information from existing and recognized businesses would help motivate women to enter the vaccine delivery system as entrepreneur

Optimizing delivery of a gendered vaccine system

For women (farmers and animal health workers), the project already has adequate materials, which this scan suggests should be adapted into Information and Communication Materials (IEC) materials to optimize the reach. Similarly, actions to enhance dissemination of the innovation (including the gender aspect) should be taken to reach men and encourage their support of the technology. This will help avoid potential 'backlash' from men and instead, ensure their support and participation in optimizing its delivery in Ghana.

The project should develop specific messaging for the different actors (including men) in the value chain and use the most relevant platforms (e.g., VSLA for women) to target these different actors with information on the importance, benefits of the innovation for women and society at large. This messaging should include specific information to address any real or perceived disadvantages for any actor that may arise from the innovation.

Align expectations

The project should introduce memoranda of understanding agreements targeting key actors in the value chain who are not part of the consortium agreement, to communicate roles and responsibilities in the innovation.

It is recommended that roles and responsibilities be clarified, which will help align expectations from all partners and stakeholders and enhance the chance of achieving the scaling ambition.

Limitations of this Scaling Scan

- To ensure representation beyond the project team, the scaling scan solicited participation from external stakeholders working in the value chain, ensuring that both public and private actors are part of the process and contribute to the key sessions of the process as experts. This approach, therefore, relies heavily on the expert opinions which are susceptible to information gaps and strategic behavior of the participants.
- The second step of the scaling scan process is scoring a scaling ingredient survey by all of the project team and external stakeholders involved in the process. One limitation of this is that the survey applies similar weightings to all participants, which is not always a reflection of the actual knowledge and experience of the participating stakeholders.
- The scaling ingredient survey is a lengthy survey of 40 questions structured into 10 fields that the participants and group must complete. The survey assumes the individual completing the survey is knowledgeable on the 10 ingredient fields, which is not always the case. Depending in what node of the value chain the individual operates, one might have better insight into some fields and less into others, which is not well considered in the tool.
- ILRI's scaling framework includes a light track, standard track, and extended track. This report is limited in that it only accounts for the light track. Usually, this light track is followed by a standard track using the Scaling Readiness. Scaling Readiness is an evidence-based study that provides a deep dive into the readiness of the innovation for scaling, using a scientific hierarchy of ranking evidence on the different components of the innovation. Scaling Readiness addresses the identified shortcomings of the scaling scan approach.



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