

# External Evaluation of the 2SCALE program

## Final Report

Volume I – Main Report



**ADE**  
Evidence for better policy



**KIT** Royal  
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# Acronyms

ABC	Agribusiness Cluster
AIR	American Institute of Research
AKVO	Akvo Foundation
ATR	Ability to Recover
ATT	Average Treatment Effect on the Treated
BC	Business Champion
BSS	Business Support Services
CDI	Centre for Development Impact
CRS	Catholic Relief Services
DID	Difference in Differences
ECOWAS	Economic Community of West African Countries
EPDRA	Eastern Presbyterian Development and Relief Agency
EQ	Evaluation Question
ET	Evaluation Team
FAO	Food and Agriculture Organization
FGD	Focus Group Discussions
GHS	Ghanaian Cedis
IA	Impact Assessment
IDS	Institute of Development Studies
IFDC	International Fertilizer Development Centre
IGG	Inclusive Green Growth Department
IOB	Operations Evaluation Department
KES	Kenyan Shillings
LIS	Light Intensity support
MEAL	Monitoring, Evaluation, Accountability, and Learning
MFA	Ministry of Foreign Affairs

MSME	Micro, Small and Medium Enterprises
NGO	Non-governmental Organization
ODA	Official development assistance
OECD	Organisation for Economic Co-operation and Development
PPP	Public-Private Partnerships
PSC	Private Sector Contribution
PSM	Propensity Score Matching
SEM	Structural Equation Modelling
SHF	Small Holder Farmer
SME	Small & Medium Enterprises
SNV	Netherlands Development Organisation
SUTVA	Stable Unit Treatment Value Assumption
TOC	Theory of Change
ToR	Terms of Reference
UII	Universal Impact Indicator
VSLA	Village Loans Saving Associations
WBCSD	World Business Council for Sustainable Development
WFP	World Food Program



# Executive Summary

The Netherlands Ministry of Foreign Affairs commissioned an external evaluation of the 2SCALE program, which was implemented in two phases from 2012 to 2024. The 2SCALE program, with the sub-title Toward Sustainable Clusters in Agribusiness through Learning in Entrepreneurship, focuses on Public-Private Partnerships with Business Champions in specific agrifood value chains in more than ten countries in Sub-Saharan Africa.

The main program goal is to contribute to inclusive agribusiness. 2SCALE aims to improving sustainable food productivity, production and income for smallholder farmers. In addition, other goals are improved consumption of nutritious food by Base-of-Pyramid consumers and inclusive private sector growth, while also facilitating sub-sector change. In total, 131 partnerships were started: 58 partnerships in Phase 1 and 73 in Phase 2, of which approximately one quarter stopped prematurely. The contribution of the Ministry of Foreign Affairs to this flagship program was more than € 100 million, while the private sector was planned to contribute a similar amount in the form of investments and other activities related to the partnership.

The Evaluation Team followed a utilization-focused and theory-based evaluation approach. This approach promotes effective use by intended users to support learning and adaptive management. The Evaluation Team collaborated with the 2SCALE team and program management throughout the evaluation process. In line with this approach, the evaluation process started with a jointly reconstructed Theory of Change, which formed the basis for the evaluation matrix with key indicators per evaluation question.

The evaluation consisted of two parts: Phase 1 (2012-2018) Impact Assessment (IA) of two partnerships using a quasi-experimental approach and Phase 2 (2019-2023) Evaluation to assess relevance, effectiveness, impact, sustainability, and additionality. Given the complexity and long duration of the program, striking the right balance between the in-depth Phase 1 Impact Assessment and the broader Phase 2 evaluation proved to be challenging. Nevertheless, through a mixed-method approach, sampling of Phase 2 partnerships for in-depth and intermediary analysis, portfolio analysis, followed by validation and triangulation, the Evaluation Team came to sound and robust findings and conclusions. While the Phase 2 evaluation has been able to provide additional information on the scope of results and explanatory factors, the use of robust impact assessment methods to assess the program's impact seven years after concluding the support provided essential information to confirm Phase 2 evaluation findings and conclusions. This formed the basis for lessons for future inclusive agribusiness programs and specific recommendations for the final extension of 2SCALE.

## General conclusions

2SCALE is a complex and very ambitious agricultural value chain program with a vast scope, that operates in volatile African environments. With its integrated inclusive agribusiness approach, 2SCALE has addressed key needs of stakeholders including smallholder farmers (men, women, youth), private sector and Base-of-Pyramid-consumers. However, external factors, such as climate conditions, political instability, and investment climates have affected the relevance of the approach. In addition, the program's vast scope and complexity

have posed significant challenges. The focus on specific value chains and crops further underscored trade-offs, particularly in fragile contexts.

One of 2SCALE's major challenges has been to manage the complexity of its program, while insufficient risk mitigation has negatively impacted the program's overall performance, despite the program's attention for adaptive management. 2SCALE's approach of operating as a facilitator while maintaining a certain distance from the field further complicated matters. 2SCALE's emphasis on developing concepts and guidelines was intended to ensure harmonized approaches whatever the context, but this may have been to the detriment of adapting partnerships to the specificity of the context. This means, for example, that no conflict-sensitive approach has been developed for the fragile countries and regions where 2SCALE is active.

2SCALE can be considered as a hybrid private sector program, with private sector engaged through public-private partnerships, but private sector is not fully in the lead. A critical success factor of 2SCALE is the presence of strong and committed business champions embracing the concept of inclusive agribusiness. However, the main reason for prematurely stopping or ending partnerships was the failure of business champions to live up to their engagements. While collaboration with the private sector is very important for 2SCALE, the expertise of 2SCALE regarding viable business cases is limited, which is reflected in the relatively limited attention for additionality. Private sector is certainly interested in engaging with 2SCALE, but business champions perceive 2SCALE as the central leading actor.

In practice, 2SCALE operates at a distance from the field, which calls into question 2SCALE's value added and value for money. 2SCALE does not provide direct (financial) support to the beneficiaries and acts as an intermediary in the various partnership processes. While this approach is meant to enhance ownership and facilitate sustainability, it leads to distance from the field and relatively high transaction costs.

## Outcome achievement conclusions

The 2SCALE program has contributed to positive outcomes for various value chain actors, including smallholder farmers, private sector entities, and Base-of-Pyramid consumers, albeit with significant variation across its impact pathways and partnerships. Tangible evidence highlights notable achievements for smallholder farmers, particularly in adopting improved agricultural practices and forming cooperatives. Additional outcomes include the development of new Base-of-Pyramid products and distribution channels with business champions and MSMEs, as well as improved access to nutritious food for Base-of-Pyramid consumers. Contextual factors such as fragility, security issues, and ecosystem conditions influence outcomes, with both successes and challenges observed across fragile regions and middle-income countries.

2SCALE's monitoring and evaluation system is overly complex and resource-intensive, focusing on ambitious numerical targets rather than robust beneficiary-level data. While 2SCALE claims that it has achieved its target of reaching 1 million smallholder farmers, in Phase 2, this evaluation found that not more than 800,000 SHFs were reached in 2023 and potentially benefitted from 2SCALE support. 2SCALE's monitoring and evaluation system is based on ambitious targets for various key indicators that has led to number-centric reporting mainly at output level, the accuracy of which may be questionable, while hardly any information at beneficiary-level is collected. The system is not robust enough to capture the real outcomes of the program.

Moreover, 2SCALE's private-sector-driven value chain approach is not fully equipped to address challenges in enabling the environmental necessary for broader sub-sector system change. 2SCALE works with only one or two Business Champions at sub-regional level, whereas sub-sector system change usually requires other forms of engagement and commitments than those existing at partnership level. Challenges in the enabling environment often go beyond the 2SCALE focus related to a specific value chain.

The program's adaptive management approach, designed to respond to changing contexts and partnership dynamics, has yielded positive adjustments in successful cases. However, it remains insufficiently focused on learning from failures or leveraging insights from external evaluations. While adaptive management is a cornerstone of 2SCALE, its practical implementation often emphasizes successes, leaving opportunities for critical learning and improvement underutilized.

## Impact and sustainability conclusions

The impact assessment of two Phase 1 partnerships that were considered as success cases found evidence that the program led to positive short-term impact in terms of productivity, but these effects demonstrated a concerning trend of decline over time after the partnership's conclusion. These findings were confirmed in the Phase 2 evaluation. In addition, it was not possible to assess how many farmers benefitted from these short-term productivity increases. This points to a critical issue regarding the sustainability of productivity gains, which were not robust enough to be maintained without continued external assistance.

Attributing or contributing changes in income due to 2SCALE is difficult to establish, given the many factors that influence changes in farmers' income, including 2SCALE's focus on a single crop, changes in input prices, changes in market access, crop diversification and climate change. There is no solid and robust evidence for lasting income increases for smallholder farmers neither in the sample of Phase 1 nor for Phase 2 partnerships. Although income gains were observed in some cases, such as in the Kenya Phase 1 sorghum partnership, these were not sustained, and overall results across partnerships were inconsistent, with no solid evidence of lasting productivity or income increases for smallholder farmers.

Adoption of improved agricultural practices by smallholder farmers was a notable outcome, yet these practices did not significantly enhance farmers' resilience to severe shocks. A potential explanatory factor is that 2SCALE focuses on one crop and its related value chain, and doesn't take a broader, more diverse farming systems perspective, which is needed for strengthened resilience. Another potential explanation might be that some extreme weather conditions might just be too severe to be addressed by improved agricultural practices.

2SCALE's focus on improving the terms of inclusion provided anecdotal evidence of benefits for women and youth, particularly through non-agricultural job creation and the establishment of medium- small and micro enterprises, but little evidence for lasting transformational change.

2SCALE's ambition to scale inclusive agribusiness has seen limited success in replicating models without external support. 2SCALE emphasizes the need for accelerating and scaling of current partnerships through proven practices of replicable models. Similar partnerships with comparable approaches for specific value chains exist, which 2SCALE considers as horizontal replication, but which require substantial external

assistance. This challenges the program's goal of fostering replicable models that are developed and adopted without 2SCALE support.

The findings raise concerns about sustainability and ownership among value chain partners, highlighting gaps in 2SCALE's graduation approach and its practical implementation. After 12 years, the program's limited ability to ensure lasting outcomes calls for a reassessment of its strategies to build resilient and sustainable partnerships.

## Lessons for inclusive agribusiness programs

Inclusive agribusiness programs, by their nature, are complex, given their ambitious objectives and operation in challenging environments. Managing this complexity requires clearly defined specific geographic and thematic scopes. A clear lesson is that programs, such as 2SCALE, should not cover too broad geographic scope. Furthermore, while at program level different impact pathways can be developed, such as for smallholder farmers, private sector and Base-of-Pyramid markets, at partnership level choices should be made regarding a limited number of impact pathways, thus reducing complexity at partnership level. Furthermore, an adequate program design, anchored in a state-of-the-art Theory of Change, is essential to guide implementation and ensure effective monitoring and evaluation.

**A robust M&E system should focus on a limited set of qualitative and quantitative indicators and cost-effective baseline surveys to facilitate learning and adaptive management.** Such systems should measure tangible changes for beneficiaries, including smallholder farmers and Base-of-Pyramid consumers, while integrating tools like GIS and remote sensing for large-scale programs where primary data collection is challenging. Impact assessments, carefully planned with baseline studies, offer valuable learning opportunities but require substantial resources and alignment with accountability and learning objectives. Alternatively, simple surveys and complementary methods can provide practical insights when impact assessments are not feasible.

**Inclusive agribusiness programs should prioritize food and nutrition security goals over other objectives, such as private sector and partnership development, to maintain focus and reduce complexity.** Programs like 2SCALE, which pursued multiple goals, faced management challenges, especially when combining impact pathways for smallholder farmers and Base-of-the-Pyramid (BoP) markets, which may not naturally align. Additionally, private-sector-driven value chain approaches are poorly suited to achieving sub-sector system changes or addressing enabling environment bottlenecks, as these typically require greater engagement with government and broader actors.

**Inclusive agribusiness programs focused on specific value chains and in which the private sector plays a central role are not well-suited to (sub-)sector systems change approaches.** This evaluation, in line with previous studies, such as the IOB study on the aid, trade and investment agenda, have shown that private sector driven value chain programs are not well suited to bring about systems change to address bottlenecks in the enabling environment. Strengthening the enabling environment has been difficult to achieve through PSD programs that only engage to a limited extent with government and other actors.

**If the private sector plays a central role, its position should be clearly defined, with lead companies taking the driver's seat.** Tripartite contracts between private sector partners, the program, and donors should go beyond generic agreements to mitigate risks, address conflicting interests, and ensure alignment with program goals. Transparent adaptive management processes are also crucial, incorporating milestones, intermediate targets, and periodic reviews to reflect on success factors, failures, and evolving challenges.

**Clearly focused inclusive agribusiness programs should adopt tight, inclusive and transparent adaptive management processes, which include adequate risk mitigation at all levels, learning from both successes and failures, and learning from external experts.** This would involve setting milestones and intermediate targets and holding periodic meetings to assess whether these targets are being met and reflecting on the internal and external explanatory factors. This approach will enhance the ability to respond to evolving circumstances and challenges within the partnerships and at program-level.

**Finally, funding structures for inclusive agribusiness programs should set limits on overhead costs and allocate sufficient time and capacity for donor management.** Donor involvement is critical to maintaining program alignment with realistic objectives and funding cycles. Given declining donor capacities, external support may be necessary to manage risks effectively. Through these measures, inclusive agribusiness programs can enhance their focus, adaptability, and impact while addressing the complex challenges inherent in their implementation.

## Recommendations for final 2SCALE extension (2025)

The 2SCALE program must prioritize enhancing the sustainability of partnership results, particularly for smallholder farmers, during its limited extension period. Achieving this requires a significant reduction in scope and complexity, necessitating hard choices in the remaining short extension period. Options for scope reduction include narrowing the focus to fewer countries, industries, impact pathways, and partnerships, with prioritization given to partnerships that demonstrate potential for sustainable outcomes. Support for other pathways, such as private sector, Base-of-Pyramid markets, and sub-sector systems change, should only continue where clear outcomes have already been achieved or are imminent. For all partnerships, the focus must remain on ensuring that continued support during the extension period directly contributes to sustainable results through well-defined exit strategies.

**A clear and responsible exit strategy at the partnership level is essential for those selected for final support.** Past evaluations, such as the 2021 Mid-Term Review, highlighted the lack of clarity in 2SCALE's exit planning, and these gaps still persist. The extension period must explicitly focus on preparing for the responsible transition of activities and results. Exits should be carefully designed in collaboration with partners to maximize the likelihood of sustaining outcomes after the program concludes.

**Operating closer to the field and engaging directly with beneficiaries, especially smallholder farmers, is critical to understanding the drivers of impact and sustainability.** This closer proximity, coupled with sustained partner ownership and engagement, can enhance the program's value for money. By reducing its operational distance from ground-level activities, 2SCALE can make more informed decisions, particularly during this crucial final stage.

**A revised M&E system is required to align with the program's reduced scope and focus on collecting robust data on key sustainability indicators at the beneficiary level.** The current system, which is both overly complex and cost-ineffective, does not provide adequate information for assessing long-term outcomes. A streamlined approach, with partners actively involved in data collection and use, will facilitate continued adaptive management at the local level. This localized system should promote a culture of sharing successes and openly analyzing failures to foster continuous learning and improvement within partnerships.

**Finally, reducing overhead costs and concentrating resources on promising initiatives are vital for achieving sustainable outcomes in the remaining extension period.** A clear definition and cap on overhead expenditure (e.g., 25%) should be agreed upon with the donor. Operating closer to the ground for selected partnerships while minimizing management and overhead costs will maximize the program's efficiency and impact. Additionally, careful attention must be paid to managing the consequences of staff departures during this final phase to avoid jeopardizing the sustainability of results. Through these measures, 2SCALE can ensure that its extension period delivers meaningful and lasting contributions to its beneficiaries.



# 1 Introduction

This final report presents the Evaluation Team (ET)'s findings, conclusions and recommendations of the External Evaluation of the 2SCALE program. 2SCALE stands for Toward Sustainable Clusters in Agribusiness through Learning in Entrepreneurship, was the sub-title for Phase 1. The original sub-title for Phase 2 was 'Incubating and accelerating inclusive agribusiness in Africa'<sup>1</sup>. The program focuses on Public-Private Partnerships (PPPs), also referred to as partnerships. This report builds on the Terms of Reference (ToR), see Annex 1, and the inception report in which the approach to this evaluation was set out, and on document review, interviews and workshops during the inception phase.

## 1.1. Purpose, objectives and scope

The evaluation objectives, its scope and users as reflected in the ToR are summarized in below. This provides the basis for the evaluation approach and methodology.

Figure 1: Evaluation objectives & scope

Evaluation Objectives		Evaluation Scope	
<p><b>The overall aim of the evaluation is to assess whether and how inclusive agribusiness contributes to food and nutrition security for low-income consumers.</b></p> <ul style="list-style-type: none"> <li>Assess the level and sustainability of the impacts for smallholder farmers &amp; the progress and outcomes of 2SCALE in relation to its program-level ToC</li> <li>Determine the size and sustainability of the intended impacts on incomes, productivity, and resilience of smallholder farmers</li> <li>Assess the input and development additionality, contributions, and the necessity of 2SCALE to incubating inclusive agribusiness development processes</li> </ul>		<b>Spatial</b>	<b>9 countries in Sub-Sahara Africa</b> Benin, Burkina Faso, Côte d'Ivoire, Ethiopia, Ghana, Kenya, Mali, Niger, Nigeria
		<b>Portfolio</b>	<b>Portfolio of Phase 2 PPPs</b> 4 industries: animal production related, fresh produce, soy and oil seeds, staple crops
		<b>Temporal</b>	<b>Phase 1: 2012-2018 (2 PPPs) Phase 2: 2019-2024</b>
		<b>Thematic</b>	<ul style="list-style-type: none"> <li>Smallholder farmers</li> <li>Private sector</li> <li>BoP consumers</li> <li>Sub-sector system change</li> <li>Four industries</li> </ul>
Evaluation Framework			
Specific EQs for the ex-post impact assessment (phase 1) focusing on <b>Income, Productivity and Resilience Impacts</b> , and for the endline evaluation (phase 2) focusing on <b>Relevance, Effectiveness, Impact, Sustainability &amp; Additionality</b> , as well as <b>focus on learning and forward-looking lessons</b> .			

Source: ADE-KIT, based on the ToR

## 1.2. Overall evaluation approach

The ET has followed a utilization-focused and theory-based evaluation approach. As a key focus of this evaluation is on learning, a utilization-focused approach is appropriate as it aims to promote effective use by the intended users to ensure that evaluation supports learning and adaptive management. A key element has been the collaboration with the 2SCALE team and program management, throughout all evaluation phases. An evaluation reference group composed of representatives of the Ministry of Foreign Affairs

<sup>1</sup> The original sub-title for Phase 2 was in the Proposal 2019-2023 Revised. Later other sub-titles, such as "incubating agribusiness in Africa" were used.



(Inclusive Green Growth department and the evaluation department IOB), an M&E advisor of the 2SCALE program and 2SCALE program staff guided the evaluation and provided comments on the inception report and draft final report. The comments on the draft final report were put together in a comments matrix in which the ET indicated whether and how comments were addressed. All factual mistakes were corrected and if the ET did not agree with specific comments, it has been indicated why.

Theory-based evaluation approaches aim to establish a 'program theory', that is, "clarifying how program activities are understood to cause (or contribute to) outcomes and impacts"<sup>2</sup>. Therefore, together with the 2SCALE team the Theory of Change (ToC) has been reconstructed. This allowed to map the causal chain from inputs to outcomes using the reconstructed program ToC and seek evidence to confirm the program activities have led to the expected output and outcomes.

The evaluation consisted of two parts, with distinct methodological approaches as requested by the ToR. The Phase 1 (2012-2018) Impact Assessment (IA) uses a quasi-experimental approach for two country case studies (Ghana and Kenya) and tries to quantify and attribute changes in income, productivity levels and resilience of Smallholder Farmers (SHFs) to 2SCALE PPPs. The Phase 2 (2019-2023) Evaluation conducts a contribution analysis to assess how 2SCALE second phase performed, in terms of relevance, effectiveness, impact and sustainability and additionality. For more details on the specific methodology implemented for phase 1 IA and phase 2 evaluation, see Section 2 and 3 respectively.

Even if two different approaches were used, the ET jointly worked on the two phases to make as many synergies as possible in the conduct of the study as well as in deriving results, conclusions and recommendations.

## 1.3. Background of the 2SCALE program

The approach of 2SCALE is based on partnerships with so-called Business Champions (BCs) – either African SMEs or Dutch/international companies – focused on sustainable sourcing via SHFs and/or serving local and regional Base-of-the-Pyramid (BoP) consumer markets. The companies are the drivers of the inclusive agribusiness.

2SCALE is presented as a flagship program for the Netherlands' food security policy and considers itself "as one of the leading catalysts of inclusive agribusiness in Africa"<sup>3</sup>. While the overall approach is consistent between Phase 1 and Phase 2, there are some notable differences in focus countries, organisation and budget as reflected in Table 1 below. The department within Ministry of Foreign Affairs (MFA) responsible for 2SCALE changed from the private sector department (Sustainable Economic Growth – DDE) to the Inclusive Green Growth Department (IGG) dealing with food and nutrition.

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<sup>2</sup> Westhorp G. 2014. Realist impact evaluation; an introduction. Methods Lab publication. Overseas Development Institute.

<sup>3</sup> IDCC, SNV, PRC; 2SCALE Proposal 2019-2023, p.8

Table 1: Key characteristics 2SCALE Phase 1 and Phase 2

Key characteristics	Phase 1	Phase 2	Change
Period	2012-2016 Extension 2017-2018	2019-2023 Extension until December 2024	
DGIS budget	€ 42.5 million	€ 50 million Plus Extension € 12.5 million	Increase of annual budget to > € 10 million per year
Industries	Range of commodities, initially no animal products, and fresh produce, but scope gradually broadened	Staples, Fresh produce, Oilseeds, Dairy and animal protein	In Phase 2, additional focus on fresh produce and dairy/animal protein
Countries	9 countries: Benin, Ghana, Mali, Nigeria, Kenya, Ethiopia, Mozambique, South Sudan, Uganda. During implementation Ivory Coast added	10 countries: Ghana, Mali, Nigeria, Niger, Burkina Faso, Ivory Coast, Kenya, Ethiopia, South Sudan, Egypt	Shift of focus in Phase 2 to Sahel, Horn of Africa and MENA region. Six countries in both phases.
Consortium partners	International Fertilizer Development Center (IFDC), ICRA, BoP PrC (strategic partner)	IFDC, BoP, Netherlands Development Organisation (SNV) (PrC strategic partner only at the start of Phase 2)	SNV as new consortium partner in Phase 2 with expertise in new countries and in horticulture, dairy and sub-sector system change

Source: ADE-KIT, based on 2SCALE Program documents for Phase 1 and 2, 2SCALE annual reports

The overall goal for Phase 1 was “to improve rural livelihoods and food and nutrition security in Africa”<sup>4</sup>. For Phase 2, the following goals were presented<sup>5</sup>:

1. Promote competitiveness of, and inclusive and sustainable growth in, the agricultural and food sector in Africa.
2. Reduce existing hunger and malnutrition and improve access to nutritious food for Base-of-the-Pyramid consumers.
3. Empower young entrepreneurs and businesswomen in private sector development, local and regional sourcing, processing, marketing and trade, and in creating jobs.
4. Create productive and sustainable food systems by strengthening smallholder farmers’ capacity in eco-efficient production.

The specific targets to be achieved for Phases 1 and 2 are reflected in Table 2. The targets for phase 2 were increased after the extension. While the main approach of 2SCALE remained the same in Phase 1 and Phase 2, except the changes reflected in Table 1, other changes are related to a broader range of more inclusive targets, in particular the Universal Impact Indicators (UIIs), as reflected in Table 2.

<sup>4</sup> IFDC, BoP, ICRA; 2SCALE Public-Private Partnership Proposal, p.8

<sup>5</sup> 2SCALE, October 2018, Phase 2 Proposal 2019-2023, p.8

Table 2: 2SCALE Targets - Phase 1 and Phase 2

Target area	Phase 1	Phase 2	
		Original	Revised <sup>6</sup>
Number of PPPs	100 PPPs working with 10 Dutch multinationals and 30 large African companies <sup>7</sup>	60  --	50 active Phase 2 PPPs plus 17 PPPs Phase 1 Light intensity support
BoP consumers (UII1)	550,000 metric tons	1 million	1.5 million
SHFs (UII2): Number Increase of productivity Increase of income	1.15 million families 100% 30%	750,000 farmers (50% women, 40% youth)	1 million
Adoption of Eco-efficient production practices (UII3)	--	375,000 ha	500,000 ha
Strengthened SMEs in inclusive business (UII4): Number	4,000	250 (50% female-led) in leadership role	700
Additional non-farming jobs (UII5)	--	20,000	25,000
Strengthened capacity of Micro, Small & Medium Enterprises (MSMEs) in target value chains (UII6)	--	5,000	15,000
Innovations in non-farming segments of value chains (UII7)	--	50	150
Access to financial services (UII8): Target value	--	€ 50 million	€ 75 million
Strengthened capacity for advocacy and lobbying for policy improvement		12 demonstrable contributions to sub-sector transformation	
New knowledge on business models that bring transformative change		Linkages to African and Dutch knowledge platforms	

Source: ADE-KIT, based on 2SCALE Program documents for Phase 1 and 2, Request for extension Phase 2

## 1.4. Reconstructed Theory of Change

In line with the use-driven, theory-based approach, a joint reconstruction of 2SCALE's ToC by the 2SCALE team and ADE-KIT ET took place at two workshops in December 2023 during the inception phase. While different targets were set for Phase 1 and Phase 2, and the program was active in some different countries in Phase 2, there were no main changes in approach. Therefore, the reconstructed ToC is valid for both Phase 1 and Phase 2.

<sup>6</sup> 2SCALE, Request for Extension, 2023-2024, Accelerating & harvesting Public Private Partnership impact of 12 years 2SCALE in Sub-Saharan Africa, 29<sup>th</sup> July 2022.

<sup>7</sup> The PPP definition in Phase 1 was quite broad and included informal partnerships at local level, (later called ABCs).

The purpose of this joint reconstruction was:

- Develop a common basis for the independent external evaluation
- Basis for reformulation of the Evaluation Questions
- Basis for definition of indicators
- Essential step for the contribution analysis.

The point of departure were the ToCs developed by 2SCALE in Phase 2 (there was no Phase 1 ToC):

- Program-level ToC<sup>8</sup>. This ToC was mainly process-oriented (see Section 1.4 for further analysis);
- ToCs at partnership-level. These ToCs often consist of different impact pathways, such as:
  - ▶ Increase quantity and quality of production, productivity and incomes of smallholder farmers, diversification
  - ▶ Improve access to finance for specific stakeholders
  - ▶ Improve access to nutritious and affordable food for BoP consumers
  - ▶ Improve performance of private sector, esp. MSMEs
  - ▶ Facilitate sub-sector system change.

In practice, there are no clear linkages between the program-level ToC and the Partnership ToCs. For this evaluation, it was important to agree on a common overall ToC that is applicable at program-level and at partnership level. The partnership ToCs were considered suitable for reconstructing an overall ToC.

The reconstruction started with a discussion on the main impact areas and impact pathways, based on the relevant SDGs<sup>9</sup>, the relevant MFA Food and Nutrition Security Goals<sup>10</sup> together with the 2SCALE Phase 2 goals as presented in Section 1.3. It was agreed to merge the 2SCALE goals 1 and 4 in one impact area focused on sustainable food production by SHFs. The second impact area focuses on entrepreneurship and private sector development and the third one on BoP consumers.

The definition of impact pathways is based on the impact pathways found at partnership level and started with the main focus of activities: one focusing on SHFs, a second focusing on private sector, a third on BoP food consumption and a fourth on sub-sector system change. The first impact pathway focusing on SHFs and aiming for sustainable food production includes three possible impacts: 1) increased production, 2) increased income, and 3) increased resilience related to eco-efficient farming practices and sustainable food production. These are the three impacts the IA Phase 1 assessment is focusing on. However, there is only one UII, namely UII2, the number of SHFs with improved food production and income representing these impacts. Regarding increased resilience as impact, it should be noted that this was not a formal objective or impact

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<sup>8</sup> A first draft ToC was included in the 2SCALE Proposal 2019-2023 (5 October 2018, p. 34) and a next version was elaborated in 2SCALE's Program-Level ToC, September 2020, p. 7.

<sup>9</sup> SDG2 Zero Hunger (end hunger, achieve food security and sustainable agriculture for BoP), SDG5 Gender Equality, SDG8 Decent work and inclusive economic growth, SDG12 Responsible Production and Consumption, SDG15 Life on Land, and SDG17 Partnerships.

<sup>10</sup> MFA, 2019, Investing in Global Prospects. MFA, 2020, Food and Nutrition Security framework with three goals: Eradicate hunger. Indicators are adequate diet, nutritional resilience to shocks, Double productivity and income. Indicators are living income, yield gap, empowered women, livelihood resilience, Sustainable use of farmland. Indicators are under conservation practices, agro-ecological resilience.

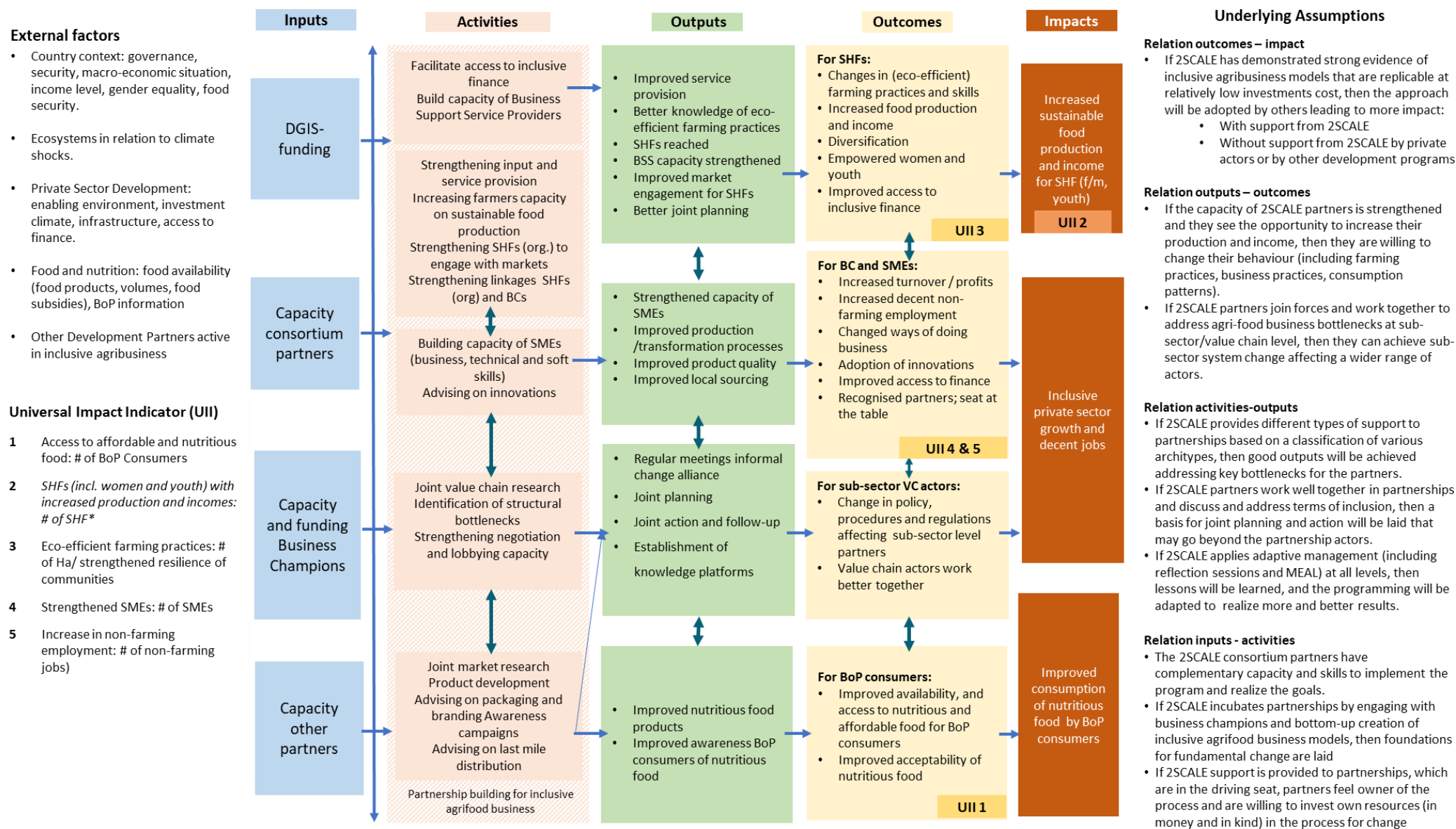
for 2SCALE, neither in Phase 1 nor in Phase 2<sup>11</sup>. 2SCALE did focus on adoption of improved agricultural practices, which are considered as an outcome in the SHF impact pathway. In line with the reclassification of Ulls (see Table 10), the main Ulls are also indicated in the ToC figure. The fourth impact pathway focusing on sub-sector system change is potentially contributing to all three impacts areas that are presented on the top of the results chains. At partnership level, often a common impact pathway focusing on increasing access to inclusive finance can be found, which is applicable both for SHFs and MSMEs. Access to finance has, therefore, been integrated in the first two pathways as shown in Figure 2.

As next steps, the outputs and outcomes for the various impact pathways were jointly identified. In this way the results chain -including the Ulls at the appropriate level- was reconstructed. The two final steps in the reconstruction process were the identification of context factors (column on the left Figure 2) and the underlying assumptions (column on the right in Figure 2). The contextual factors, such as political, climate and economic factors, affect whether planned results are achieved or not. The underlying assumptions, on the other hand, relate to the causal relations in the ToC. The underlying assumptions reflect to a large extent the 2SCALE approach, processes and procedures.

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<sup>11</sup> Various 2SCALE activities such as introduction of improved farming techniques, introduction of new varieties and other inputs could contribute to making SHFs more resilient to climate shocks, which is reflected at output and outcome level in the SHF impact pathway.

Figure 2: Reconstructed Theory of Change and UIIs based on documents and workshops with 2SCALE team



Source: ADE-KIT, based on ToC workshops

## 1.5. Overall Challenges and Limitations

In line with the presentation of the specific methodological approaches for the Phase 1 IA and the Phase 2 evaluation approach in respectively Section 2 and 3Phase 2 , the specific challenges and limitations of these approaches are set out also in these Sections. In this Section, some overall challenges and limitations are presented:

**Very large number of 2SCALE documents and lack of concise overviews:** The ET worked very well together with the 2SCALE team and received a large number of documents (more than 3000 documents) with often very detailed information at partnership level. However, there is lack of good, consolidated overviews, which affected, for example, the portfolio analysis (see Section 3.1).

**Striking a right balance between the in-depth Phase 1 IA and the broader Phase 2 evaluation proved to be challenging.** The IA of two Phase 1 partnerships required thorough preparation and sufficient time in the field for surveys and additional data collection. Therefore, this part of the evaluation was very resource-intensive, and half of the resources had to be spent on the rigorous assessment of impact. This meant that relatively limited resources were available for the broad evaluation of Phase 2 of this flagship program. This also meant that hard choices had to be made in terms of number of case studies, and processes and support mechanisms that have not been analysed in detail, such as and the screening and selection processes for the Phase 2 partnerships, as this was part of the MTR<sup>12</sup>. The MTR recommended to consider Light Intensity Support mechanism (LIS) to enhance the scope for upscaling of Phase 2 partnerships. For the extension period 2023-2024, 2SCALE included LIS for Phase 1 partnerships. This LIS-support has not been included in the evaluation analysis as not all support could be covered in depth.

Throughout the 2SCALE program, there has been some lack of clarity regarding the specific activities for which 2SCALE is responsible, which complicated the contribution analysis for Phase 2 but also led to **attribution challenges in the Phase 1 IA**. 2SCALE's approach is to make partners responsible. Therefore, beneficiaries do often not know 2SCALE, but they do know the partners, such as the BCs, Business Support Service suppliers (BSS) and coaches. This makes it difficult to trace 2SCALE's interventions, especially also because the impact pathways are not always clearly defined. For the Phase 1 IA, it proved to be particularly difficult to trace 2SCALE's interventions. Interviews and discussions indicated that the program's implementation varies among beneficiaries, with many farmers potentially unaware of 2SCALE's involvement due to its indirect approach. For example, while 2SCALE offered training sessions for farmers, it is often uncertain which specific farming practices were promoted and to which farmers they were targeted.

**No assessment of efficiency as per the ToR.** The ToR asked for a Phase 2 evaluation focussing on relevance, effectiveness, impact, sustainability and additionality. The assessment of efficiency was deliberately left out, as was confirmed in the inception phase. On the one hand. This helped to strike a balance between the

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<sup>12</sup> The MTR mentions that 244 business ideas were received during Phase 2, while also some business ideas from Phase 1 were considered for screening and selection. The country teams pre-selected 112 business ideas, of which 65 were approved by the selection committee. After the approval by the selection committee, D&D workshops started and during the process not all approved ideas did actually result in signed partnership agreements (p.10-11, MTR). In the portfolio analysis (section 3.2), details on the Phase 2 partnerships are presented.



number of issues to be covered in the evaluation and the necessary depth of analysis, but on the other it was found that there were various efficiency aspects affecting performance. Therefore, efficiency has not been separately assessed but is part of the explanatory factors.

## 2 Phase 1 Impact Assessment

### 2.1. Methodology

As per the ToR, the main objective of this exercise is to assess the long-term impact of the 2SCALE phase 1 partnerships on SHF by answering the following Evaluation Questions (EQs):

Table 3: Phase 1 Impact Assessment Evaluation Questions

Phase 1 IA Questions
<b>RELEVANCE: Is the program doing the right thing?</b>
What are the main characteristics of the beneficiaries/ stakeholders of 2SCALE i.e SHF and business partners?
<b>IMPACT: What difference does the intervention make?</b>
Did productivity and production levels of SHFs partnering with 2SCALE increase over time?
Did 2SCALE lead to more sustainable improved farming practices, including eco-efficient practices, allowing SHFs to cope better with climate shocks? <sup>13</sup>
Did income of SHFs partnering with 2SCALE increase over time?
<b>SUSTAINABILITY: Will the benefits last and are they likely to be replicated?</b>
To what extent have the intended impacts been sustained over the years, for PPPs incubated during the first phase of 2SCALE for which the support was withdrawn?

This exercise is based on two PPPs from the 2SCALE Phase 1 portfolio and relies on both cross-sectional and Difference-in-Difference (DID) analyses, as further described below. This IA is also part of the 2SCALE proposal on its extension request for 2023-2024.

This Section provides details on the methodological approach followed to assess farmers' characteristics, impact in income, productivity, and resilience, as well as to assess sustainability, to better understand the results presented in Sections 0, 0 & 0. In each of the following sub-sections the EQs to be answered and the type of analysis performed to do so are presented. A more detailed explanation on the technical approach is available in Section 2.1.2. The EQs are thoroughly addressed in this Section 2, with an overarching conclusion provided in Section 4.

#### 2.1.1 PPP Sampling & Background

The PPPs selected to be part of the sample of the Phase 1 IA were the Shalem sorghum partnership in Kenya (KEN03) and the Yedent soybean partnership in Ghana (GHA02).

<sup>13</sup> While resilience was not mentioned as an explicit objective in the Phase 1 proposal, there are various activities such as improved farming techniques, introduction of new varieties and other inputs that are meant to make SHFs more resilient to climate shocks. In line with this, the ToC focuses on 2SCALE's activities (outputs) promoting resilience strengthening activities such as the introduction of eco-efficient farming practices leading to outcomes such as adoption of improved agricultural practices. As a result, the ET focused on assessing whether 2SCALE support led to more sustainable eco-efficient farming practices. Further details on the resilience framework are available in Annex 2 Measuring Resilience.

A crucial factor that influenced the selection of the two PPPs was the availability of data from the previous Impact Evaluation by American Institute of Research (AIR) in 2018. Then, the selection of two out of the five PPPs covered in the previous study was conducted in close collaboration with the 2SCALE team. They provided insights on different aspects of the selection process like in-country security, in-country 2SCALE presence for Phase 2. Both Ghana and Kenya PPPs are considered by 2SCALE as a success given that SHFs still grow the crop supported during phase 1, Sorghum and Soybeans. In Kenya, SHFs still follow the same operating model selling directly to the BC, while in Ghana the cases vary, with some SHFs opting to sell to other buyers and aggregators.

ET therefore has quantitative data available for two or three waves in treated and control area, as shown in Table 4 below.

Table 4: Selected PPPs for IA

N°	PPP code	Country	Industry	Product	Business Champion	2015 Data	2017 Data	2023 Data
1	KEN03	Kenya	Staples	Sorghum	Shalem	Yes	Yes	Yes
2	GHA02	Ghana	Soy and oil seeds	Soybeans	Yedent	No	Yes	Yes

Sample descriptions for Kenya 2015 and 2017 and Ghana 2017 can be viewed in Annex 3 Sample description and Summary Statistics.

To provide context for the evaluation, the following Section briefly describes the state of the partnerships based on indicators (productivity, resilience and income), as they stood immediately after the support concluded. The ET analysed data from the 2018 Impact Evaluation conducted by AIR and supplemented this with recall questions from the 2024 questionnaire<sup>14</sup>. It is important to note that this Section's content is not a finding of the current ADE-KIT evaluation but serves as a starting point for further analysis.

**The 2017 endline data highlights a mixed impact of the partnership on yields in Kenya and Ghana.** In Kenya, the partnership significantly boosted productivity, with treatment farmers achieving an average yield per acre higher than in the control group (Annex 4 Additional Data, Table 3). In Ghana, the results were less favourable, the treatment group reported an average yield slightly lower compared the control group. This contrast shows the partnership's success in Kenya but also reveals challenges in enhancing productivity in Ghana.

**Differences in land allocation further illustrate the varying outcomes in Kenya and Ghana.** In Kenya treated farmers allocated more acres of land to the target crop compared to the control counterpart. In Ghana however treated farmers allocate slightly less land to than target crop than the control group. These differences in yield and land allocation also explain outcomes in total production.

**When the support ended farmers in both Kenya and Ghana showed higher ability to recover from shocks.** The adoption of practices like soil preparation, the use of pesticides and inorganic fertilizers contributed to enhance soil fertility and improved resilience capacity of treatment farmers in Kenya. In Ghana the partnership did not have a strong impact on resilience capacity of treatment farmers, however, the promotion of certain practices like soil preparation, intercropping and high pest checks were greatly adopted by farmers. For the

<sup>14</sup> Further detail on the 2024 Questionnaire can be found on the Annex 5 Questionnaires.

specific figures on resilience for both partnerships refer to Annex 4 Additional Data Table 7.

**The effects on resilience, thanks to the adoption of improved farming practices, diminished over time in both countries.** Short-term impact on resilience was stronger in Kenya than in Ghana right after the partnership's conclusion.

After the intervention ended, treatment farmers in both partnerships showed higher levels of household income but not higher wealth Index levels<sup>15</sup>. In Kenya, treatment farmers reported significantly higher household income than control farmers, though this did not immediately translate into a higher wealth index. In Ghana, treated farmers enjoyed a better market access compared to control group as they were offered significantly higher prices. This difference in prices only had a small impact as differences in income were not so big. For a more detailed look on the Income situation on both partnerships in 2017 please refer to Annex 4 Additional Data Table 2.

## 2.1.2 Technical Approach

To assess the long-term impact of the 2SCALE phase 1 partnerships on SHF, the ET used a cross-sectional analysis of treatment and control groups in both countries. This approach measures the partnership's impact by comparing outcomes at a single point in time between those who participated (treatment) and those who did not (control)<sup>16</sup>.

Next, the ET examines how farmer households progressed after the partnership ended in 2017 by comparing treatment and control groups using 2017 data to assess the immediate impact at the end of the partnership (See Annex 4 Additional Data).

A DID analysis is then used to determine significant changes between 2017 and 2023. This analysis helps isolate the partnership's effect from other factors, evaluating whether the impact was sustained or declined over time.

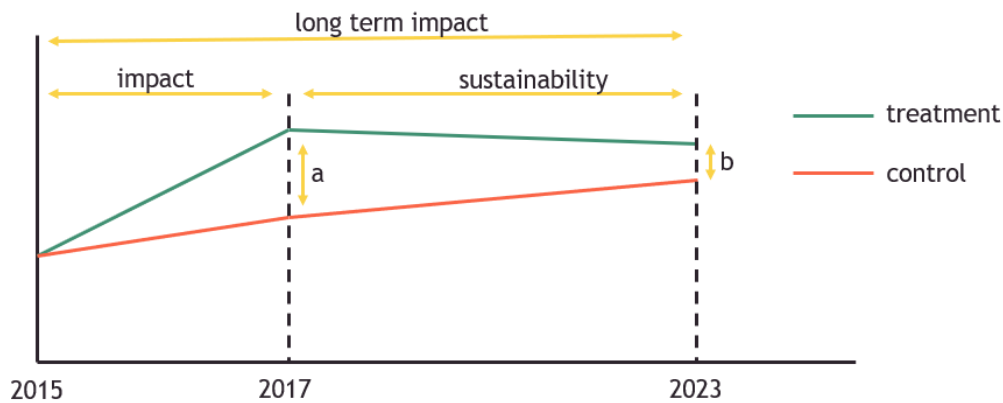
The ET relied on datasets previously collected in Kenya (2015 and 2017) and in Ghana (2017 only) and on the 2023 data collected during May 2024 for both partnerships. The datasets from the IA carried out in 2018 by AIR, serve as baseline data and together with the 2023 data, they provide the foundation for the analysis of the partnership's long-term impact and post-partnership progress across various dimensions of impact, including productivity, resilience, and income.

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<sup>15</sup> A detailed definition of the Wealth Index can be found in Section 0, footnote 23.

<sup>16</sup> While a cross-sectional analysis is useful, a DID analysis would offer a more robust method of estimating impact. The DID approach compares changes in outcomes for treatment and control groups over time, isolating the partnership's effect by examining how differences between the groups evolve before and after the intervention. However, a DID analysis between 2015 (baseline) and 2023 could not be fully employed because no baseline data was available for Ghana in 2015, and in Kenya, Shalem had already started implementing the partnership before 2015, compromising the integrity of the baseline data.

Figure 3: Impact timeline of an intervention



Source: ADE-KIT

Figure 3 illustrates the typical impact timeline of a development project, tracking progress using an indicator like yield. Initially, both treatment and control groups start from a comparable point. During the project, the treatment group is expected to progress faster, represented by Line A (2017 data). After the project, the treatment group may either converge with or diverge from the control group, with Line B reflecting the long-term impact (2023 data). The DID analysis assesses the sustainability of results by comparing changes between 2017 and 2023.

This combined approach provides a detailed view of the 2SCALE partnerships' impact. By using both cross-al and DID analyses, the ET assesses immediate and long-term effects, with a focus on the robustness of these findings.

### 2.1.3 The Key Assumptions

There are three key assumptions to be satisfied for a valid cross-sectional analysis. These assumptions ensure that the observed differences in outcomes between treatment and control groups can be attributed to the partnership, rather than other external factors. The underlying assumptions are the following:

1. **Exogeneity of Treatment:** The decision to participate in the partnership should not be influenced by unobserved factors that could also affect the outcomes of interest (Biased estimates).
2. **Stable Unit Treatment Value Assumption (SUTVA):** This assumption ensures that there is no interference between the treatment and control groups. If spillover effects exist, where one group influences the other, this could distort the true impact of the partnership.
3. **Comparability of Groups:** The treatment and control groups must be comparable in all respects (including similar starting conditions), except for their participation in the partnership. This means that any differences in outcomes between the groups can be attributed to the partnership itself, rather than pre-existing differences in characteristics.

Assumptions 1 and 2 are assumed to be satisfied. Control communities were selected from locations far from treatment areas, ensuring no chance for control farmers to join the partnership. The partnerships in Kenya and Ghana were popular, with broad participation, minimizing the risk of self-selection bias. Additionally, the geographic distance between the groups limits potential spillover effects, supporting Assumption 2.

Assumption 3, related to comparability, is difficult to confirm due to the lack of start-of-partnership data. To address this, Propensity Score Matching (PSM) is used to match farmers based on observable factors like

land size and soil quality. Farmers without a suitable match are excluded, improving comparability between the groups.

Assumption 3 also requires that treatment and control farmers were exposed to the same external influences, aside from the intervention. However, since the farmers were from different regions, they faced varying external factors, such as weather conditions. For example, adverse weather events in certain areas may have disproportionately impacted one group more than the other. Further details on this issue will be addressed in Section 2.1.5.

## 2.1.4 Data Collection Process

The ET followed a collaborative approach with the 2SCALE Monitoring, Evaluation, Accountability, and Learning (MEAL) team throughout the process to ensure efficiency and learning. For the Phase 1 IA, the ET reviewed and adapted the 2018 IA questionnaire, incorporating relevant questions on income, productivity, resilience, and additional variables to ensure a comprehensive analysis. After refining the questionnaire with local experts, the ET conducted training and piloting to finalize it.

Sampling design was developed in collaboration with country teams to ensure comparability with previous assessments. Field data collection involved surveying SHFs in Kenya and Ghana, supported by trained enumerators. Qualitative data was also gathered through focus groups and interviews to provide deeper insights into the impacts of the 2SCALE partnership. Data from the 2015 and 2018 assessments was analysed alongside new data using robust econometric methods to measure the attributable impact of 2SCALE on income, productivity, resilience, and sustainability.

Details of each step can be found in the Annex 6 Data Collection Steps.

## 2.1.5 Challenges and Limitations

The ET has faced some challenges and limitations during this Phase 1 IA. Some of these challenges are described here and should be considered when reading Sections 0, 0 & 0 Phase 1 IA Findings.

1. Due to budget and time constraints, only a small sample of the Phase 1 portfolio (two Phase 1 PPPs) reach could be evaluated, affecting the interpretation of results and generalization of the partnership's impact, which is not representative of the overall 2SCALE program. Moreover, the Phase 1 assessment focuses solely on the SHF impact pathway, and the two selected PPPs were considered successful cases, which may lead to an overestimation of the partnership's impact, emphasizing the need to avoid extending these findings to the entire 2SCALE program.
2. The absence of personal identifiers in the 2017 dataset prevented the creation of a clean panel dataset, as data protection regulations and respondent anonymity made it impossible to trace individuals from 2017. To address this, the ET selected new respondents from 2023 and used PSM to match them with 2017 participants based on stable characteristics (e.g., land size, gender, education). This approach enabled paired testing in the difference-in-difference analysis, ensuring that only comparable farmers were included.

3. In Ghana, the 2SCALE partnership ended more than five years ago, creating challenges in farmer identification. During this time, some sampled farmers stopped cultivating soybeans, making them ineligible for the survey. Most farmers were more familiar with the BSS initiative than with 2SCALE, which provided similar support in the same regions. As a result, some activities recalled by farmers may not have been part of 2SCALE, further complicating the evaluation. **Respondents from both the treatment and control groups in Ghana and Kenya participated in other interventions**, complicating the isolation of 2SCALE's specific effects and potentially influencing outcomes attributed to the partnership.
4. **Any observations without a suitable match from 2017 were excluded from the final sample.** This situation made the final sample size for the Kenya PPP to be below the recommended 630 observations. However, during the analysis, as a mitigation measure, nearly significant results are also considered, as the non-significance could arise from the sample size.
5. In Kenya, Shalem had begun implementing interventions before the baseline survey in 2015, and farmers were already trained and dependent on Shalem as a key buyer. This could result in social desirability bias, where respondents provide favourable responses due to their reliance on the organization. Such factors may affect the objectivity of the data and the perception of the partnership's benefits.
6. **Severe weather conditions affected data collection in Ghana, particularly in the Salaga cluster, impacting the accuracy of the reported values.** Similarly, farm characteristics and rainfall differences in Kenya's Tharaka Nithi and Meru counties introduced discrepancies in production, income, and yield. These environmental factors need cautious interpretation of the findings and limit generalization. See Annex 7 Precipitation Overview for a detailed overview on Kenya's and Ghana's precipitation statistics.

## 2.2 Characteristics of 2SCALE Beneficiaries

Answer to the evaluation question on relevance: What are the main characteristics of the beneficiaries/stakeholders of 2SCALE, i.e. SHFs and business partners?

- The main beneficiaries of the 2SCALE partnerships analysed are smallholder farmers. In Kenya they cultivate an average of 3.08 acres (sorghum) and 6.3 acres in Ghana (soybean).
- Farming constitutes the main source of income for households (79% in Kenya, 89% in Ghana).
- The groups targeted is rather aged, share similar years' experience, but education levels differ highly. Majority of farmers in Kenya are aged 46-65, and in Ghana 36-55, with an average of 24 years of experience. Higher education levels in Kenya compared to Ghana: 83% completed primary in Kenya vs. 26% in Ghana.
- A high percentage of female-headed households is present in both partnerships (71% in Kenya, 45% in Ghana).

Table 5: Characteristic of beneficiary smallholder farmers<sup>17</sup>

Variable	Ghana	Kenya
	SHF Characteristics	SHF Characteristics
Sample Size	438	305
<b>Smallholder Farmer Characteristics</b>		
Median Farmer Age	36-45	46-55
Average years of Farming Experience	24,1 (10,7)	24,1 (11,3)
% who completed primary education	26% (44%)	83% (38%)
% who completed secondary education	21% (41%)	70% (46%)
<b>Household &amp; Farm Characteristics</b>		
Households are headed by women	40% (49%)	31% (46%)
Average Household Size	10,5 (5,01)	7,11 (2,46)
Income from Farming activities	89% (21%)	79% (29%)
Average Land cultivated (in Acres)	5,51 (3,34)	2,71 (1,64)
Average Yield from last season	217 kg (124)	716 kg (336)

The characteristics are described using either the mean or median, with the standard deviation provided in parenthesis.

Source: ADE-KIT, based on ADE-Kit survey data collected in 2024

Households selected by 2SCALE and its partners in Kenya and Ghana rely heavily on farming, which constitutes over half of their income—79% in Kenya and 89% in Ghana (Table 5). The program supports experienced farmers, with most in Kenya aged 46-65, and in Ghana, aged 36-55, with an average of 24 years of farming experience.

A focus on gender inclusion is notable in Kenya, where 71% of households are headed by women, compared to 45% in Ghana. Education levels differ significantly between the two countries: 83% of beneficiaries in Kenya have completed primary education (85% of women and 79% of men), with 70% finishing secondary school

<sup>17</sup> Annex 3 Sample description and Summary Statistics provide a more detailed look at Treatment and Control statistics.



(39% of women and 77% of men). In Ghana, only 26% have completed primary education (12% of women and 36% of men) and 20% secondary.

**Farmers in both countries are smallholders.** In Kenya, they manage an average of 3.08 acres, focusing on sorghum production, while in Ghana, they manage 6.3 acres, focusing on soybean production. In Kenya the average land size cultivated by SHFs typically ranges between 0.5 to 5 acres<sup>18</sup>, and in Ghana it is 2.6 acres<sup>19</sup>.

**The 2SCALE approach involves partnerships with BCs, and on BSS.** BSS often serve as extension agents in the field since 2SCALE itself does not operate directly on the ground. In some cases, BCs have their extension staff like the PPP in Kenya, while others rely on BSS to support field activities. For example, in the Ghana soybean partnership, Yedent was the BC, while two BSS, EPDRA (Eastern Presbyterian Development and Relief Agency) in Salaga and SEND Ghana in Saboba, were engaged to facilitate the implementation.

PPP code	Country	Industry	Product	Business Champion	Business Service Supplier
KEN03	Kenya	Staples	Sorghum	Shalem	COMEHA
GHA02	Ghana	Soy and oil seeds	Soybeans	Yedent	EPDRA & SEND Ghana

Shalem also adds value by processing crops into products like precooked ugali and fortified porridge, targeting Bottom of the Pyramid consumers. In addition, it provides training and input financing to over 30,000 farmers, helping them mitigate risks from weather and market volatility through diversification efforts.

In the Ghana PPP, Yedent, the BC based in Sunyani, produces fortified food products like Maisoy Forte Tom Brown. Yedent aims to excel in the fortified food industry through technological innovation and a skilled workforce, positioning itself as a top player in the market. EPDRA in Saboba supports farmers with training, financial education, and improving women-led SMEs, while SEND Ghana in Salaga promotes sustainable farming and development through community-focused interventions.

<sup>18</sup> [483 Agricultural Productivity in Kenya Barriers and Opportunities.pdf \(publishing.service.gov.uk\)](#)

<sup>19</sup> <https://www.fao.org/family-farming/data-sources/dataportrait/farm-size/en/>

## 2.3 Impact on Farmer Productivity

This Section aims to explore how the two selected 2SCALE partnerships have influenced productivity for SHFs in Kenya and Ghana in 2023. As a key measure of productivity, the analysis focuses on yield, which provides a direct indication of how effectively the partnership has improved the output per unit of land. The methodological steps followed to analyse the data and obtain the results are described in Section 2.1.2.

**Answer to the evaluation question on impact: How plausible is it that 2SCALE Phase 1 PPPs have led to a significant change in production of SHFs?**

- In Kenya, the ET found a positive effect on sorghum productivity with increased yields for farmers in the treatment group. Production levels increased, with a highest peak after 2SCALE support concluded in 2017, even though farmers were working on smaller plots than those in the control group. While consistently outperforming control farmers despite reduced land use, productivity of the treatment group declined over time. This increase in productivity, could be a result of higher rates of adoption of productivity-boosting practices, including the use of organic fertilizers, thorough cleaning of crop residues, and consistent application of pesticides.
- In Ghana, the ET found no positive effects on soybean productivity since higher yields are reported for farmers in the control group, at all times considered. Despite adopting productivity-improving practices, farmers from the treatment group could not mitigate the adverse impacts of severe weather conditions in recent years. The control group boosted production through practices like crop rotation and land cleaning.
- Explanatory factors:
  - External weather shocks have negatively impacted productivity, diminishing the effects of 2SCALE either immediately after the partnership or in the years following.
  - In Ghana's control villages, the initial context is characterized by larger farms focused on soy, used them more efficiently through practices like intercropping.
  - Decline in Kenya linked to less prioritization of sorghum and more crop rotation/intercropping?

In Kenya, the treatment group produced significantly more sorghum than the control group in 2023, with an average of 758 kg compared to 610 kg in the control group (Table 6 below). The increased production was driven by higher yields among treatment farmers, with 714 kg per acre compared to 478 kg in the control group, compensating for the smaller land area. The higher production of the treatment group occurred despite they used less land for sorghum cultivation: 1.17 acres on average versus 1.31 acres in the control group, though the difference in land area was not significant.

However, yield performance declined for the treatment group between 2017 and 2023 in Kenya. Despite this decline, treatment farmers continued to outperform the control group. Yields dropped from 895 kg per acre in 2017 to 714 kg per acre in 2023 (Tables 9 and 8, respectively). However, treatment farmers continued to outperform the control group, whose yields increased from 163 kg per acre in 2017 to 478 kg per acre in 2023. Focus Group Discussions (FGDs) indicated that pest infestations, heavy rains, and poor seed germination were key challenges contributing to lower yields in the treatment group, especially during the 2023 season.

Total production for the treatment group in Kenya also decreased over this period, falling from 1,596 kg in 2017 to 758 kg in 2023. Meanwhile, the control group's production rose from 264 kg in 2017 to 610 kg in 2023, reflecting improvements in both yield and land use. Farmers from the treatment group, cited issues with input availability, such as fertilizer and quality seeds. Shalem sometimes provided inputs on credit, but only for one acre of land.

Land allocated to the target crop also decreased between 2017 and 2023 in Kenya, due to climate mitigation strategy and soil recovery support through crop rotation. The treatment group reduced their allocation from 2.02 acres to 1.17 acres, and the control group from 1.51 acres to 1.31 acres. While the DID analysis in Annex 4, does not support this trend, cross-sectional analysis for 2023 shows it clearly. FGDs revealed that, despite production challenges, farmers continue to prefer sorghum for its climate resilience. However, many reduced sorghum acreages to mitigate climate risks and support soil recovery through crop rotation.

In Ghana, the control group outperformed the treatment group in soybean production in 2023, with an average of 665 kg versus 435 kg in the treatment group. The smaller land area and lower yields in the treatment group hampered their total production. The control group allocated more land to soybean cultivation– 2.60 acres compared to 1.97 acres – and achieved higher yields of 289 kg per acre versus 222 kg in the treatment group.

Yields remained relatively stable between 2017 and 2023 in Ghana. Treatment group yields decreased slightly from 227.86 kg per acre in 2017 to 217.93 kg per acre in 2023, while control group yields increased from 266.52 kg to 291.72 kg per acre. FGDs in Ghana highlighted similar production challenges as Kenya, especially climate issues like heavy rainfall, which damaged crops and reduced yields. For a detailed analysis on the weather conditions experienced by Control and Treatment groups in both partnerships, please see Annex 7 Precipitation overview.

Production in Ghana slightly increased for the treatment group, rising from 374.7 kg in 2017 to 409.66 kg in 2023. Control group production grew even more, from 481.7 kg to 680.67 kg, during the same period. FGDs in Ghana revealed that farmers from the treatment group, continued applying practices learned from the partnership, such as crop rotation and land preparation, which helped sustain production despite adverse weather conditions in 2023.

Table 6: 2023 Production outcomes for Treatment vs. Control groups in Kenya and Ghana

Production	# of Matched Pairs	Matched Treatment Mean	Matched Control Mean	Difference in Means	p-value
<b>Kenya</b>					
Area allocated to target crop (in acres)	273	1,17	1,31	-0,13	0,11
Share of the total cultivated area allocated to the target crop	305	49%	43%	5%	0,19
Production of the target crop (in Kg)	270	758,33	610,39	147,94	0,00
Yield of the target crop (in Kg/acre)	294	713,93	478,34	235,59	0,00
Number of different crops cultivated	305	3,94	3,02	0,92	0,00
Share consumed **	285	3%	8%	-5%	0,01
Share sold **	303	95%	89%	6%	0,01
Share stored **	288	1%	2%	-1%	0,38

<b>Ghana</b>					
Area allocated to target crop (in acres)	343	1,97	2,60	-0,63	0,00
Share of the total cultivated area allocated to the target crop	381	39%	50%	-10%	0,00
Production of the target crop (in Kg)	307	434,82	664,75	-229,92	0,00
Yield of the target crop (in Kg/acre)	355	221,75	289,49	-67,74	0,00
Number of different crops cultivated	381	2,97	2,56	-0,41	0,00
Share consumed **	377	15%	14%	1%	0,73
Share sold **	376	70%	63%	6%	0,07
Share stored **	377	4%	8%	-4%	0,02

\*\* The test performed on the difference in the log odds ratio rather than on the reported mean

Analysis uses PSM with optimal matching technique.

Source: ADE-KIT, based on ADE-Kit survey data collected in 2024

**Further quantitative analysis showed that eco-efficient farming practices significantly boosted yields in both Kenya and Ghana (Annex 4 Additional Data, Tables 3 and 4).** In Kenya, organic fertilizer use, and crop residue removal were particularly effective in enhancing productivity. Intercropping and pesticide use were also key practices contributing to higher yields, supporting the partnership's goal of improving agricultural output. In Ghana, specific practices also led to higher yields, contributing to increased productivity. Intercropping significantly increased yield, proving effective in improving productivity. Pesticide use also played a key role in maintaining and enhancing yields, highlighting its importance in the context of the partnership.

**In Kenya, the treatment group adopted key productivity-boosting practices more frequently than the control group (Annex 4 Additional Data, Table 3).** Organic fertilizer was used by 74% of the treatment group compared to 37% of the control group, and crop residue removal, important for soil preparation, was practiced by 66% of the treatment group versus 27% in the control group. Pesticide use was also more common among treatment farmers (90%) than control farmers (83%). These findings indicate that the partnership successfully promoted practices that increased productivity among the treatment group farmers in Kenya.

**However, in Ghana, adoption of productivity-enhancing practices was more mixed, with some being more prevalent in the control group.** Intercropping, a key contributor to yield, was less common in the treatment group (3%) compared to the control group (8%). On the other hand, inorganic fertilizer use was more prevalent in the treatment group (16%) compared to the control group (7%). These mixed results suggest varying levels of success in promoting effective practices within Ghana. FGDs in treatment communities revealed that intercropping was not economically viable for the farmers, contrary to the use of inorganic fertilizer that during the program was provided by the BSS.

**The partnerships' focus on these practices directly supports its goal of increasing productivity.** By promoting practices like organic fertilization and residue removal in Kenya, and intercropping and pesticide use in Ghana, the partnership effectively enhances the agricultural output of SHF. These practices are key to achieving the partnership's objectives of boosting productivity and ensuring the sustainability of farming communities.

**No significant external factors, such as natural shocks, were identified that might explain differences in the impact between the treatment and control groups in Kenya.** This reinforces the conclusion that the adoption of good agricultural practices (GAPs) contributed to the higher yields among treatment farmers, highlighting

the partnership's effectiveness in Kenya.

**Severe weather occurrences could partially explain the poorer productivity performance of the treatment farmers in Ghana in 2023<sup>20</sup>.** FGDs in Ghana's treatment communities, such as Kappito and Nakpaye, revealed that atypically low yields in 2023 were primarily due to external factors like heavy rainfall and declining soil fertility. For example, heavy rains in Kappito caused flooding that destroyed much of the soybean harvest, while in Nakpaye, declining soil fertility reduced yields. The treatment community of Salaga also experienced unusually high rainfall, which could have negatively affected germination and plant growth. These severe weather occurrences potentially explain the poorer performance of the treatment farmers in Ghana despite their higher adoption of good agricultural practices (see Annex 7 Precipitation overview).

**FGDs in Ghana highlighted the need to adapt farming calendars due to climate change, aligning with farmers' calls to adjust planting seasons.** Aggregators' instructions to farmers about timing and planting practices align with the GAPs discussed in the FGD's, where farmers mentioned learning practices from the partnership.

**A notable observation is that in both countries, the control groups tend to have larger farms overall.** In Kenya, control farmers cultivated 3.5 hectares on average compared to 2.7 hectares in the treatment group, while in Ghana, control farmers averaged 6.2 acres compared to 5.7 acres in the treatment group. Farm size differences are likely influenced by factors related to the specific regions from which the samples were drawn rather than being an effect of the partnership itself and should be viewed as sampling noise, partially accounted for using PSM.

**However, it is difficult to draw any conclusions about farm size. While larger farms often result in greater total production, they may also lead to lower yields due to resource constraints,** as farmers with larger areas under cultivation may struggle to invest sufficient resources per unit of land, resulting in lower yields. In Ghana, however, the treatment group, despite having smaller farms experienced lower yields than the control group, raising concerns about the partnership's effectiveness in improving productivity. This outcome suggests that the partnership may not be addressing the critical factors that influence yield, which is problematic for the intended positive impact of the intervention.

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<sup>20</sup> Even though weather conditions had their influence on the production performance of the treatment group, other differences with the control group such as the experience in the soybean production must be taken into account.

## 2.4 Impact on Resilience through Improved Farming Practices

This Section examines how the adoption of improved farming practices influences resilience and assesses the extent to which the partnerships have strengthened farmers' capacity to recover from adverse events. By evaluating resilience and the adoption of these practices, the ET can determine whether 2SCALE's partnerships have contributed to greater resource efficiency, reduced environmental impact, and improved adaptability. The methodological steps followed to analyse the data and obtain the results are described in Section 2.1.2.

**Answer to the evaluation question on impact: How plausible is it that 2SCALE Phase 1 PPPs have led to a significant change in the resilience of SHFs?**

- The SHFs have successfully adopted improved farming practices that can lead to resilience in both countries.
- However, the adoption of these practices does not translate into higher resilience according to ATR index levels, which suggests that there might be other factors undermining the impact of the adoption of these practices.
- In Kenya, treatment farmers initially showed higher resilience than the control group. However, this gap diminished with time. In Ghana, treated farmers showed little improvement in resilience compared to the control group.
- Farmers of the selected partnerships have effectively adopted improved farming practices, including eco-efficient practices, in Kenya and in Ghana.
  - In Kenya, intercropping, use of organic fertilizers and soil preparation are the practices with higher adoption rates among treatment farmers.
  - In Ghana, crop rotation and the use of inorganic fertilizer are the practices more frequently adopted by the treatment farmers, although it is unclear whether this result can be attributed to 2SCALE PPP.

Farmers resilience levels have not significantly improved after partnership activities in both countries, which suggests a lack of impact related to resilience capacity. The Ability to Recover Index (ATR)<sup>21</sup> shows mixed results in Kenya and Ghana (Table 7). In Kenya, 2023 data indicate a slight improvement in the index for the treatment group compared to the control group, with a difference of 0.03. However, this difference is not statistically significant. In contrast, in Ghana, the treatment group has a lower ATR Index than the control group, with a significant negative difference of 0.06. This indicates that the partnership may not have effectively enhanced resilience in Ghana, and treatment farmers may even be less resilient than their control group counterparts.

The impact of the 2SCALE partnerships on resilience has evolved differently over time in Kenya and Ghana. In Kenya, treatment farmers initially showed a higher ability to recover compared to the control group, but this gap has narrowed over time. In Ghana, treatment farmers showed modest improvements in 2017

<sup>21</sup> See Annex 2 Measuring Resilience for a formal definition of the Index.

compared to the control group.

**The partnerships have successfully promoted the adoption of improved farming practices critical for resilience in both Kenya and Ghana (Table 7).** The results of a Structural Equation Modelling (SEM) regression (Annex 4 Additional Data, Tables 10 and 11) show a significant correlation between partnership participation and the adoption of improved farming practices, highlighting the partnership's effectiveness in promoting these practices.<sup>22</sup>

**In Kenya, intercropping, use of organic fertilizers and soil preparation are the practices with higher adoption rates among treatment farmers.** Intercropping is essential for resilience, reducing the risk of total crop failure and enhancing biodiversity, which mitigates the impact of pests and diseases. It was adopted by 44% of treatment farmers compared to 28% of control farmers. Similarly, 74% of treatment farmers use organic fertilizers, compared to 37% in the control group, contributing to long-term soil health. Soil preparation practices, such as residue management and proper tillage, are also more common among the treatment group (66% vs. 27%), improving soil structure and reducing erosion.

**When comparing changes over time between treatment and control groups (Annex 4 Additional Data, Tables 4 and 5), the analysis confirms positive impacts of the partnerships on the adoption of sustainable eco-efficient farming practices in Kenya.** Practices such as intercropping and residue management showed sustained adoption, with significant Average Treatment Effects on the Treated (ATT) from 2017 to 2023. The use of organic fertilizers also remained consistently high, highlighting the partnership's long-term effectiveness in promoting these practices.

**In Ghana, the partnership has also encouraged the adoption of eco-efficient farming practices, although the situation in 2023 shows mixed results.** Crop rotation, which improves soil fertility and reduces pest and disease buildup, is adopted by 41% of treatment farmers compared to 26% of control farmers. The use of inorganic fertilizers is higher among the treatment group (16% vs. 7%), enhancing resilience by ensuring adequate nutrients in nutrient-poor soils. However, despite increased adoption of these practices, the negative impact on the ATR Index suggests that these practices alone are insufficient to improve resilience. FGDs revealed that access to markets, financial support, and extension services are also crucial for recovery from shocks.

**In Ghana, the partnership had mixed success in sustaining improved farming practices.** It effectively promoted the use of inorganic fertilizers, crop rotation, and integrated pest management, contributing to long-term productivity. However, intercropping saw a significant decline by 2023, indicating challenges in maintaining its adoption.

**Results related to a lack of impact on resilience capacity contrasts with the results that treatment farmers in both countries apply more improved farming practices on average than control farmers.** In Kenya, while treatment farmers have adopted more of these practices, it has not resulted in a significantly higher Ability to Recover Index. In Ghana, although practices like crop rotation and inorganic fertilizer use are more

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<sup>22</sup> SEM provides insight into the partnership's impact on resilience by accounting for intermediate outcomes and controlling for factors such as education, farming experience, number of shocks, and land and soil characteristics. The analysis confirms the partnership's positive influence on eco-efficient practices adoption in both Ghana and Kenya. Additional SEM estimations can be found in the Annex 4 Addition Data.



common among treatment farmers, the lower ATR Index indicates additional challenges. These findings highlight the need for a holistic approach that promotes improved and eco-efficient farming practices alongside factors like financial access, market integration, and ongoing support beyond the partnership.

**The relationship between the adoption of improved farming practices and resilience is complex and suggest the non-negligible role of unobserved factors.** In both countries, the coefficient for the number of improved farming practices applied on resilience is not statistically significant, suggesting that other unobserved factors may be influencing resilience beyond what the model accounts for. It should be noted that resilience was not an initial objective of the 2SCALE partnerships, and the fact that each partnership focuses on a single crop instead of farming systems, could explain the challenge of developing an effective ability to recover.

Table 7: 2023 Farming practices and resilience outcomes for Treatment vs. Control groups in Kenya and Ghana

	# of Matched Pairs	Matched Treatment Mean	Matched Control Mean	Difference in Means	p-value
<b>Kenya</b>					
2023 Ability to Recover Index	180	0,67	0,65	0,03	0,15
Intercrop	305	44%	28%	16%	0,00
Soil preparation	305	66%	27%	39%	0,00
Crop rotation	305	73%	88%	-14%	0,00
High checks for pests	305	30%	25%	5%	0,17
Use of pesticides	263	90%	83%	8%	0,01
Use of organic fertilizer	305	74%	37%	37%	0,00
Use of inorganic fertilizer	305	22%	7%	15%	0,00
Number of farming practices utilized					
<b>Ghana</b>					
2023 Ability to Recover Index	104	0,64	0,70	-0,06	0,02
Intercrop	381	3%	8%	-5%	0,00
Soil preparation	381	29%	30%	-1%	0,76
Crop rotation	381	41%	26%	15%	0,00
High checks for pests	381	43%	38%	6%	0,13
Use of pesticides	379	62%	63%	-1%	0,71
Use of organic fertilizer	381	7%	4%	3%	0,10
Use of inorganic fertilizer	381	16%	7%	9%	0,00
Number of farming practices utilized	381	16%	7%	9%	0,00

Analysis uses PSM with optimal matching technique.

Source: ADE-KIT, based on ADE-Kit survey data collected in 2024

Overall, the analysis underscores the varying degrees of sustained impact of the 2SCALE partnerships on resilience of SHFs. While the partnerships had a lasting influence on the adoption of certain farming practices in Kenya, initial gains in ability to recover have eroded over time. In Ghana, the results are more varied, with improvements in practices in some cases but deterioration in others.

## 2.5 Impact on Income

This Section explores how the 2SCALE partnerships influenced household income among SHFs in Kenya and Ghana (Table 8). Income is a key indicator of the partnership's success, reflecting the economic well-being of participating farmers and their ability to generate returns from agricultural activities. The analysis focuses on household income from all sources, with particular emphasis on income from the target crops. The methodological steps followed to analyse the data and obtain the results are described in Section 2.1.2.

**Answer to the evaluation question on impact: How plausible is it that 2SCALE Phase 1 PPPs have led to a significant change in income of SHFs?**

- Income improvements after 2SCALE support ended were not sustained over time. Treatment farmers observed a reduction of the difference with the control group on income and profits from the target crop.
- After 2SCALE support ended, treatment farmers initially showed lower wealth index levels, which then increased over time.
- In 2023, treatment farmers in both countries reported lower household incomes but higher wealth indexes compared to the control group, with increased borrowing indicating reliance on loans to manage income fluctuations. Despite lower income, treated farmers were able to accumulate more wealth, and show a more commercialized approach to agriculture.
- In Kenya, treatment farmers saw higher and more reliable income from focus crop thanks to higher yields, although price volatility and buyer uncertainty remained challenging.
- In Ghana, treatment farmers had lower income from soybeans compared to the control group but relied less on this crop, dedicating less land to it compared to the control group. The negative impact on income is mainly explained by productivity and yield which is highly affected by external factors such as weather.
- Over time, the improvements in income and profits diminished, largely due to external factors like severe weather events affecting productivity and yield. However, treated farmers experienced improved market access and bargaining power.

An unusual trend was observed in 2023, where treatment farmers reported lower household income, but higher wealth indexes compared to control groups in both Kenya and Ghana. In Kenya, treatment farmers had a total household income of 82,088 Kenyan Shillings (KES), lower than the control group's 91,746 KES. However, the wealth index<sup>23</sup> for the treatment group was higher at 0.13 compared to -0.12 for the control group. A similar pattern emerged in Ghana, with treatment farmers reporting lower income at 4,828 Ghanaian Cedis (GHS) compared to 5,635 GHS for the control group, but a higher wealth index of 0.13 compared to -0.15 in the control group. This contrast suggests that while recent income may be lower for treatment farmers, they have accumulated more wealth over time.

<sup>23</sup> The Wealth Index has been created using 2024 collected data and following the DHS definition: "The wealth index is a composite measure of a household's cumulative living standard. The wealth index is calculated using data on a household's ownership of selected assets, such as televisions and bicycles; materials used for housing construction; and types of water access and sanitation facilities"

In Kenya, treatment farmers experienced a significant drop in household income between 2017 and 2023, while control group incomes increased. This suggests that the gains made during the partnership were not sustained. In 2017, treatment farmers had a household income of 97,562 KES, much higher than the control group's 57,207 KES. However, by 2023, treatment group income fell to 78,589 KES, while control group income rose to 90,972 KES. FGDs identified possible reasons for the income decrease observed in the treatment group, with recurring factors including significant price volatility in sorghum, where prices ranged from 10 to 43 KES/kg, and delayed payments from buyers such as Shalem.

In Ghana, treatment farmers also saw a relative decline in household income compared to control farmers, indicating that the control group outperformed treatment farmers in income growth. In 2017, treatment farmers had a household income of 1,260 GHS, slightly higher than the control group's 1,196 GHS. By 2023, treatment farmers' income decreased to 4,785 GHS, while control group income rose to 5,590 GHS. FGDs supported this, with farmers citing market access challenges and lower prices after the partnership ended. Without the market facilitation services provided by SEND Ghana, farmers were forced to rely on local markets, where prices were not as favourable as those previously offered by partnership-linked buyers.

Borrowing rates and loan amounts were higher among treatment farmers, indicating the use of this mechanism in response to lower income in 2023 and to smooth consumption. In Kenya, 42% of treatment farmers borrowed, compared to 38% of control farmers, with treatment farmers borrowing an average of 20,150 KES, almost double the control group's 11,149 KES. In Ghana, 36% of treatment farmers borrowed compared to 17% in the control group, though the loan amount difference was not statistically significant. These higher borrowing rates suggest treatment farmers may have relied on loans to offset income fluctuations, signalling that 2023 was a challenging year for income, notably related to the severe weather events suffered by most farmers from the treatment group in Ghana.

These findings indicate that while treatment communities faced significant income challenges in 2023, they have accumulated more wealth over time. The higher wealth index, despite lower household income, suggests that treatment farmers have built up more assets. However, the increased borrowing rates in both countries point to greater income volatility among treatment farmers, particularly given their typically smaller land sizes, which makes income generation more difficult. Further analysis of income components will help clarify how yields have affected the household income of treatment farmers.

Household income is a result of several components such as focus crop production, price per unit, share of production sold, and income from other sources (including other agricultural activities). To understand the income differences between treatment and control groups, the ET assessed the partnership's impact on each of these elements.

In Kenya, higher income from focus crops in the treatment group is mainly driven by better yields and total production, as discussed earlier. Treatment farmers also received slightly higher prices per kg—40.59 KES compared to 39.00 KES for the control group—boosting their income despite challenges like smaller plots and greater income volatility.

**However, income and profits from the target crop declined over time for treatment farmers in Kenya, eroding their earlier advantage.** In 2017, treatment farmers earned 49,604 KES from their main crop, much higher than the 11,171 KES earned by the control group. By 2023, the treatment group's income dropped to 33,644 KES, while the control group's income increased to 22,520 KES. FGDs confirmed that market access challenges and uncertainty about buyers like Shalem often forced farmers to sell at lower prices to alternative buyers. As for profits, in 2017, treatment farmers earned 52,734 KES in profits from the target crop, compared to 6,648 KES for the control group. By 2023, treatment group profits dropped to 34,827 KES, while control group profits increased to 27,932 KES, further narrowing the treatment group's profitability advantage.

**Qualitative findings from focus groups in Kenya support these data, with price volatility and buyer uncertainty cited as major income factors.** Farmers reported significant fluctuations in sorghum prices during 2023, with prices sometimes dropping to 10 KES per kg. Although preferred buyers like Shalem offered 43 KES per kg, their availability was inconsistent, forcing farmers to sell to other buyers at lower prices. Delayed payments from buyers further compounded income issues.

**Despite these income challenges, the treatment group in Kenya achieved a positive wealth index by 2023.** In 2017, the treatment group had a wealth index of 0.58, slightly lower than the control group's 0.67. By 2023, the treatment group's wealth index was 0.13, while the control group's wealth index fell to -0.13. Although wealth indices are not directly comparable across years, the relative advantage of the treatment group in 2023 suggests that, despite income losses, they had managed to build up wealth assets, consistent with FGDs where farmers mentioned investing in housing and education.

**In Ghana, lower income from focus crop sales largely explains the income gap between treatment and control groups.** This was primarily driven by lower production, severe weather events and lower yields, as prices were similar between the groups. FGDs confirmed this, with farmers noting that the market benefits previously provided by SEND Ghana had diminished, reducing income from crop sales.

**Income and profits from the main crop in Ghana showed sharper growth over time in favour of the control group, further widening the gap. Access to markets and buyer uncertainty are cited as major challenges for the treatment group.** In 2017, treatment farmers earned 449 GHS from their main crop, compared to 571 GHS for the control group. By 2023, treatment farmers' main crop income increased to 1,603 GHS, while control group income rose to 2,527 GHS. Reduced market facilitation and greater difficulty in finding buyers likely contributed to this slower income growth for treatment farmers. As for profits, in 2017, treatment farmers earned 613 GHS in profits from the target crop, while control farmers earned 759 GHS. By 2023, treatment group profits increased to 2,080 GHS, but control group profits rose to 3,728 GHS, showing greater profitability gains for the control group.

**Despite income challenges, the treatment group in Ghana maintained a relative wealth index advantage.** In 2017, the treatment group had a wealth index of 0.30, compared to 0.47 for the control group. By 2023, the treatment group's wealth index was 0.12, while the control group's wealth index declined to -0.13. This suggests that treatment farmers were able to accumulate more wealth since the partnership ended.

Treatment communities in both countries showed a more commercialized approach to agriculture, with higher shares of production sold. In Kenya, treatment farmers sold 95% of their produce compared to 89% for control farmers, reflecting a shift towards market-oriented farming. Similarly, in Ghana, treatment farmers sold 70% of their produce compared to 63% for the control group, suggesting the partnership's influence in promoting agricultural commercialization.

In Kenya, treatment farmers are more reliant on agriculture for income, with 80% of their income coming from agricultural activities, compared to 70% for control farmers. This greater reliance makes treatment farmers more vulnerable to income shocks, contributing to the income challenges observed in 2023.

Despite smaller landholdings, treatment farmers in Kenya earned significantly more from their main crop, averaging 33,846 KES compared to 22,813 KES for control farmers. This highlights the partnership's effectiveness in helping treatment farmers maximize income from their focus crops despite having less land.

In Ghana, treatment farmers are less dependent on focus crop sales, which explains the smaller gap in total income compared to focus crop income. While overall agricultural income is similar between the groups, treatment farmers allocate less land to focus crops, resulting in a smaller share of income from these crops. Focus groups revealed that farmers in Ghana also grow groundnuts, maize, and peppers, which contributes to the smaller difference in total income between the groups is smaller than the difference observed in focus crop income.

Table 8: 2023 Income outcomes for Treatment vs. Control groups in Kenya and Ghana

Income	# of Matched Pairs	Matched Treatment Mean	Matched Control Mean	Difference in Means	p-value
<b>Kenya</b>					
Total HH Income *	241	82088	91746	-9658	0,35
Income from target crop *	234	33846	22813	11033	0,00
Profit from the target crop	286	34868	26704	8164	0,00
Share of income from agricultural activities **	305	80%	70%	10%	0,01
Share of agricultural income from the target crop **	285	57%	49%	8%	0,06
Average price per kilo (between the two main buyers)	275	40,59	39,00	1,59	0,00
Wealth index ***	305	0,13	-0,12	0,26	0,00
Percentage Borrowing	305	42%	38%	4%	0,29
Average loan amount (among those borrowing) *	28	20150	11149	9001	0,33
<b>Ghana</b>					
Total HH Income *	321	4828	5635	-807	0,01
Income from target crop *	285	1821	2564	-743	0,00
Profit from the target crop	380	2170	3633	-1463	0,00
Share of income from agricultural activities **	381	89%	91%	-2%	0,36
Share of agricultural income from the target crop **	371	45%	62%	-17%	0,00
Average price per kilo (between the two main buyers)	355	4,94	4,97	-0,03	0,84
Wealth index ***	381	0,13	-0,15	0,27	0,00
Percentage Borrowing	381	36%	17%	19%	0,00
Average loan amount (among those borrowing) *	2	450	435	15	0,87

\* The test is performed on the log transformation of the variable

\*\* The test performed on the difference in the log odds ratio rather than on the reported means

\*\*\* Normalized with mean 0, negative values indicate below average wealth

Analysis uses PSM with optimal matching technique.

Source: ADE-KIT, based on ADE-KIT survey data collected in 2024

**All findings above are supported by significant effects from the DID analysis.** While treatment farmers in both countries faced income declines between 2017 and 2023, these results may reflect external factors in 2023, rather than a sustained downward trend. The negative impact on income was mainly driven by productivity and yield, which are often affected by factors like weather. Therefore, the negative progress since the partnership's end does not necessarily indicate a long-term trend. However, the relative stability of the wealth index for treatment farmers suggests they maintained some level of economic resilience despite these challenges.

## 3 Phase 2 Evaluation

### 3.1. Methodology

#### 3.1.1 Evaluation questions

In the inception report the EQs presented in the ToR were reformulated based on the Reconstructed ToC (see Section 1.4), preliminary document analysis and interviews (see Annex 9 Phase 2 Methodology). There are four main evaluation questions for Phase 2, related to five evaluation criteria: relevance, effectiveness, impact, sustainability and additionality. Note that there was no EQ on efficiency in the ToR, and therefore, the assessment of efficiency has not been included. During the data collection and analysis process, it was deemed useful to further merge some sub-question as indicated in Table 9 below.

Table 9: Evaluation questions Phase 2

Sub-questions Inception Report	Changes final report	Structure final report
<b>1. RELEVANCE: Is the program doing the right things?</b>		
1.1. What are the main characteristics of the beneficiaries/stakeholders of 2SCALE, i.e SHF and business partners? How are they selected/targeted to enhance the terms of inclusion?	No change	Terms of inclusion
1.2 Did 2SCALE adequately respond to key needs of its stakeholders/beneficiaries, i.e. SHF, business champions, business service providers and were potentially conflicting interests adequately identified and addressed?	Merged with sub-question 1.4, as sub-questions were complementary/overlapping	--
1.3 Was 2SCALE adequately designed to contribute to the three overall objectives of increased sustainable food production and income for SHF, improved inclusive private sector growth and improved food consumption of nutritious food by BoP consumers? Have adequate targets been defined?	No change	Adequate design
1.4 Has the 2SCALE program been sensitive and responsive to the context and has the program been flexible to adapt to changes in context such as changes in the security situation or climate shocks?	Merged with sub-question 1.2 as sub-questions were complementary/overlapping	Responsiveness, context-sensitivity and flexibility
<b>2. EFFECTIVENESS: Is the program achieving its objectives (outputs and outcomes)?</b>		
2.1 To what extent have outputs been realised?	The sub-questions regarding outputs and outcomes are answered on the basis of the Reconstructed ToC, and therefore answered per Impact	SHFs
		Private sector
2.2. To what extent have outcomes been realised?		BoP consumers
		Sub-sector system



	Pathway	change
2.3 What are the main explanatory factors -external and internal- for the realisation of outputs and outcomes?	No change	Explanatory factors
<b>3. IMPACT AND 4. SUSTAINABILITY: What difference does the intervention make, will the benefits last and are they likely to be replicated?</b>		
3.3 How plausible is it that 2SCALE Phase 2 PPPs have led to a significant change in the livelihoods of the intended beneficiaries?	Questions on impact and sustainability have been merged as there was some overlap	Impact and replication
3.4 To what extent and how did 2SCALE cause positive or negative, intended or unintended higher-level effects, including transformational systemic change and replication of the 2SCALE approach?		
4. To what extent are outcomes and impacts of 2SCALE likely to continue or to be replicated by other actors in the region?		Sustainability
	The ToR and evaluation approach ask specific attention for contribution analysis	Contribution analysis
<b>5. ADDITIONALITY: What does the private sector add?</b>		
5. What is the additionality of 2SCALE in the funding of PPPs, taking into account development additionality, input additionality (financial and non-financial) and output additionality?	Sub-questions on two types of additionality have been split. Insufficient information to assess development additionality	Input additionality
		Output additionality

### 3.1.2 Indicators and Evaluation Matrix

The evaluation matrix is structured along the EQs and their sub-questions. Specific indicators, data collection and analysis tools are defined for each sub-question. The evaluation matrix is presented in Annex 9, Table 1. To the extent possible, the ET has used the same indicators as developed by 2SCALE. The UIIs (see Section 1.4), which were agreed upon with the MFA, are important indicators for the program. Although the UIIs refer in the terminology to impact, in practice the UIIs are a mix of output and outcome indicators, as shown in the table below that was presented in the approved inception report.

Table 10: UIIs reclassified

UII	Output, Outcome, Impact
Access to affordable and nutritious food: # of BoP Consumers	Outcome
<i>SHFs (incl. women and youth) with increased production and incomes: # of SHF*</i>	Increased production and incomes = impact # of SHF reached: output
Eco-efficient farming practices: # of Ha/ strengthened resilience of communities	Outcome
Strengthened SMEs: # of SMEs	Strengthened capacity SMEs = output
Increase in non-farming employment: # of non-farming jobs)	Outcome
Number of (M)SMEs in partnerships/target value chains	Output
Number of innovations adopted by (M)SMEs	Outcome
Improved access to financial services for smallholders and (M)SMEs (Euro)	Outcome

The reclassified UIIs are included in the evaluation matrix, together with other quantitative and qualitative indicators.

### 3.1.3 Three Levels of Data Collection and Analysis

Phase 2 data collection and analysis were organized at three levels allowing for a good balance between breadth and depth, which is also reflected in the evaluation matrix:

#### 1. Overall strategic and portfolio level

The analysis at strategic level involved a portfolio analysis for phase 2 and an overall strategic analysis. Data collection consisted of a document review including portfolio analysis (See Annex 11 Portfolio Overview) and was complemented with strategic level interviews and focus groups at different levels, also taking into account the utilization-focused approach.

Towards the end of the data collection and analysis phase, the findings of the intermediate and deep-dive assessment levels were integrated into the strategic analysis when the results could be generalized to the extent possible on the basis of the validation and triangulation of the data.

The country debriefs in six countries (see Section 3.1.4 on sampling below) have been important for feedback and validation of findings.

#### 2. Intermediate level: desk case studies

In the ToR, it was indicated that the 2SCALE program would carry out self-assessments to complement the external evaluation. These self-assessments consisted of contribution analyses of 13 PPPs in Phase 2 and served as the starting point for selecting the case studies for our external evaluation (see Section 3.1.4 on sampling below). As only a limited number of field studies could be conducted, most of the case studies have been desk-based, including online interviews. In total, six desk case studies have been conducted.

A specific case studies template that is in line with the evaluation matrix has been elaborated by the ET and

discussed with the 2SCALE MEAL team, both for the intermediate and the deep dive levels (see Annex 9<sup>24</sup>). The desk case studies consisted of the following steps:

- i. Collection of all relevant PPP documents (such as the partnership agreement including PPP ToC, workshop reports, annual evaluation notes, status updates, monitoring data and relevant quantitative data on AKVO Lumen)
- ii. Filling out of the case study template by 2SCALE team
- iii. Discussion of the template and identification of information gaps by the ET
- iv. Online interviews with the BC and BSS, and with the 2SCALE staff in charge
- v. Filling gaps in the template based on validation and triangulation of collected information
- vi. Presentation of preliminary findings and discussion with the country team together with a discussion on the Phase 2 country portfolio.

### 3. Deep-dive level: field case studies

At deep-dive level, field visits were made to four partnerships in Nigeria and Kenya (see Section 3.1.4). The basic six-step approach is identical to that of the intermediate level analysis, starting with desk work and discussion with the 2SCALE team, based on the case studies template (See Annex 9). The major distinction with the intermediate level analysis is that field studies have allowed for a 'deeper' engagement with stakeholders, business service providers and other stakeholders, as well as with independent sources through interviews, focus groups and site visits. This has enabled ongoing question-response loops for clarification of key issues and led to a more comprehensive understanding of the nature and performance of the partnership than the intermediate analysis. Therefore, the field studies were implemented prior to the desk case studies, which allowed to apply lessons from the deep-dive assessments for the intermediate level analysis. Nevertheless, the field visits were necessarily limited in time, given the available resources, as indicated in the Section 1.5.

#### 3.1.4 Sampling

The 13 cases selected for self-assessment by 2SCALE formed the starting point for the sampling. The 2SCALE selection was based on various criteria and aimed for a good balance of partnerships across various countries and industries but excluded cases for which no monitoring was available. Therefore, these cases are a 'better than average' representation of overall portfolio performance. Furthermore, the ET compared the overall portfolio with the self-assessment cases to assess representativeness in terms of countries and industries, which was the basis for the sample of case studies to be included in this evaluation. To take account of the higher-than-expected case study workload during the inception phase, the MFA approved the reduction of the sample for intermediate-level analysis from nine to six desk case studies. In addition, four field case studies were conducted as initially planned, leading to a total of ten case studies in six countries.

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<sup>24</sup> Initially, scoring of the evaluation criteria for each of the case studies was foreseen in the inception report. However, as scoring would not contribute to learning the scoring was abandoned.

The selection for the four field case studies was based on the following criteria: (i) safety and security<sup>25</sup>, (ii) portfolio representation and (iii) balance. This led to the following selection of four partnerships in Nigeria and Kenya:

Table 11: Selection of partnerships for the deep-dive analysis

#	PPP code	Country	Industry	Product	Self-assessment	Observations
10	NG25	Nigeria	Oilseeds	Oil palm	yes	no
11	NG01	Nigeria	Protein	Dairy	no	Only partnership in the portfolio that lasted two entire phases from 2012 to 2024
12	KE30	Kenya	Staples	Sorghum and Millet	yes	no
13	KE21	Kenya	Fresh Produce	Vegetables	yes	no

Source: ADE-KIT, based on 2SCALE M&amp;E data

The ET had capacity to review six other cases for intermediate-level analysis, aiming for a good representation of the portfolio in terms of country and industry coverage complementary to the field case study selection. Furthermore, due attention was paid to include three partnerships focussing on “sub-sector change”, a specific impact pathway included in the Reconstructed ToC, that is not very common and requires specific attention. This has resulted in the following sample of six PPPs for intermediate-level analysis (see Table 12).

Table 12: Selection of partnerships for intermediate analysis

#	PPP code	Country	Industry	Product	Sub-sector system	Self-assessment
2	BF28	Burkina Faso	Protein	Poultry	yes	yes
3	ET23	Ethiopia	Protein	Honey	no	yes
4	ET25	Ethiopia	Staples	Teff	no	no
7	ML25	Mali	Staples	Fonio	no	yes
8	NE26	Niger	Fresh Prod.	Potato	yes	yes
9	NG09	Nigeria	Staples	Sorghum	yes	yes

Source: ADE- KIT, based on 2SCALE M&amp;E data

### 3.1.5 Challenges and Limitations

In addition to the overall challenges and limitations mentioned in Section 1.5, during the Phase 2 evaluation, several specific challenges were encountered, that are listed below:

**Striking a balance between in-depth analysis at partnership level and overall analysis of the Phase 2 portfolio proved to be difficult.** As limited information at portfolio level was available, it was decided during the inception phase to do in addition to the four deep-dive case studies, also additional intermediary level case studies at partnership-level. This helped to strike a better balance between the overall portfolio analysis and the in-depth case studies.

**Limited time for field visits related to the four deep-dive case studies.** The vast scope of the Phase 2 evaluation in combination with the enormous amount of scattered documentation and lack of reliable and concise

<sup>25</sup> No field visits to countries or regions that are ‘red’ in the MoFA assessment.

overviews, meant that considerable time had to be spent on collecting and analysing basic information. Therefore, only limited time was available for the field studies, approximate 3-4 days for each case study. This allowed to do interviews with key actors, such as BCs, BSS and 2SCALE staff and organise focus groups with SHFS and MSMEs. However, given the lack of information at beneficiary level, it would have been better to have more time in the field. Nevertheless, the field visits allowed to collect very useful information, and the methodology used for the deep-dive studies was applied for the intermediate-level case studies.

**No complementarity between self-assessments and evaluation case studies.** As indicated above, the self-assessments and the case studies for this evaluation were meant to be complementary to each other, and the selection for the self-assessments informed the sampling approach. In reality, no complementarity was realised. While the evaluation started with delays, the self-assessments were even more delayed and the self-assessment reports only became available when data collection for the case studies was completed. Furthermore, the self-assessments were confronted with methodological challenges and did not provide additional useful information for this evaluation (see Section 3.5 for more details on self-assessments)

**Inconsistent data quality, reliance on manual inputs, and delayed information at program- and portfolio level as well as at partnership level, all of which affected the accuracy and validity of the findings.** Although 2SCALE collected data from most participating countries, the quality of this data varied considerably. Data collection relies heavily on manual inputs, which are often outdated. Multiple requests for updated data were made, often requiring persistent follow-ups to obtain various information, including updates on financial information and revised exit dates. Additionally, PPP codes changed between Phases 1 and 2 and were inconsistent across documentation, with mappings not being clearly tracked. Data collection regarding Iset and reached targets for UIIs, data quality and obtaining verification have also shown significant challenges. Therefore, the evaluation limited itself to targets for BoP and SHF.

## 3.2. Portfolio Overview

The portfolio analysis for Phase 2 is based on information provided by 2SCALE during this evaluation. As mentioned, gathering all information to come to a consistent and complete overview was challenging. The portfolio data was complemented by a discussion with five country teams (Nigeria, Burkina Faso, Mali, Niger, Ethiopia) to add qualitative information and have a better understanding of the reasons for suspension of partnerships.

The portfolio of Phase 2 comprises a total of 82 partnerships in ten countries in three categories: 57 Phase 2 PPPs that were active during at least 2.5 years, 16 PPPs that were suspended or stopped prematurely, and 9 Phase LIS PPPs (see Table 13). There were PPPs in six countries in West Africa (Burkina Faso, Ghana, Ivory Coast, Mali, Niger, Nigeria), two countries in East Africa (Ethiopia and Kenya) and two pilot countries (Egypt and South Sudan). These partnerships started activities after an identification and screening process in each country. The screening process has not been analysed by the ET, and there is no information on the number of requests vs the number of approved partnerships. 2SCALE makes a distinction in partnership status -active, phasing out, suspended, stopped, light intensity support and sub-sector system change – but the status changed over time and the categories overlapped (e.g. sub-sector system change is one of the impact

pathways, which can apply to active and stopped partnerships). For the purpose of this evaluation, it is important to make a distinction between, on the one hand, the 57 Phase 2 partnerships<sup>26</sup> that lasted for a sufficiently long period, i.e. 2.5 years, to generate potential (lasting) results and, on the other hand, the 16 partnerships<sup>27</sup> that were prematurely suspended or stopped, for which, in principle, no results can be expected. A separate third category are the 9 LIS Phase 1 partnerships, that received some additional support in Phase 2 during the extension phase 2023-2024.<sup>28</sup> Table 13 shows the breakdown of the number of partnerships for the three categories per country

Table 13: Overview of status of Phase 2 partnerships

Country	LIS Phase 1	Phase 2 PPPs*	Stopped or Suspended After being supported for 2-2.5 year	Total
Burkina Faso	0	7	1	8
Egypt	0	0	2	2
Ethiopia	1	8	2	11
Ghana	0	5	0	5
Ivory Coast	0	4	1	5
Kenya	4	8	3	15
Mali	1	6	3	10
Niger	0	7	1	8
Nigeria	3	10	3	16
South Sudan	0	2	0	2
<b>Total</b>	<b>9</b>	<b>57</b>	<b>16</b>	<b>82</b>

\* A PPP is considered stopped or suspended if 2SCALE support ceased less than 2.5 years after the start of program activities, while the other PPPs that lasted 2.5 years or longer are considered active PPPs for be included in the analysis.

Source: ADE & KIT

Table 13 shows that more than one quarter of the Phase 2 partnerships was prematurely stopped. The original target of 60 Phase 2 PPPs was almost achieved, and the revised target of 50 Phase 2 PPPs was overachieved (see Table 2 in Section 2). The portfolio overview also shows 9 LIS phase 1 PPPs, i.e. 8 less than the initial target of 17<sup>29</sup>. This third category has not been further analysed as the focus was on Phase 2 partnerships (with the exception of the Kenya KE03 sorghum partnership selected for Phase 1 IA, see Section 2).<sup>30</sup> LIS Phase 1 PPPs are concentrated in four countries.

The table also shows that Nigeria and Kenya have the largest number of PPPs, respectively 16 and 15, while the pilot countries Egypt and South-Sudan both have 2 pilot PPPs, in Egypt implementation stopped after two years and in South-Sudan activities were continued until March 2024. There is information on these pilot countries in the annual reports, and for Egypt an external evaluation report is available<sup>31</sup>. The average number

<sup>26</sup> This includes the NG01 dairy partnership, that started in Phase 1, but was continued in Phase 2 with full support until March 2024.

<sup>27</sup> This includes the two pilot partnerships in Egypt.

<sup>28</sup> 2SCALE request for funded extension Phase 2, July 2022

<sup>29</sup> 2SCALE request for funded extension Phase 2, July 2022

<sup>30</sup> Phase 2 partnerships that transitioned over time into light intensity support before phasing out have not been included in this category, but are part of the Phase 2 active partnerships.

<sup>31</sup> In November 2023, an external evaluation report "An evaluation of the 2SCALE pilots in Egypt" was published based on a one – week field visit and interviews with key stakeholders of the two pilots. The main findings refer to positive impact for SHFs in terms of improved incomes and access to markets for SHFs. However, these findings are based on perceptions and not on solid data. The evaluation also reports challenges in terms of communication and timely implementation.

of active Phase 2 PPPs is 7 per country, with exception of the two pilot countries. Mali has relatively the largest number of stopped/suspended PPPs with 3 out of 9 Phase 2 PPPs.

For some of the 16 partnerships that stopped prematurely, 2SCALE reports that some results have still been achieved, while 2SCALE's reported expenditures on these PPPs were € 2,781,096.<sup>32</sup> Interviews with the country teams provided insights into the reasons for suspension. In most cases, the main reasons were related to the BC not meeting its financial commitments due to financial or other problems, or different interpretations of the partnership and inclusive agribusiness. Security reasons were a second important reason for stopping activities. Nevertheless, for 10 of the 16 stopped PPP results were still reported, especially for SHFs, and between 100 to more than 3000 SHFs have been reached by these PPPs.

The 57 Phase 2 partnerships included in the evaluation analysis, have been classified by country and industry, which is reflected in the following table:

Table 14: Portfolio of 57 active Phase 2 partnerships per country and per industry

Country	Animal production Related	Fresh Produce	Soy and Oil Seeds	Staple Crops	Total
Burkina Faso	1	1	2	3	7
Ethiopia	2	2	1	3	8
Ghana	1	0	1	3	5
Ivory Coast	1	1	0	2	4
Kenya	2	2	3	1	8
Mali	1	1	1	3	6
Niger	1	2	1	3	7
Nigeria	2	2	2	4	10
South Sudan	0	0	0	2	2
<b>Total</b>	<b>11</b>	<b>11</b>	<b>11</b>	<b>24</b>	<b>57</b>

Source: ADE-KIT, based on 2SCALE M&E data

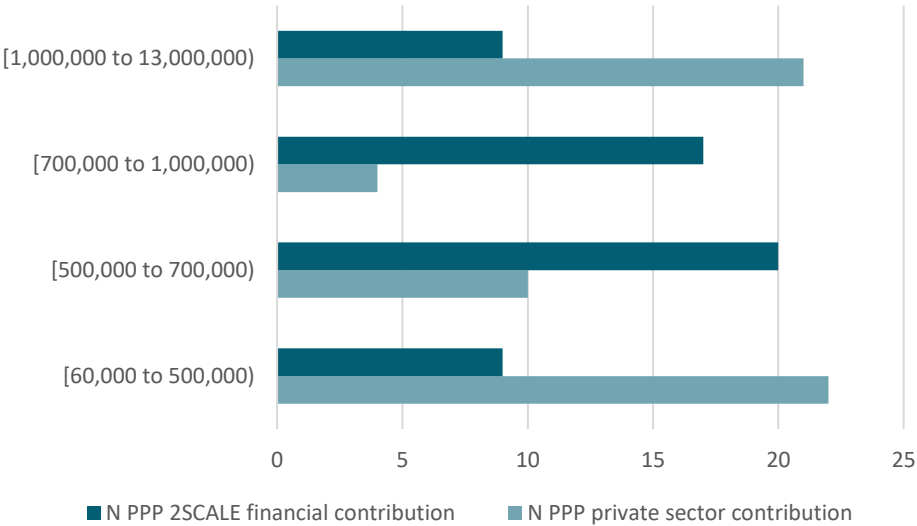
Table 14 shows that the staple crops industry is most important with 22 PPPs, focusing on a variety of staple crops such as sorghum, maize rice, and teff. The three other categories each have 11 active PPPs. The dominance of staple crops is understandable given the program's focus on agrifood. There are no major differences among the countries, and, only in Kenya, staple crops are relatively underrepresented, and soy and oilseeds are relatively overrepresented.

A final classification of basic characteristics of the active Phase 2 portfolio is based on the financial support, which consists of two elements: 2SCALE support and Private Sector Contribution (PSC), both were planned to be more or less equivalent at program and partnership levels. 2SCALE expenditures are allocated to partnerships, while other costs related to the partnership activities are included for the PSC investments. In Section 3.6 on additionality, the financial contributions are further explored. Figure 4 illustrates the substantial variation in financial contributions.

<sup>32</sup> Note that only 77% of stopped or suspended PPPs (i.e. 14) had consolidated 2SCALE results data available.



Figure 4: Overview of 2SCALE and Private Sector financial contributions for active PPPs, 2019-end 2023



Source: ADE & KIT, based on 2SCALE M&E data

The financial overview shows that total PSC for Phase 2 (until the end of 2023) stands at €70 million, while the 2SCALE contribution is €43 million, and the total available 2SCALE budget until the end of 2024 is €62.5 million. This corresponds to the figure above, where the PSC is substantially higher for the largest partnership (for one partnership a PSC up to €13 million is reported). For the middle categories, 2SCALE contributions tend to be larger than the PSC.

## 3.3. Relevance

The relevance evaluation criterion addresses the question whether the program is doing the right things, and whether it is doing this in the right way. The four sub-questions on relevance have been merged into three main issues (see Table 9) that are dealt with in this Section: terms of inclusion, characteristics of beneficiaries (3.3.1), quality of design (3.3.2) and responsiveness, flexibility and context sensitivity (3.3.3).

### Answer to the evaluation question on relevance: Is the program doing the right thing?

- 2SCALE is addressing key needs of SHFs (men, women, and youth) and private sector related to specific agricultural value chains with a clear focus on enhancing the terms of inclusion.
- 2SCALE aims to promote gender and youth equality through its gender-and youth sensitive approach, however, in most cases women and youth are engaged in additional activities, such as shopkeepers, transporters, processors and not in the main targeted agricultural activities.
- 2SCALE has developed an integrated approach on inclusive agribusiness, which is rather complex in practice, especially as the period of implementation is relatively short.
- The complexity of the approach has led to design problems at program and partnership level, with well-elaborated theories of change for less than half of the partnerships.
- While adaptive management is one of the key features of the 2SCALE approach, the program faces difficulties to adequately address changes in the context, such as political change (coup d'états), economic crises and security issues (in at least six countries where 2SCALE is active). No conflict-sensitive approaches have been developed.
- The adaptive management practices of 2SCALE work reasonably well to address internal partnership challenges, such as difficult relationships between the partners, but when the BC does not live up to its commitments, 2SCALE is often not able to adequately intervene.

### 3.3.1. Terms of Inclusion, Characteristics of Beneficiaries

For all PPS included as case studies, due attention has been paid to the terms of inclusion during the partnership preparation phase. However, during implementation, the main characteristics of the beneficiaries and the factors defining the actual terms of inclusion are only partly analysed. In the partnership preparation phase, a good and detailed joint problem analysis was conducted, including the characteristics of SHFs, the role of women and youth in the value chain. The detailed partnership approach, including the definition of impact pathways, the targets, the activities to be carried out and the distribution of roles were agreed upon. However, beyond the gender and age of community members, there was hardly any information on the specific characteristics of SHFs, as illustrated by the textbox on the engagement of pastoralists as beneficiaries.

While achieving gender and youth equality is part and parcel of the 2SCALE approach, in practice, women and youth are more active in secondary activities, such as processing, shopkeeping, threshing, etc, and their full involvement in farming activities is difficult to realise. The joint problem analysis at the start of the partnership pays due attention to the role of women and youth in the specific value chain and how they can benefit from the intended transformational changes. The intention for most partnerships is that women and youth will also be active in adopting different good agricultural practices, but in practice various challenges

occur. In most contexts, women and youth face limitations regarding their access to land, which are not easily overcome especially when it comes to the production of staple crops. Therefore, in the majority of the case studies women and youth are engaged in a wide variety of additional income-generating activities in the value chain either in MSMEs or as employees of the BC, such as in processing of food (e.g. women fura processors<sup>33</sup>), vendors, Agribusiness Cluster-coaches, transporters, etc. For most crops the traditional division of roles, where senior men dominate the production of main crops and own the cows, cannot easily be changed, and this explains the focus on additional income-generating activities. Case studies focusing on vegetables and honey, for which women are the focus, form an exception. However, the honey partnership in Ethiopia that explicitly aimed to change the traditional men-dominated and forest-based honey production system into an improved and backyard-based honey production system by women and youth, faced challenges. Despite some involvement of women and youth in some good examples, their engagement remains below par in most partnerships. While it is well-known that changing gender relations and achieving gender equality is a long-term process, the ET did not find clear evidence in most cases that gender relations are fundamentally addressed by 2SCALE.

**2SCALE aims to pay due attention to the terms of inclusion, concerning the formation of inclusive Agribusiness Clusters (ABCs), and the partnerships are built on these concepts that are elaborated in detail by the program.** The 2SCALE, Phase 2 Proposal<sup>34</sup>, referred to the definition of inclusive agribusiness by the World Business Council for Sustainable Development (WBCSD); “A sustainable and commercially viable business that seeks to involve low-income communities in its agricultural value chain, in a way that is benefitting them”. This refers to SHFs, youth, women, local entrepreneurs and low-income consumers of nutritious/quality food products. Therefore, a PPP approach was adopted with private sector companies as BCs that commit to be engaged as key partners of inclusive ABCs. The starting point was always a clear business idea or opportunity. The strategy for ABC formation and development was further developed by 2SCALE in October 2020<sup>35</sup>. The ABC definition of Food and Agriculture Organization (FAO) was adopted: “a concentration of producers and related firms in a geographical location”. In all partnerships, these central elements of contributing to inclusive agribusiness can be recognised. This starts in the identification and screening phase, where the context including all key actors were identified and the terms of inclusion for the specific partnership were elaborated, including gender-sensitive ABC needs analysis. ABC capacity building in the value chain focusing on hard and soft skills is one of the key features of the program, in which ABC coaches<sup>36</sup> should play a key role in addition to the 2 SCALE staff and BSS.

**In addition, various dimensions of inclusive ABC formation have been distinguished, such as voice, ownership, reward and risk, that were being discussed in workshops and monitored. 2SCALE distinguishes** four dimensions to assess ABCs. In principle, these dimensions were relevant but an add-on to the M&E system. No overview of PPPs performance regarding these four dimensions is available. In practice, the intention is to form SHF groups and if possible, to set up farmer cooperatives. In some cases, where SHFs have joint interests the approach worked quite well, but in other cases where communities are less homogenous

<sup>33</sup> Fura is an indigenous fermented cereal-based food consumed in the Northern part of Nigeria. It is a thick ball snack that is produced mainly from sorghum and spices such as ginger, black pepper, cloves, and black pepper.

<sup>34</sup> 2SCALE, Incubating and accelerating inclusive agribusiness in Africa, Proposal 2019-2023, October 2018, p.

<sup>35</sup> 2SCALE, Thematic: Agribusiness cluster formation & development Strategy, October 2020

<sup>36</sup> ABC coaches can be trusted employees of the BC, community members or a BSS coach

development was slow.

### 3.3.2. Quality of the Design

The ToC at 2SCALE program-level is process-oriented and does not match the theories of change at partnership level, which can be considered as a design flaw related to the lack of clear linkages between impact pathways and Ulls. The program-level ToC takes the main 2SCALE processes of incubation of inclusive agribusiness, replication and facilitation of (sub)-sector system change as point of departure. However, the distinction between these three processes is not very well articulated. All partnerships in the portfolio are focused on incubation, while in some cases sub-sector system change is considered as a separate impact pathway at PPP-level. In the jointly developed Reconstructed ToC for this evaluation, replication was included as an underlying assumption, and it was agreed that replication cannot be considered as an impact pathway. At Phase 2 proposal phase and in the peer review of the ToC and M&E system<sup>37</sup> the following critical comments on the program-level ToC were made:

- Better definition of realistic results in the ToC and impact pathways, attention to conflicting interests, more attention to context-specificity, clear distinction should be made between main goals and specific objectives
- Causal ToCs must be specified
- Assumptions are underplayed and there are leaps in the boxes

However, these comments did not lead to major changes. The disconnect between the program-level ToC and partnership ToCs has remained, while the links between ToCs and indicators were not improved. This led to reconstructing a new program-level ToC for this evaluation, based on the partnership ToCs.

The ten case studies show theories of change of variable quality, with four PPPs that have well-articulated and coherent ToCs, three PPPs that have strong and weak elements in their ToCs, and three PPPs with insufficiently articulated ToCs. In most cases, the impact pathway focusing on SHFs is well elaborated. For most of the impact pathways at PPP-level the relation between the activities, outputs and outcomes, including related indicators are not very well developed. All ten case studies have an impact pathway focusing on improvement of the productivity and production of the main crop/product by SHFs, which is in 9 cases relatively well articulated. The sub-sector system change impact pathway is present in three of the ten case studies, which is (deliberately) overrepresented compared to the overall portfolio for Phase 2 (with a total of 9 PPPs focusing on sub-sector system change). The impact pathway on sub-sector system change was elaborated in 2021, two years after the start of Phase 2 (see Section 3.4.4). The other two impact pathways focusing on private sector and BoP consumers are regularly combined, i.e. in two cases the impacts pathways on SHFs and private sector are combined (this is common in relation to access to credit), and in other cases the private sector impact pathway is combined with the focus on BoP consumers. Changes to the impact pathways at PPP-level during implementation are often related to the BoP consumer impact pathway. Some of these changes point at design challenges, such as an unrealistic impact pathway regarding BoP products and distribution. These specific impact pathway issues are further analysed in Section 0. Changes to impact

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<sup>37</sup> Institute of Development Studies (IDS), Centre of Development Impact (CDI), November 2019, Peer review of the Draft Monitoring, Evaluation and Learning Approach developed for the 2SCALE Program.

pathways during the partnership can also be considered as a flexible response to context changes. For most of the impact pathways at PPP-level the relation between the activities, outputs and outcomes, including related indicators are not very well developed. Including hypotheses in ToCs was considered too complicated and was therefore not included by 2SCALE.

### 3.3.3. Responsiveness, Context Sensitivity and Flexibility

Most PPPs were based on good problem analysis of the value chain at the start of the partnership, including the technical challenges of producing certain crops or products in different agro-ecological contexts, capacities of the partners, role of the BC, gender and age-sensitive analysis. 2SCALE pays due attention to a detailed problem analysis in the partnership documents and D&D workshops at the start of the partnership, which is the basis for the definition of impact pathways. This includes attention for Business Champion(s), farming practices, value chain issues, the specific commodity, marketing, access to finance, environmental issues and risk analysis.

In the partnership preparation phase, the needs of the various partners were identified, and the intention was to address these needs through a good design, while adaptive management practices have been developed to respond flexibly, especially to internal changes. These adaptive management practices were mainly focused on the relationships between partners, progress made, and other specific partnership issues. Flexible responses may include technical issues a change in the extension approach towards good agricultural practices, introduction of new seeds or varieties, decisions of the BC to invest in other equipment or machines, different marketing methods for BoP products etc. Flexible responses also included changes in impact pathways, such as new impact pathways, e.g. sub-sector system change, or access to credit, but also suppressing or merging impact pathways, such as on BoP products. If the relationship with the BC deteriorated, this would eventually lead to suspending or an early end to the partnership.

2SCALE partnerships paid insufficient attention to changes in external factors, such as political changes, economic crises and especially security problems. While the majority of the 2SCALE countries faced serious security challenges, no conflict sensitive approaches have been developed. All partnerships were confronted with context changes, and, in principle, 2SCALE had to flexibly respond to these changes. This was indeed the case, albeit only to a limited extent. Six of the ten case study partnerships were confronted with serious security issues, which were given very little attention in all partnership documents. Interviews with the BCs and BSSs made clear that in most cases these security issues were very seriously affecting 50% or more of the intervention areas. The most common response was to limit or change the intervention area to less affected areas. However, the effects on beneficiaries are not discussed in-depth. Alternatives to continue providing inputs to SHFs or to aggregate the agricultural products in insecure areas were being developed only to a limited extent. A common response was to abandon the insecure areas, which may in turn have had an effect on the conflict. While 2SCALE in phase 2 was specifically focussing on various fragile countries, this issue was given very little attention and was also not in line with the MFA policies for fragile countries<sup>38</sup>.

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<sup>38</sup> In the Dutch 2018 policy for development cooperation "Investeren in perspectief" due attention is paid to increased cooperation

## 3.4. Effectiveness

The objective of the effectiveness evaluation criterion is to understand whether the program achieved its objectives. The intent is to assess the performance of the program against the outcomes and outputs in the reconstructed ToC, while taking the targets of relevant ULLs<sup>39</sup> into account. The analysis used a contribution analysis that follows the logic of the impact pathways. The effectiveness analysis is primarily based on data from the 10 partnership case studies (intermediate level + deep dive analyses Table 11 & Table 12), and is complemented with data from the portfolio analysis. During the in-country visits, the ET conducted focus groups with SHFs, interviews with BCs, BSS and MSMEs, and visited relevant field locations such as local markets. This Section presents the four impact pathways of the reconstructed ToC, focussing on outcomes, and concludes with an analysis of the main external and internal explanatory factors, in line with the evaluation matrix. Section 3.5.3 presents the overarching contribution analysis, which builds on the analysis in this Section.

### Answer to the evaluation question on effectiveness: Is 2SCALE achieving its objectives?

- SHFs have adopted improved agricultural practices due to 2SCALE, although the rate of adoption is rather variable over time and across partnerships, and there is limited explicit focus on eco-efficient practices.
- 2SCALE has contributed to more inclusive agribusiness through the set-up of farmers groups, cooperatives and Agribusiness Clusters around BCs, but there is no solid evidence on strengthened negotiation capacity.
- 2SCALE has not reached the targeted number of SHFs in at least two-thirds of the partnerships.
- Some BCs have benefitted from 2SCALE support regarding product and BoP-market development, while MSMEs- focussing specifically on women and youth- have been established in transport, processing, agricultural services, and distribution.
- Approximately one-third of the PPPs reached their BoP-consumer targets, demonstrating variable performance ranging from good BoP product development and marketing to complete failures.
- The 2SCALE M&E system has clear strengths, such as the involvement of partners, but it does not provide sufficient evidence-based information at output and outcome level.
- External factors, such as changes in the political, economic and security situation affect performance of the program (especially in the Sahel and other conflict-affected countries and regions) but have been insufficiently taken into account.
- The complexity of the program – in terms of number of countries, number of impact pathways, number of PPPs in various industries, approach i.e. involvement of many partners – is on the one hand a strength, but on the other negatively affects performance as ambitions are very high.
- 2SCALE has in all areas only partially achieved its objectives, and performance seriously lags behind the ambitions.

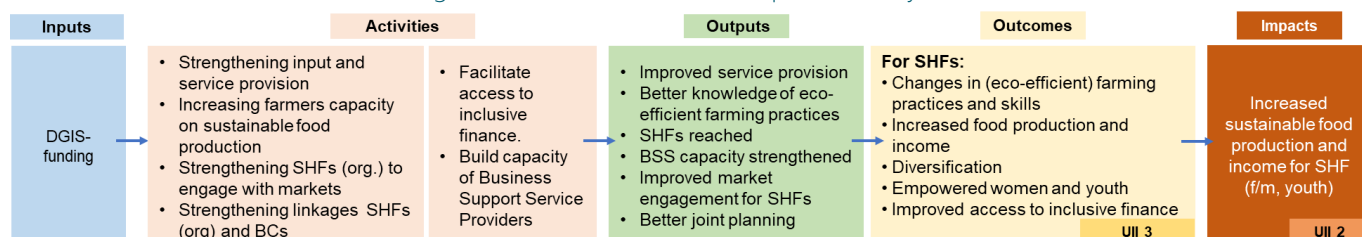
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with fragile states, including the Sahel and the Horn of Africa. This explains why 2SCALE was asked to become active in more countries in the Sahel and also encouraged to start pilots in South Sudan and Egypt. The same Dutch policy document emphasizes the need for conflict sensitive approaches in fragile countries. However, 2SCALE has not developed any conflict-sensitive approaches.

<sup>39</sup> As indicated in Section 3.1.2, the ULLs are in most cases not related to the impact level but rather to output and outcome levels.

### 3.4.1. Smallholder Farmers

Figure 5: Smallholder Farmer Impact Pathway



This impact pathway, common to the entire 2SCALE Phase 2 partnership portfolio, focuses on the adoption of eco-efficient or improved agricultural practices, empowerment of SHFs, in particular women and youth, strengthened capacity of farmers groups and cooperatives (almost all PPPs), improved access to inclusive finance (many PPPs), and agricultural diversification (less common). The ten case studies show some variation in their approach towards realising outcomes: the supply of agricultural inputs and training is most common, improved market access through BCs buying the production from SHFs is very common, and mobilizing and strengthening farmer organisations and providing access to credit is also common. In the Phase 2 PPP portfolio there is one notable exception of a partnership without an IP1, the poultry partnership in Ethiopia (ET27), where chickens are raised by private farmers and the focus was on BoP-consumers. The text box on sorghum Kenya (KE30), is a rather typical example of the PPP approach.

#### Sorghum and millet partnership, Kenya: expanding farming for women with offtake guarantees

Tegemeo Cereals aims to aggregate white sorghum and pearl millet from 12,500 smallholders (revised target) arranged in nine agribusiness clusters in Tharaka Nithi County in Eastern Province. The company was inspired by the example of Shalem Investment, another cereals processor and Phase 1 PPP, subject to IA (see Section 2). Most farmers – of which 70% are women – produce sorghum (similar to the Phase 1 Kenya sorghum case, see Section 2) under a simple contract, with 84 youth service providers and nine agribusiness coaches providing technical training and provision of certified seed and inputs. At harvest, youth provide mobile threshing services and produce aggregation is coordinated. Other young farmers grow certified sorghum seed with foundation seed supplied by Tegemeo. Through access to local, structured output markets – including East Africa Breweries – Tegemeo is able to guarantee offtake and prices to farmer groups before planting. There is no price premium, but productivity is higher as a result of inputs and the (partial) adoption of conservation agriculture.

In all cases, there is evidence that farmers have improved knowledge of and have adopted improved agricultural practices. This includes eco-efficient farming practices and skills, such as the use of improved seed varieties, but also the use of inorganic fertilizers and pesticides. However, the rate of adoption of improved farming practices is highly variable. It is not clear to the ET what 2SCALE defines as eco-efficient farming practices. Sometimes the provision of quality seed of improved crop cultivars, multiplied by local farmers and adapted to local conditions, is cited as an eco-efficient intervention. Improved varieties alone can only support eco-efficiency when they are supported by appropriate cropping systems interventions – intercropping, fertilizer microdosing, integrated pest management and other good management practices.



In practice, there is an important mix. Some partnerships focus particularly on the production and sales of organic vegetables (e.g., BF26 in Burkina Faso), while others are to a lesser extent focused on eco-efficient practices. Overall performance in terms of the number of hectares of land under better eco-efficient management practice (UII3) is poor in relation to the target set, as shown in Table 15: Performance of the ten PPP cases against UII3 below.

Table 15: Performance of the ten PPP cases against UII3

PPP code	Country and Product	UII3 (revised) EEF target	Realisation UII3 EEF 2023*	Comments
BF28	Burkina Faso Poultry	N/A	N/A	No EEP target set
ET23	Ethiopia Honey	3,000	--	435 ha reported in 2020, 21 ha in 2021 and none in 2022 and 2023
ET25	Ethiopia Teff	13,000	6,667	Gradual increase in # of ha reported, but only around half of target. A combination of improved seed and vermicompost application. The extent to which vermicomposting has been scaled is not clear.
ML25	Mali Fonio	8000	285	UII3 only 3% of target. There were problems with one of the BCs, the fonio aggregator, which led to a lack of trust between the SHFs and the BC.
NE26	Niger Potatoes	6,500	9,500	In 2022, 19,461 ha was reported, but in 2023 the specific fertilizer was not available, while also potato seed supply was a problem.
KE21	Kenya Vegetables	200	109	55% of target achieved, although this was in 2021. Since then performance has reduced markedly, with only 23ha in 2023.
KE30	Kenya Sorghum	22,000	5,843	In 2021, 7,312 ha but drop to 2,950 ha in 2022, followed by an increase.
NG01	Nigeria Dairy	7,000	9,570 (2022)	No figure reported for 2023, probably decline as new Bobi scheme was abandoned for security reasons. Especially use of improved fodder seeds.
NG25	Nigeria Oil palm	2,000	4,500	Substantial increase from 1,428 ha in 2023, which cannot be fully explained. Improved hybrid oil palm variety Tenera is sold by the BC. In addition, better pruning, fire tracing, returning empty bunches into the farmland, and mulching
NG09	Nigeria Sorghum	23,000	32,140 (2022)	No 2023 figure, probably decline in 2023 because of economic crisis and deterioration of prices. Focus on supply of improved seeds, fertilizers

\*The 2023 figures reported by 2SCALE are reflected, unless indicated otherwise. 2SCALE often reports the highest achievement as overall achievement, independent of the year of realisation.

The UII3 target was achieved in a maximum 3 out of 10 cases. Despite this there are some good qualitative results such as the promotion of conservation agriculture in Kenya (KE30), and the production and distribution of vermicompost in Ethiopia (ET25). 2SCALE focused on improvement of farming practices, and there many stories about the adoption of these practices. However, the fact that 2SCALE itself reports non-achievement of most UII3 targets is indicative of the difficulties faced. The extent to which eco-efficient practices were able to be carried out consistently every cropping season, and at what scale is important, but this is not clear. Farmers may need consistent supply of sufficient quantities inputs – which they must also be willing to purchase and apply - in order to realise a sustainable and positive change. The risk is visible in KE21, for example, which showed an otherwise unexplained 75% drop in the area under eco-efficient cultivation as soon as it ‘graduated’ and moved to light-intensity support. Two separate groups of farmers spoken to had neither had training in good agricultural practices by the BSS or BC, nor better access to inputs (improved seeds, fertilizers, agrichemicals). Other farmer groups supplying leafy vegetables to the same BC are understood to have received more support, but farmers supplying root crops – key suppliers to the BC- had seen no real benefits other than the facilitated aggregation of their produce at farm gate.

**There is no evidence of the extent to which 2SCALE contributed to agricultural diversification, which is not surprising given 2SCALE’s strong focus on commodities.** A diversification of farm-level production through complementary crop cultivation or animal husbandry can help build household resilience to external shocks and stresses or incentivise the engagement of women or youth. However, 2SCALE interventions are not farming systems oriented, but strongly commodity focussed with quality seed and crop-specific ‘good agricultural practice’ instruction. As a result, agricultural diversification as a result of 2SCALE is not evidenced. Enhancing farm-level diversity for resilience would require broader approaches than those adopted by 2SCALE.

**More than half of the partnerships claim to focus on financial inclusion, including improved access to inclusive finance, but there is only anecdotal evidence for actual changed financial inclusion in a few partnerships.** In various partnerships ‘improved access to finance’ is a separate impact pathway, but in the reconstructed ToC, this is included in the SHF impact pathway. Often there is a focus on rotating savings and credit type of associations at the level of farmers group aiming to link these groups to formal financial institutions. For example, in the Kenya sorghum PPP (KE30) a financial inclusion consultant was recruited to train multiple Village Loan and Savings Associations (VSLA) on access to finance, record keeping with digital applications, financial management, and risk management. Some groups were linked to a formal credit institution and a total of 48 commercial loans were granted using VSLA collateral. There are similar experiences in other case study PPPs (NG01 and BF28). However, the ET cannot find good evidence for most of the case studies that the activities resulted in structural improved access to credit for SHFs or groups of SHFs. Aggregator BCs, such as for Niger potatoes (NE26) and sorghum Nigeria (NG09) are also involved in credit provision to farmers in relation to input supply and as an advance on the production to be delivered. However, the capacity of the BCs to provide credit is often limited to maximum 30% of the production, while it is also volatile and dependent on economic circumstances.

2SCALE has contributed to more inclusive agribusiness through the set-up of farmers groups and cooperatives and Agribusiness Clusters. The capacity of these groups varies and there is no clear evidence yet of improved negotiating capacity that has led to more stable prices. 2SCALE's 'terms of inclusion' address four dimensions: ownership, voice, risk and reward. The way that these are defined by the program suggest that 'voice' and 'reward' are most relevant in the context of the empowerment of SHFs (whereas ownership and risk apply more to the 'business' dimensions of the partnership). In all partnerships, farmer groups or cooperatives are established, sometimes mixed groups, and sometimes specific male, female or youth groups. Farmer organisation was an explicit focus of NG01 and NG25 but also features prominently in other partnerships. For the dairy partnership in Nigeria this was only very modestly successful (see textbox on page 50), and in the Nigeria oil palm case the results lag behind, with less groups than planned. Here, nine farmer cooperatives were formed, but farmers still complain of perceived high input prices, payment issues, and a lack of access to credit. The 'voice' of the cooperatives is limited, in this case and the groups lack cohesion and a clear joint motivation. Other partnerships have farmer's groups that do score better on ownership, especially joint savings and credit schemes are common. In terms of voice, i.e. performance regarding improved negotiating capacity, there is no convincing evidence that SHFs negotiated better market terms with BCs, e.g. in the Nigeria dairy case the milk price offered by the BC was far below the market price for some months and even after an increase the price remained below the price of competitors (although good service provision by the BC and facilities have to be considered as well). Nevertheless, at the farm level, the ET has noticed promising developments in value chain contracting on favourable terms and conditions in Kenya sorghum (KE30) and to a smaller degree in Niger potatoes (NE26). Contracts in Kenya are trending away from individuals to farmer groups located in the various clusters. This is a positive development that may increase the negotiating leverage of smallholders. Given the inclusive agribusiness orientation of 2SCALE, the ET would, however, have expected that an equitable formalisation of value chain linkages would feature in more partnerships. The formalisation of linkages, such as through value chain contracting, has been shown to help contribute to better outcomes for farmer income, reduced farming risk, and improved food security and nutrition<sup>40</sup>

**Despite the focus on improved terms of inclusion, there is only scattered evidence on realisation of improved gender equality and inclusion of youth.** 2SCALE aims at sex and age disaggregated targets for UII2 (senior women, senior men, junior women, junior men), and women and youth are explicitly targeted for training. In the Kenya sorghum partnership (KE30) 70% of women were engaged, which is comparable to the Phase 1 sorghum PPP in Kenya that was subject to IA (see Section 2). The exceptionally high number of female-headed households may be due to the specific context, compared to the challenges to reach female farmers, especially for staple crops in other contexts. For vegetables and sometimes poultry, a higher number of female farmers have been engaged in practice. The honey PPP in Ethiopia (ET23) aimed to update the forest-based and traditionally male-dominated honey production system into a modern backyard production system by actively involving specifically women and youth in the value chain. This was somewhat successful, although subsequently compromised by a BC that has not aggregated any honey from them since 2023. Both the case study and the portfolio analyses show that nearly two-third of the partnerships did not reach the number of SHFs targeted, despite some success stories. The 2SCALE M&E system to monitor progress

<sup>40</sup> [Value Chain Approaches for Social Change](#). KIT Working Paper 2021-1.

**at farmers level shows some serious problems.** Only for two out of ten case studies, the farmers targets have been achieved (or almost), as shown in the Table 16. The definition of the UII2 indicator by 2SCALE is “the number of SHFs (women/men/youth) who have improved productivity and net income”. However, in practice, improved productivity and income are not measured, and these impacts are explored in Section 3.5. 2SCALE’s focus is on the number of SHFs that are trained, and benefit from improved input supply and from better market access. The focus is therefore limited to the number of SHFs reached, which has been validated by the MFA.

Table 16 shows the revised targets for the case studies in terms of number of SHFs and whether they have been achieved.

#### Dairy partnership, Nigeria: mixed benefits for pastoralists

For Fulani pastoralists that settled and changed their dairy practices, the benefits of the partnership are clear. They adopted herd management practices, paid attention to animal health, started with improved pasture management, and set up cooperatives produced more and better-quality milk. Milk production per cow increased, as indicated in interviews and FGDs. However, the rate of settlement remains far behind target, 12 years after the start of the PPP. The large majority of Fulani is still completely dependent on traditional grazing, which forces them to move the cows according to the season. Of the 13,000 SHFs trained, 2SCALE itself estimates that less than half have actually increased productivity, but the evaluators consider this to be substantially lower, based on milk supply figures from the BC.

Women are traditionally responsible for selling and processing the milk, instead elected to make Wara (a soft cheese) that they sold on local markets, or they sold the milk to artisanal yoghurt processors, who have lower standards for milk hygiene. With a partnership focus on higher milk productivity and higher quality, investments must be made in improved breeds, animal herding, better fodder, etc. Men, who own the cows are responsible for those investments. Women were trained in more hygienic milking. However, they are dependent on men for the delivery of the milk to the collection centres, for which they pay. This means that a part of the (higher) milk income goes to the men to compensate for the investments made. While it is assumed that women benefit from all the changes, the extent to which women really profit from the changes is not really known. Women have been trained on additional sources of income by 2SCALE, but it is not known whether that provides them with an increased, sustainable income. As adoption by Fulani pastoralists was very slow, the partnership and BC - encouraged by the Government of Nigeria – changed its focus towards sedentary pastoralists, but also towards larger commercial farmers. The pastoralists increasingly face (violent) conflicts over land, and cows are being poisoned. It is, therefore, probable that Fulani herders will be gradually squeezed out by the overall agricultural developments in Nigeria.

Table 16: Performance of the ten PPP cases against UII2

PPP code	Country & Product	UII2 (revised) # of SHF target	Realisation UII2 # of SHF 2023*	Comments
BF28	Burkina Faso Poultry	26,159	11,733	In 2022, 2SCALE reports that 26,164 SHFs were reached. However, serious issues in the value chain occurred, affecting the supply of chicklets, but also delivery of improved chicken feed decreased.
ET23	Ethiopia Honey	7,000	7,707	The #SHF claim is debatable. Honey aggregated by the BC reduced by half in 2022 and stopped altogether in 2023. Farmers are now selling elsewhere, and on unclear terms.
ET25	Ethiopia Teff	40,666	32,075	Although the target was not reached, strong market access was good growth in participating SHF until 2022, when numbers dropped slightly, possibly due to security issues.
ML25	Mali Fonio	21,000	11,074	Target not reached, in 2022 4,000 SHFs followed by sharp increase in 2023, which is explained by expansion to another region. However, serious issue with BC aggregator. Only people trained calculated in 2023, Inconsistent with reporting on UII3?
NE26	Niger Poatoes	32,281	7,770	Original target was 13,000. In 2022, 19,294 SHF were reached, but import problems of potato seeds and fertilizers affected the value chain.
KE21	Kenya Vegetables	1,400	228	The original target was 3000, but realisation still far short of target
KE30	Kenya Sorghum	12,500	11,775	UII2 target was revised down from 20,000 and is now almost reached
NG01	Nigeria Dairy	9,290	938	Downward trend reported, 6,443 SHF in 2021 and 1,677 in 2022. A new region in the North (Bobi scheme) had to be abandoned
NG09	Nigeria sorghum	42,000	20,579	Also, downward trend from more than 34,000 ha in 2021, to 29,000 in 2022 and further down in 2023. Due to security and economic external reasons.
NG25	Nigeria Oil palm	6,500	155	Also, downward trend, from 2,250 in 2022. Farmers have alternative cash crops

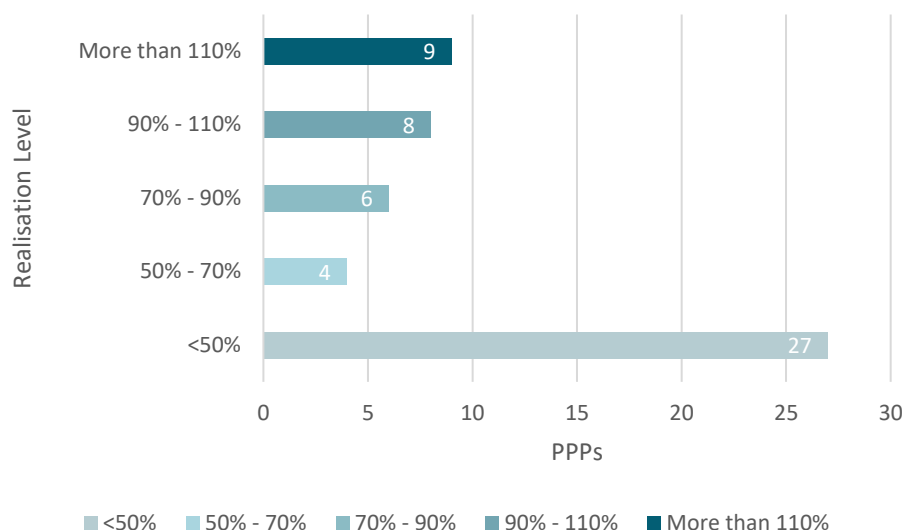
\*The 2023 figures reported by 2SCALE are reflected, unless indicated otherwise. 2SCALE often reports the highest achievement as overall achievement, independent of the year of realisation.

For the overall Phase 2 portfolio, only one-third of the PPPs realised the 2SCALE revised target for the number of SHFs, as indicated in Figure 6: 54 PPPs with 2023 or 2022 UII2 SHF Results (Achieved Results Over Revised Targets)<sup>41,42</sup>.

<sup>41</sup> Of the 57 active PPPs, 1 PPP does not have a SHF target, while for 8 PPPs no 2023 UII2 achievements are reported, often because the PPP already stopped.

<sup>42</sup> It is remarkable that the three PPPs with the highest number of SHFs reported (around 90,000 each) are dairy PPPs in Mali and Kenya, followed by a rice PPP in Burkina Faso.

Figure 6: 54 PPPs with 2023 or 2022 UII2 SHF Results (Achieved Results Over Revised Targets)



Source: ADE & KIT, based on 2SCALE M&E data

The UII2 revised target is 1 million SHFs and according to 2SCALE this target has been reached, while the ET found an achievement of not more than 800,000 SHFs based on the most recent figures.

The UII2 targets were revised in 2023, when the program was extended. Most targets were revised upwards as the overall UII2 target was increased formally from 750,000 SHFs to 1 million. Most partnerships that failed to reach their targets performed poorly, reaching less than half of their target number of farmers. Based on 2SCALE's reporting, 726,756 SHFs were reached in 2023, plus 56,158 SHFs partnerships that were stopped early and for which the 2022 achievements were included, leading to a total of 782,914 SHFs reached. 2SCALE itself reports a validated figure of 1,014,727 SHFs. The ET based its analysis mainly on the 2023 figures, as this appears to be most appropriate. There are several problems with the way the number of SHFs reached is calculated:

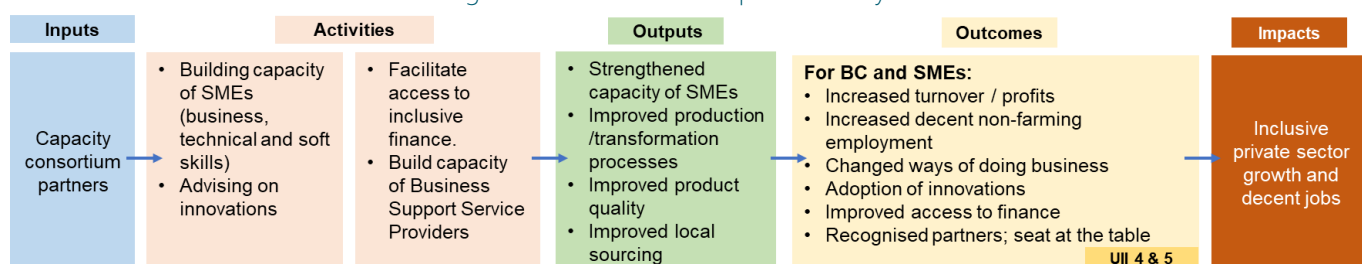
1. Baseline figures are not deducted. Often BCs were already activity providing inputs, extension services and credits to SHFs prior to the start of the partnership. The same applies to market access as BCs were often already buying from farmers prior to 2SCALE.

UII2 is based on two sub-indicators, namely (i) number of farmers selling to BC or to others (improved market access); (ii) number of farmers with improved access to inputs, while also the number of SHFs that received training is being recorded. In practice, the highest number of SHFs reached in a specific year for a specific sub-indicator is reported as overall achievement. For example, in the Burkina Faso poultry case (BF28), 26,614 SHFs apparently bought improved chicken feed from the BC in 2022 (against 11,733 in 2023). However, the main intervention should have been delivery of a new hybrid chicken, but no chicklets were available due to serious problems with the hatchery. Nevertheless, 2SCALE reports that 26,614 SHFs were reached in 2024. Other examples are presented in the UII2

2. Table 16 above.
3. Many PPPs show a downward trend of number of smallholders reached over the years, but 2SCALE reports the highest annual figure (even if this number was reached in 2021 or 2022).
4. The presentation of the gender and age differentiation of SHFS reached (senior men, senior women, young men and young women) by 2SCALE is based on a calculation based on the persons reached through training. However, this is not a reflection of the persons actually reached through input supply, credit provision or extension activities. The ET refrains from a differentiation of SHFs by gender and age, as this cannot be validated.
5. 2SCALE has not done any surveys among farmers to collect data on actual input supply, adoption of improved practices, perceptions on market access, etc. Instead, reporting by the BC and sometimes by BSS serve as the basis to calculate proxy numbers of SHF reached.
6. 2SCALE considers the UII2 figures as a proxy for increased productivity and income, but the underlying assumptions are not made explicit (see the Section 3.5.1).

### 3.4.2. Private Sector

Figure 7: Private Sector Impact Pathway



The Impact Pathway (IP) related to private sector development is the least well-defined pathway in the Phase 2 partnerships. This IP is often combined with a focus on BoP-markets and in a few cases with the SHF IP. In Phase 1, 2SCALE was considered a private sector development program, which still is a key feature in Phase 2. This is done in two ways: (i) the BCs are at the core of the partnership as they invest their own money (see Section 3.6 on additionality) and jobs are created as a result of the partnership; (ii) MSMEs are created as value chain actors. The reconstructed ToC identifies outputs and outcomes for these different private sector actors. If there is a focus on strengthening the BC, this is almost always combined with the development of a specific BoP strategy, that is dealt with in Section 0 3.4.2. Most PPPs do have a clear focus on strengthening MSMEs through training of specific skills or through increased access to finance.

In four out of ten cases, 2SCALE has enabled business champions to grow, but there are also two cases where the BC faced serious financial problems. In four cases, a positive trend in the development of BCs in 2SCALE partnerships is seen, such as vegetables in Kenya (KE21), sorghum Kenya (KE30) and teff in Ethiopia (ET25), while the three Sahel cases (fonio Mali (ML25), potatoes Niger (NE26) and poultry Burkina Faso (BF28) do not show convincing improvements. Both Kenya partnerships are characterised by relatively strong market demand and dedicated, ambitious leadership by capable BCs. In both cases 2SCALE provided appropriate capacity support. Teff deliveries to consumer cooperatives in Addis Abeba (ET25) were enabled through B2B linkages facilitated by 2SCALE, where Kassem Union has managed to engage more producer organisations



every year, although 2023 was challenging due to security constraints. The ET is not able to assess whether BC income has increased due to the partnership. There were also BCs that faced financial or other challenges and needed but did not receive 2SCALE support. In Mali (ML25) and Ethiopia (ET23). BCs faced serious problems leading to discontinuation of the activities. In most cases, 2SCALE did not succeed in helping BCs to improve their access to capital through a viable business case.

**BCs have made investments in partnership-related activities, which led to the creation of non-farming jobs (UII5).** Most BCs have invested in new warehouses, processing factories, trucks, milk collection points, packaging, distribution, etc. (see Section 3.6 on additionality), which led to creation of new jobs (UII5). The numbers of jobs per PPP vary between a few dozen and a few thousand, but these numbers cannot be validated by the ET as investments that are not directly related to the partnership may have been included. Furthermore, many jobs are temporary or casual labour, which implies that work may not be available year-round, as it is tied to the agricultural season.

**2SCALE did provide capacity building support to BCs in a number of cases, especially also to develop BoP markets, but in other cases this much needed support was absent.** In the Kenya vegetables case (KE21) and the Mali fonio case (ML25), new BoP products were developed with the support of 2SCALE (see Section 0). However, in the Kenya case 2SCALE did not help with the financing needs of the BC. In the second Kenya case (KE30), the BC was determined at the start of the PPP to secure financing for a cereals processing factory which would also produce flours for the BoP market. Land for the factory had already been purchased. Despite technical and business support from 2SCALE, the required level of investment capital could not be mobilized. A significant amount of working capital has been accessed by Tegemeo, but this has not been sufficient to run its business per its 2Scale plan.

#### **Bench Maji Union, Ethiopia (ET23): Tax bill forces BC to suspend operations**

The case of the Bench Maji cooperative union in Ethiopia is illustrative for the pivotal role of the BC and the consequences if there are issues with its functioning. The union aggregates honey from 21 primary cooperatives organized in 10 agribusiness clusters. Sales to BoP in Addis Ababa began after the union established market linkages with six urban consumer cooperatives. 2SCALE provided the training and capacity building in supply chain coordination, union leadership, internal capitalization of the union, and the creation of the B2B linkage with the consumer cooperatives.

In 2022 the union received a large and unexpected tax bill. The union's bank account was frozen by the tax authority, and all honey operations ground to a halt. Since 2023, no honey has been aggregated by the union. Luckily, primary cooperatives have coped by selling to local retail outlets and to middlemen buyers. Although the partnership asserts that farmers receive good prices and can sell all the harvested honey, honey producers are likely to be in a worse off position.

In 2024, 2SCALE provided financial advice to the union to help resolve its financial challenges. The tax bill is still pending, but the union hopes to be able to restart operations again in September 2024, two years after it halted operations.

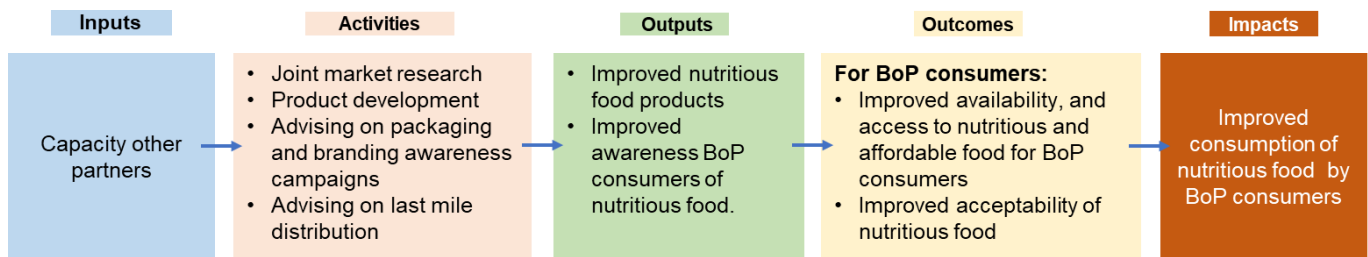
The contribution of 2SCALE to capacity development of the BCs is very difficult to assess, which is related to the large variety of BCs operating in very different contexts on the one hand, and rather generic partnership agreements on the other. 2SCALE is a private sector development program, where BCs have a central role in the partnerships. After the screening process, BCs sign a partnership agreement with 2SCALE in which the financial contribution of the BC and of 2SCALE is agreed in detail. In addition, roles and responsibilities of 2SCALE and the BC are specified and “if either Party fails to perform its obligation, the other Party has the option to terminate the Agreement”. The Partnership Description is attached to the Agreement. The ET notices that the Partnership Agreement is pretty generic and 2SCALE bears the bulk of responsibilities in terms of process management and reporting to the donor. In section 3.2 above, it was mentioned that the main reason for prematurely stopping or ending partnerships was the failure of BCs to live up to their engagements. Also, the interviews with BCs indicated that BCs feel only limited responsibility for sustaining the partnership as they see 2SCALE as the central actor.

2SCALE has contributed to the establishment of hundreds or thousands of MSMEs as value chain actors, in coaching, input supply, transport, distribution, processing, etc. especially for women and youth. Although not all MSMEs earn stable incomes, and some got out of business, many micro and small entrepreneurs have increased their incomes. In nearly all partnerships, BCs rely on a network of micro-, small- and medium-size enterprises to play key roles in the functioning of the value chain. Where BCs are performing well and expanding their market, MSMEs can help to scale further and deeper into more distant markets. MSMEs most commonly support the value chain at the juncture between farm and the BC, and between the BC and consumer. 2SCALE uses the term MSME to describe vendors, processors, ABC coaches, and BSS in some cases. Regarding UII6, which is defined as MSMEs associated with partnerships, 2SCALE reports dozens or hundreds of MSMEs per partnership, differentiated by gender and age, although these numbers cannot be verified. However, it is clear that 2SCALE focused specifically on women and youth for these micro-enterprises. For example, in the Kenya, sorghum case (KE30) youth entrepreneurs were engaged to provide aggregation services, and other youth are ‘innovating’ their service offering with sales of composting units or crop spraying services. Another positive youth case is the establishment of ‘potato caravans’ and kiosques in Niger. See for women micro-entrepreneurs the case description in 3.4.3 BoP impact pathway below) These activities provide some of these MSMEs with a stable income, but there are also examples of micro-entrepreneurs being out of business, such as female shopkeepers in Nigeria who did not receive any yoghurt supply anymore from the BC.

While providing MSMEs access to credit is a common impact pathway in the partnerships, in practice no good outcomes have been achieved regarding improved access to finance. In various PPPs, 2SCALE started a dialogue between value chain actors and financial institutions to improve access to inclusive finance, but this is a very long process affected by external factors. 2SCALE has aimed to set up digital platforms, but the set-up of these platforms in countries with limited digitalisation, such as Nigeria and the Sahel, takes time. Given the short duration of the partnerships and the external factors, no important outcomes regarding improved access to finance have been achieved, although there is some anecdotal evidence on MSMEs obtaining credits.

### 3.4.3. BoP Consumers

Figure 8: BoP Consumers Impact Pathway



2SCALE focuses in almost 80% of the Phase 2 PPPs<sup>43</sup> on improved access to affordable and nutritious food for BoP-consumers, through developing new products and packaging, and the set-up of distribution channels. 2SCALE defines inclusive business as a commercially viable business that involves low-income communities, including (BoP) consumers in a way that benefits them<sup>1</sup>. Consequently, the majority of PPPs (43 out of 55 active PPPs) focuses on BoP consumers with specific targets. Most PPPs have a separate IP on BoPs, but in a few cases the IP is combined with the private sector IP. The aim is improved acceptability, availability and access to nutritious and affordable food for BoP consumers, as reflected in the reconstructed ToC.

Three out of the ten case studies achieved the set target for BoP-consumers, three PPPs did not reach any BoP-consumer in 2023 despite initial targets, while four others remained far from the set targets, showing variable performance. Table 17 shows the performance of the ten case study PPPs against the revised targets, with a brief explanation. The Burkina Faso poultry PPP (BF28) is the only one which did not have a revised BoP target, although initially this PPP did have a BoP focus. The table shows very mixed performance for reasons set out below.

Table 17: Performance of the ten PPP cases against UII1, number of BoP-consumers reached

PPP code	Country and product	UII1 Revised Target	UII1 realisation 2023*	Comments
BF28	Burkina Faso Poultry	10,000 <i>Original target</i>	N/A	The original BoP IP was abandoned, because chicken middlemen were not interested, and there were pricing issues. However, the formal reason given for abandoning the IP was that chicken meat is not a BoP product, while four poultry PPPs are focusing on BoP
ET23	Ethiopia Honey	35,000	--	24,251 in 2022. Severe financial crisis for BC since 2023, all honey sales to urban cooperatives ceased. All sales since mostly local
ET25	Ethiopia Teff	50,000	24,877	Despite not achieving target, there was good BoP growth due to strong sales to urban consumers via B2B linkages between the farmers union and consumer unions in Addis Ababa.
ML25	Mali Fonio	45,000	6,174	The BC exported fonio products prior to 2SCALE, the gvt of Mali banned exports, 2SCALE helped developing fonio products for the local market. Target not met, because new market and problems with the other BC fonio aggregator and decline BoP in

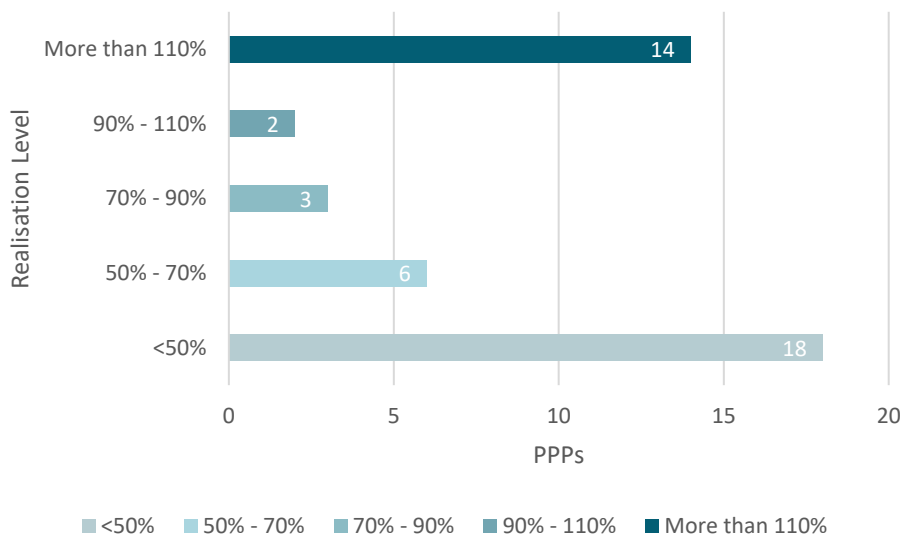
<sup>43</sup> 43 out of 55 active PPPs have a revised BoP target.

				2023, and 11,358 in 2022
NE26	Niger Potatoes	64,000	6,188	59,042 in 2022, decline in 2023 as local potato production decreased because of input supply issues. Question whether potatoes in the Sahel are a BoP product?
KE21	Kenya Vegetables	15,000	17,144	True BoP product, excellent performance. See text and text box
KE30	Kenya Sorghum/millet	10,000	--	2,069 in 2022. Number reflects limited processing and sales to BoP by local women. The intended BoP product has not yet been developed by the BC.
NG01	Nigeria Dairy	150,000	287,240	Target significantly exceeded, and in 2022 even 332,196 reported. However, calculation is based on yoghurt sales, and not on the basis of local milk production used for yoghurt. Furthermore, is sweet yoghurt a BoP product? Contribution issues
NG09	Nigeria Sorghum	30,000	45,411	Steady sales of improved fura balls by women processors. Well above target, but calculation of BoP numbers questionable.
NG25	Nigeria Oil palm	60,000	22,552	68,641 in 2022 reported. Small sachets of oil and oil dispensers. Contribution issues

\*The 2023 figures reported by 2SCALE are reflected, unless indicated otherwise. 2SCALE often reports the highest achievement as overall achievement, independent of the year of realisation.

Portfolio analysis confirms mixed BoP performance, as 60% did not realise the revised target and 40% exceeded the target as illustrated in Figure 6.

Figure 9: 43 PPPs with 2023 or 2022 UII1 BoP Results (Achieved Results Over Revised Targets)<sup>44</sup>



Source: ADE & KIT, based on 2SCALE M&E data

Cases with good to reasonable performance are characterised by a significant 2SCALE contribution to product development with focus on nutritious food products, sometimes involvement of local processors and appropriate distribution. However, in some cases product development has been problematic, resulting

<sup>44</sup> From the 41 PPPs with a revised UII1 BoP target, 33 PPPs reported 2023 BoP results which have been considered, while also for 7 PPPs with revised targets and 2022 BoP figures, these have been included.

**in disappointing performance.** Two of the three case studies that have exceeded the targets, were able to do so because of good product development. The Kenya vegetables case (KE21) is set out in the text box below, where 2SCALE supported the BC with nutritional analysis and appropriate labelling of the enriched porridge flours. The Nigeria sorghum case (NG09) is another good example, where women traditionally prepare fura balls. Fura is an indigenous fermented cereal-based food, and it is a thick ball snack that is produced mainly from sorghum and spices such as ginger, black pepper, cloves, and black pepper<sup>45</sup>. The women processors were trained on more hygienic production methods. In 2022, a survey among 280 consumers of Fura balls was done<sup>46[2]</sup> pointing at good appreciation as the more hygienic production methods were valued as well as the taste and good availability. This is one of the few surveys among beneficiaries showing interesting qualitative information, but it does not contain information on market penetration or a reliable estimate of the number of BoP consumers. For the sorghum/millet case in Kenya (KE30), product development largely failed. Pearl millet porridge sold by women is naturally nutritious (higher in iron and zinc than other common cereals), although there are questions around the label 'biofortified' that the partnership attached to their specific variety of pearl millet. The variety (KAT KPM3) is relatively old, released in Kenya in 2001, and not understood via literature review to have been specifically bred or selected for nutritive value but rather for its drought tolerance, early maturity and high yield potential.

#### Sweet 'n Dried, Kenya (KE21): 'Cham Booster' for better nutrition

Sweet n' Dried, the BC, is a small but growing company that manufactures a small range of composite porridge flours. The flagship product is called 'Cham Booster' and is specifically targeted at BoP consumers in Eastern Kenya. Cham Booster is a mix of locally procured cereals, root crops and fruits, as well as amaranth and moringa oleifera. Cham Booster is marketed as a healthy and more nutritious alternative to common 'uji' breakfast porridge containing only millet, sorghum and maize flour. Through 2SCALE, the BC engaged a nutritionist to help with the final product composition and to perform a nutritional analysis, which is printed on the packaging. Cham Booster is packaged in small packages (400 grams) and costs 140 Kenya Shillings (about 1 Euro). Near the processing factory, Cham Booster is retailed via chemists and two Sweet 'n Dried stores. Partnerships are also in place to supply in bulk to supermarkets in Nairobi. During the field visits, evaluators were given access to shop records to validate recent sales.

In 2023, Sweet 'n Dried partnered with development NGO Catholic Relief Services (CRS) in a nutrition project to sell Cham Booster to BoP via a network of last-mile vendors in semi-arid Isiolo county. Livelihoods are predominantly based on livestock husbandry, and diet quality and protein intake decline during the dry season. By providing access to Cham Booster, CRS hopes to boost the nutritional status of BoP lactating mothers and young children. 7000 sachets have been distributed, although CRS expresses concern about price (competing blended flour products are cheaper) and acceptability (local communities don't appreciate the green colour, because 'green leaves are for animals'). CRS mentioned that acceptability in certain markets would remain a constraint without awareness and social and behaviour change campaigns to promote uptake amongst BoP consumers.

<sup>45</sup> 2SCALE, October 2020, Fura with a difference: A modernized way.

<sup>46</sup> Bopinc and 60 Decibel, 2022, Three things low-income consumers taught us about supporting agrifood entrepreneurs in Northern Nigeria.

In various case studies, the question arose as to when a product can be considered a BoP product, given that 2SCALE does not always apply consistent definitions. For example, poultry is not considered as a BoP product in Burkina Faso, but it is in four poultry partnerships in other countries. A key element of 'access' relates to affordability and the question of what actually counts as a BoP product. This varies from country to country. The poultry case is set out in Table 17 above, where in Burkina Faso another definition is applied than in other 2SCALE countries. Also, for honey (ET23) and potatoes (NE26) – which is not a staple crop in Niger, but an addition to the sauce – it can be questioned whether these products qualify as true BoP products. This is also the case for sweet yoghurt sold in litre cartons in Nigeria. The BC is aware of the discussion on the nutritious value of (artificially) sweetened yoghurt and explores the balance between consumer preference for sweet yoghurt and the need to reduce sugar intake. The BC aims to gradually reduce the sugar content in its products, but 2SCALE, was not aware of the issue and never raised added sugar or nutrition as an issue.

**Appropriate packaging and distribution are important to reach BoP-consumers, and this has been considered by 2SCALE and BCs.** Some partnerships have made efforts to package and price their products appropriately for the target BoP market. Examples are NG01 (small yogurt packages), KE21 (small sachets of flour available at a relatively low price), NG25 (smaller sachets of cooking palm oil and oil dispensers), and ML25 (local fonio products). In addition, 2SCALE aimed to set-up good distribution channels, often involving MSMEs as distributors, shopkeepers, or consumer cooperatives etc. The fura ball processors in northern Nigeria are a good example, as are young potato sellers in Niger. The teff Ethiopia case (ET25) is an example of good linkages to consumer cooperatives in Addis Ababa. Other PPPs struggled to set up good distribution channels, such as the poultry case in Burkina Faso (BF28) and the Ethiopia honey case (ET23) that tried and failed to mobilize consumer unions in Addis Ababa to purchase honey.

**Price is an important issue related to the necessary affordability of nutritious BoP products but has received limited attention.** For example, Cham Booster composite flour (KE21) is more nutritious than competing products, but also more expensive. As indicated by key informants continuous, ongoing communication is needed to sensitize BoP consumers to better quality products, for which a reasonable price must be paid.

**2SCALE's monitoring of BoP results is difficult, as many national proxies are being used that do not sufficiently reflect the reality on the ground.** The monitoring of the BoP objective is based on various underlying assumptions, such as:

- The BC production of BoP products is the basis for calculating the number of BoP-consumers, together with the estimated average consumption of the given product. However, not in all cases the BC production can be related to the partnership. For example, in Nigeria not all yoghurt production by the BC is related to locally sourced milk as also imported milk powder is used. Moreover, the average consumption of a specific product is not always a good proxy for calculating the number of consumers as regular consumers use far above the average consumptions. This means that BoP figures tend to be overestimated.
- 2SCALE adopts a purchasing power parity calculation to define the BoP income cut-off, which is then applied for the calculation of BoP consumers. However, specific products probably serve relatively more better-off consumers, such as the fonio products in Mali, potatoes in Niger and Peak yoghurt in Nigeria, but this is not considered by 2SCALE.



- 2SCALE reporting shows inconsistencies and different 2SCALE documents indicate different figures without clear explanation, e.g. for NG25, which according to one data source went from 36,000 BoP to 68,000 BoP to drop again to 22,000 BoP.

In some cases, the BCs and 2SCALE pursue different strategies to reach BoP consumers, and interests do not always match, and this may lead to contribution problems as shown in the following table.

Table 18: BoP strategies in two Nigerian case studies (NG01 and NG25)

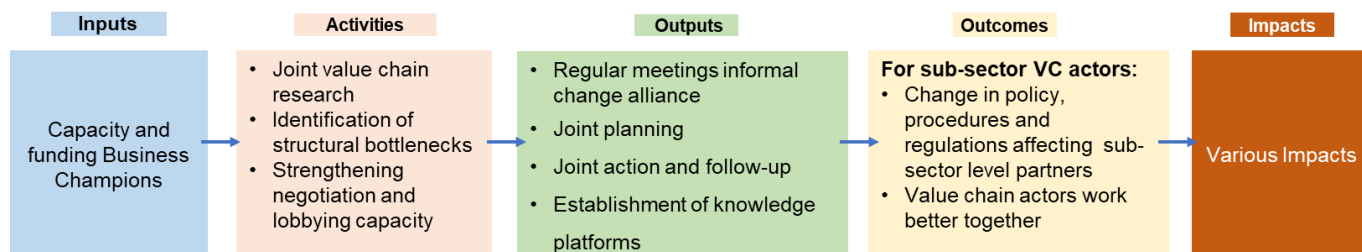
BoP strategy	Dairy Nigeria (NG01)	Palm oil Nigeria (NG25)
BC strategy	<p>Development of 'milky pap' as a BoP product (combining milk/yoghurt with African staples) to make milk products more accessible for lower income families. 2SCALE does not mention it and does not claim any contribution to this specific BoP product.</p> <p>Introduction of Nuno yoghurt (2022), based on local milk, in 2022, processed in a small mobile factory, as lower end of the market product that is sold in small sachets of 100 or 150ml for affordable prices (substantially lower than Peak yoghurt that is sold in larger cartons at higher prices). Nuno is the cheapest industrial yoghurt in Nigeria, but availability is a main issue as factory is functioning far below its capacity and production of the more expensive Peak yoghurt has apparently priority.</p>	<p>The BC started selling Banga oil in smaller packages in order to reach BoP consumers, in addition to larger bottles of 1 and 5 liters.</p> <p>However, the BC considers the production and delivery of cooking palm oil for the local market not as its main business as there is high industrial demand for palm oil. This means that the main focus is on industrial supplies. This means that the smaller packages are now not easily available. In rural areas, Banga oil is hardly available, and consumers still depend mainly on the traditionally processed low-quality oil.</p> <p>In 2024, the BC provided three tanks of 1,000 l Banga oil to the retailers for the dispensers that had to be paid in cash and were delivered with delays.</p>
2SCALE strategy	<p>2SCALE claims that the availability of yoghurt in smaller packages is due to 2SCALE, which is not recognised by the BC.</p> <p>The introduction of Nuno yoghurt is also claimed by 2SCALE as a result of the partnership, which appears to be valid.</p> <p>2SCALE trained women as shopkeepers that would sell Nuno yoghurt on the local market. However, the BC stopped the delivery of yoghurt to shopkeepers</p>	<p>According to 2SCALE, they helped with the introduction of the 200ml sachet in 2021, which apparently gained substantial traction and visibility in 2022 across the country but dropped again in 2023.</p> <p>In 2024, 2SCALE started with an innovation, namely the introduction of three oil dispensers in Benin-city. Three retailers showed interest in these machines where customers can tap 250ml, 2l or 4 l of Banga oil. It is still in pilot phase.</p>
Comments	<p>An interview with the sales department of the BC showed insight into the BoP strategies. There is no clear evidence for the 2SCALE claims of contribution to BoP, and 2 SCALE could not negotiate guaranteed supply to local</p>	<p>The BC prioritises industrial supply, and there is no evidence that 2SCALE aimed to negotiate a guaranteed supply to BoP-consumers.</p> <p>The 2024 dispenser introduction came late and is a clear 2SCALE initiative with risks for the retailers.</p>



	shopkeepers.	Electricity supply is not stable, negatively affecting sales, and solar panels must be installed.
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### 3.4.4. Sub-Sector System Change

Figure 10: Sub-sector system change Impact Pathway



The 2SCALE contribution to sub-sector system change was developed during Phase 2, which meant that there has been relatively limited time for actual implementation of this pilot impact pathway, and this has affected effectiveness. In the 2SCALE Phase 2 proposal, the role of 2SCALE to support system change was mentioned but not elaborated in detail. The proposal indicated that 2SCALE saw its “role as preparing for scaling, called acceleration. Preparing for scaling also involves working on the conditions to enable inclusive business champions to develop leadership in the industry, to inspire others and drive transformative change in the industry and related food systems”<sup>47</sup>. In the proposal, 2SCALE proposed a workstream on sector transformation and policy alignment and two targets regarding this workstream were included in the overall Phase 2 targets (see Table 2 in Section 1). In March 2021, the 2SCALE approach on sub-sector system change was further elaborated<sup>48</sup>. This document acknowledged that the “2SCALE proposal document has been using a range of concept and logics that were not always pin-downed well”<sup>49</sup>. A distinction is made between ‘horizontal scaling’, which is similar to replication<sup>50</sup> (see Section 3.5.1 on impact), and ‘vertical scaling’, which relates to systems change. The term sector transformation was abandoned, and replaced by sub-sector systems change<sup>51</sup>.

2SCALE has started in nine PPPs with impact pathways on sub-sector system change, against 12 cases targeted, while this impact pathway was stopped in at least two cases. The target in the 2021 guidelines document was that 2SCALE would contribute to 12 demonstrable sub-sector system changes trajectories. Table 19 below gives an overview of the nine trajectories that were planned.

<sup>47</sup> 2SCALE Proposal, 2019-2023, version 5 October, p. 38

<sup>48</sup> 2SCALE, Guidelines, addressing sub-sector system challenges to accelerate inclusive business, Work document for facilitating sub-sector systems change, Version 2 March 2021.

<sup>49</sup> Ibid, p.4

<sup>50</sup> Replication is defined as “the copying of a successful solution, practice, or arrangement to the same kind of actors in the same business or to other actors in other businesses”.

<sup>51</sup> 2SCALE builds apparently on the international literature regarding Sustainable Agri-Food Systems and Agrifood System Transformation, although no explicit reference to this literature is being made.

Table 19: Nine PPPs with sub-sector system change impact pathways

Type of sub-sector systems change	Countries, industries and numbers of PPPs	Characteristics	Performance and challenges
Improved access to finance	Burkina Faso, poultry	Development of new financial products	Many discussions, but very slow development. No new financial products. Limited progress and not clear whether this can be considered as systems change
Production and introduction of quality seeds	Ghana, sorghum Niger, potatoes Ethiopia, beans	In the three seed multiplication cases, research institutes were involved. For locally produced potato seed in Niger, it is a long process	In all cases, there is high demand for quality seeds at affordable prices. BCs play important roles in the initiative and often have a stake.
Developing and promoting quality norms for (organic) vegetables	Burkina Faso, organic vegetables Mali, vegetables Kenya, vegetables	In Burkina Faso, the focus was explicitly on the change towards ecological introduction and a related label for the BC	The Kenya pilot stopped as the BC changed its focus. In Burkina Faso a manual on organic vegetable production was developed
Development of an inclusive premium pricing mechanism	Nigeria, sorghum	Introduction of price-driven grain quality standards	Stopped, because of changes in the economy, including devaluation of the Naira, removal of fuel subsidy and increase in input and transport prices
Production of dairy fodder	Kenya, dairy	New fodder varieties introduced and produced	

The overview in Table 19 shows that the focus in four of the nine PPPs has been on production/multiplication of improved seeds for a variety of crops including fodder varieties. Three cases focus on norms for the production of quality vegetables. 2SCALE intends to focus on one specific sub-sector bottleneck to be solved to accelerate agribusiness. Leadership is a precondition for starting such a change trajectory and an Informal Change Alliance should be formed, consisting of a variety of different actors, including actors beyond the partnership. From a 2024 progress report<sup>52</sup>, the BC and other partnership actors play an important role in the change trajectories. Sometimes research institutes are involved, such as for seed multiplication. Only in a few cases, the (local) government is explicitly involved.

2SCALE has set (revised) ambitious targets for sub-sector system change that could not be realistically met. 2SCALE reports good progress in 4-5 cases that might lead to adoption beyond the partnership, but this is still too early to assess. The documents and interviews on the sub-sector system change approach indicate that 2SCALE was aware that the ambitions were rather high given the limited time, the conceptual problems

<sup>52</sup> 2SCALE, Progress report on the sub-sector system change partnership – 2SCALE, June 2024

and the limitations of the partnerships. While only in two cases the impact pathway was explicitly stopped, also the other seven PPPs faced challenges regarding implementation. The main constraints mentioned by 2SCALE are: (i) Limited time horizon as systems change requires substantial time, (ii) Leadership issues (iii) Technical constraints, such as finding the right location for the multiplication of quality seed (potato seeds in Niger, where the location had to be changed several times). 2SCALE staff estimates that in 4-5 cases the change, initiated by the partnership is getting some traction. However, it is still early days and there is no concrete evidence on effective sub-sector system change beyond the partnership.

The sub-sector system change experience of 2SCALE so far raise questions about the potential contribution 2SCALE can make, given its focus on specific partnerships, focusing on one industry/crop/product and often local BCs that are supposed to lead the change trajectories. While indeed 2SCALE partnerships may be confronted with challenges in the enabling environment, it is often beyond the scope of the actors to tackle these challenges. BCs have their own business interests and leading an Informal Change Alliance requires other skills and capacities. Also challenges in the enabling environment often go beyond a very specific value chain, and therefore, the literature often refers to change in farming systems or agrifood systems, which is broader than the 2SCALE focus. For example, the focus on access to credit in the Burkina Faso case appears to be similar to the common impact pathway in other PPPs, and it is not clear why this is labelled as sub-sector system change IP. The text box below on a Nigeria case study illustrates the challenges.

There is no evidence of 2SCALE's contribution to knowledge development or structural relations with relevant African and Dutch knowledge platforms. 2SCALE has produced many reports, which are partly publicly available. 2SCALE is not a primary knowledge program but an agribusiness program. Therefore, the ambitions related to knowledge development were probably not realistic. In addition to the relations between 2SCALE and Wageningen University & Research the ET found incidental collaboration with research institutions, often related to sub-sector system change.

### 3.4.5. Explanatory factors

In the evaluation methodology a distinction has been made between external and internal factors affecting performance. These factors have been analysed both at PPP and program level. During the two country visits to Nigeria and Kenya, meetings with the country teams were conducted that included a SWOT analysis at country level. This was an important input for the analysis of explanatory factors, in addition to document review, interviews at various levels with a range of different actors, case studies and debriefing sessions.

#### *a. External factors*

Security problems, in most of the countries where 2SCALE is active, are the first main external factor affecting performance. 2SCALE is active in three countries in the Sahel, where the security situation has seriously deteriorated during Phase 2. There have been coup d'états in Mali, Burkina Faso and Niger and various types of violent conflicts in the Sahel, which affected the partnerships. Also in other countries, such as Ethiopia, South-Sudan, Nigeria the security situation deteriorated. Only a few partnerships had to be stopped because of security issues. However, as indicated above in the Section on flexibility and context sensitivity (Section 3.3.3) no conflict-sensitive approach has been adopted.

**Economic and political factors are the second external factor affecting performance.** Regime change, elections, changes in the global economy, changes in the exchange rate, etc all affect the performance of partnerships. The boycott of Mali, Burkina Faso and Niger by the Economic Community of West African States (ECOWAS) seriously affected the terms of trade, and, therefore, the partnerships. For example, imports of essential agricultural inputs became problematic (e.g. potato seeds for Niger partnership), but also affected exports. Governments took also measures that negatively affected the performance of BCs, such as the ban of the Government of Nigeria for the World Food Program (WFP) to buy grains on the local market. This affected the sorghum aggregators/BCs in the northern Nigeria partnership. In Mali the government banned the export of fonio products by one of the BCs.

**Covid is another factor that has affected all partnerships in one way or another, but also the management of the program was seriously affected, because of travel restrictions.**

**Finally, there are farming systems and climate-related factors that affect performance.** Agricultural production by SHFs may be affected by droughts, floods or other factors. This may be incidental, but there might be structural underlying causes related to climate-change. At the start of the partnership, a good problem analysis, including some insight into the prevailing farming systems and climatic variables is made. Options for climate change adaptation – including the diversification of production – are not commonly addressed due to the value chain and commodity focus. However, in practice, the crop/ product on which the partnership is focussing may have become less attractive for SHFs, that may prefer alternative more profitable crops. This has been the case for oil palm in Nigeria and potatoes in Niger.

**2SCALE and its partners have been aware of these external factors, and reacted to some extent, however, more consistent attention could have been paid to context changes.** There are clear examples of reaction to external factors, such as the decision to stop the sub-sector system change price mechanism in Nigeria due to the economic crisis (see text box). Nevertheless, in most cases limited attention has been paid to changes in the environment. The 2SCALE staff recognized this in interviews but explained that these factors are beyond their control. In the Sahel case studies, the deteriorating security situation is hardly mentioned, while, in practice it affects sometimes up to 50% of the intervention area as indicated by BCs and BSS. The development of a conflict-sensitive approach would have been appropriate.

## ***b. Internal factors***

The following internal factors were identified as having a positive effect on performance:

**There is a clear commitment and dedication of the 2SCALE staff that very much believe in the focus on inclusive agribusiness and the partnership approach.** The engagement and team spirit of the 2SCALE staff is very visible in all interactions. The staff is well-trained. Roles are well-defined for the diverse staff with different backgrounds. While the consortium members IFDC, SNV and BoPInc have also different backgrounds, in practice, the 2SCALE staff operates as one team. In some countries and for some partnerships, there have been frequent changes of staff, which inevitably negatively affected the partnerships to some extent.

**Partners appreciate the 2SCALE staff and approach.** The case studies provided good insight into the appreciation of key partners, such as BCs and BSS, in the 2SCALE approach. They especially appreciated the

partnership approach, the focus on inclusive agribusiness and the adaptive management. Of course, there were variations in the appreciation, dependent on the type of partnership, the industry and especially also the size of the BC. For big multinational lead companies in a BC role, the partnership with 2SCALE represents only a minor part of their activities. The 2SCALE partnership is not always indicated on their websites. Nevertheless, these lead firms still appreciate the partnership with 2SCALE, which they see as a complementary Non-governmental Organization (NGO) partner. The role of 2 SCALE in partnerships with smaller grassroots BCs in lead role is bigger and these partners depend more on BC support, which is valued by them. The smaller BCs would in some cases prefer more technical, but also financial support from 2SCALE, while also the relative short duration of the support is considered as a limitation.

**Adaptive management adopted by 2SCALE, is, in principle, another strength of the program, but learning from external evaluations and learning from failures has been limited.** The adaptive management approach is at the core of the 2SCALE program and processes. In a series of annual workshops with all partners, each partnership is jointly designed and monitored. Lessons are being learned, and partners agree on the way forward. While 2SCALE's adaptive management is based on firm foundations, in practice, there are some challenges. It is natural to focus on joint successes, and more difficult to learn from failures, and this also applies to 2SCALE. The case study documents, including the workshop documents, provide relatively limited insight into challenges the partnerships are facing, which seriously affect performance. For example, in the poultry partnership in Burkina Faso, the hatchery, which was a crucial partner, failed to produce the necessary number of hatching eggs for years, which was not clearly mentioned in the documents, but highlighted in interviews). Therefore, internal and external challenges faced by the partnerships deserve more attention. Learning from external evaluations, such as the Impact Assessment and final evaluation of Phase 1 has been limited. The Phase 1 evaluation<sup>53</sup> is mainly positive about the achievement of output and short-term outcomes but did not find hard evidence yet that 2SCALE agricultural production and incomes. The Phase 1 evaluation recommended a continuation of the program making use of a ToC with three impact pathways (comparable to the Reconstructed ToC in this evaluation) and improved processes for phasing out partnerships. In its consolidated response to this evaluation, 2SCALE agrees with the positive findings and conclusions, but criticises the lack of understanding of 2 SCALE concepts and approach. 2SCALE rejects the key lessons. The 2021 MTR finds that Phase 2 is well on its way and points at early results. At the same time, the program and partnerships are found to be too complex, exit strategies were not well developed and efficiency is criticised by stakeholders. 2SCALE prepared a response to the MTR conclusions and recommendations, indicating that some of the recommendations, such as development of a clear exit strategy and light-touch support for Phase 1 partnerships have been considered. However, the more critical MTR conclusions and recommendations for change, such as less complexity at program and PPP-level through a focus on food & nutrition, increasing efforts to measure true impact, and reducing the number of intervention themes and a stepwise approach to improve efficiency were not followed up. There are also other factors that have a mixed effect on performance:

**The complexity in combination with the high ambitions of the 2SCALE program can be considered both as a strength and as a weakness.** 2SCALE is a very complex program, active in ten countries in Africa, in various

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<sup>53</sup> SEO, 2018, External Evaluation 2SCALE 2012-2017.

industries and value chains. The focus on inclusive agribusiness, working with BCs, in combination with a focus on BoP markets and sub-sector system change demonstrate the insight of 2SCALE into interrelated problems, for which integrated solutions are proposed. However, the program has limited means and also a limited time horizon, which do not allow to tackle all problems and achieve transformational change in such a variety of contexts. In addition, as indicated by 2SCALE country teams, there are frequent changes in the program, which are very demanding for the staff on the ground, but sometimes also for partners. This raises fundamental questions regarding the high ambition level of the program. Other agrifood systems programs often focus on less geographic and farming systems locations, with longer time horizons, thus reducing complexity.

**The complexity is also reflected in the program design and the lack of clear linkages between the program-level and the PPP-level of the Theories of Change.** In Section 3.3.2, it has been indicated that the impact pathways at PPP-level are reasonably well articulated, albeit without underlying assumptions and no clear linkages to indicators for the various results. The program-level ToC shows some flaws, and, therefore, a ToC has been jointly reconstructed for this evaluation. 2SCALE also faces conceptual challenges as many different concepts are being used that are not always well-defined and are sometimes interpreted in different ways by various actors.

The 2SCALE M&E system has clear strengths, such as the involvement of partners, but it is also rather sophisticated and very complex, while it does not provide sufficient evidence-based information at output and outcome level. 2SCALE had to find a balance between setting-up a rigorous and sufficiently detailed system that at the same time is flexible enough to adjust to changes. Striking this balance has proved to be **very complicated**. The M&E system is based on the ToC, which had its flaws, and is focused on the ULLs, while also Markers for Change to assess partner capacities are monitored. The ULLs do not measure impact but represent mainly output and outcome indicators as shown in Table 10. Moreover, a lot of rather scattered information is collected from BCs and BSS, which with a complicated system of proxies are transferred into ULLs. The system is rather resource and time-consuming, but the reliability of the information can be questioned. There are only very few surveys among SHFs or MSMEs available, which could provide more primary information on results for beneficiaries. This is surprising given the vast resources for M&E.

The average duration of the active Phase 2 partnerships is approximately 3 years and in principle the graduation process is clearly defined in the program documents, but in practice the process is more fluid. A duration of approximately 3 years is relatively short to achieve transformational change. Only in one of the ten case studies – the Nigeria dairy case- there was clear agreement of the 2SCALE phasing out as another donor was interested in funding the partnership<sup>54</sup>. In the other nine case studies, the phasing out was more open and most of the partners indicated in interviews that they hoped for continued support. It deserves to be mentioned that 2SCALE stopped most of its support on the ground in 2024 given limited budget availability and contracts with BSS were ended end 2023 or early 2024 in most cases. The formal exit date indicated by 2SCALE does not always match with the end of the support on the ground.

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<sup>54</sup> The Bill and Melinda Gates Foundation support the partnership since March 2024, while IFDC continues to provide support with this new donor.



A main feature of the 2SCALE approach is to put the BCs and partners in the driving seat, which is a key strength, while at the same time this implies that 2SCALE is operating at a distance from the field with hardly any boots on the ground. 2SCALE has adopted an adaptive process management approach, leaving the ownership to partners at the ground. On the other hand, 2SCALE has an extensive staff operating at a distance, which might lead to relatively high transaction costs. However, the interviews for the case studies indicated that partners, including BCs, only feel themselves to a limited extent owner of the partnership. Stakeholders see 2SCALE, despite the distance, as the key actor.

Even though the assessment of efficiency was not included in the ToR for this evaluation, the critical assessment of efficiency made by the MTR-team, has been confirmed in this evaluation. The MTR reports that more than half of the budget goes to 2SCALE own staff and overhead cost. Most of the partners consulted for the MTR were critical of 2SCALE's efficiency and saw good options for improvement. During the extension phase 2023-2024, it is likely that the percentage spent on 2 SCALE staff and overhead has further increased as there have been very limited activities on the ground in 2024 and most contracts with Business Service Providers were ended early 2024. Also, the fact that 2SCALE operates in ten countries makes that travel and transaction costs are rather high. In 2024, 2SCALE spent a lot of time on preparing Phase 3, which further affected efficiency.

For 12 years and two consecutive phases, the MFA has been the only donor of this flagship program, to which a hands-off management approach was applied. Also, there were no formal responses to external evaluations that were of variable quality. There have been three external evaluations of 2SCALE Phase 1<sup>55</sup>. The quality of these evaluations has been variable according to the comments of key informants, and much of the findings of Phase 1 evaluations were not used to shape Phase 2 plans<sup>56</sup>. Comments made in the appraisal of the Phase 2 program document were also not sufficiently considered and also the peer review comments on the ToC and M&E system did not lead to any changes. In Phase 2, an external mid-term evaluation<sup>57</sup> also of insufficient quality and was not sufficiently used to tweak. The MFA has been in frequent contact with the program, mainly on an informal basis. Other MFA departments pay more attention to external M&E of key programs, while focussing on accountability and learning, but there are no uniform directives within the MFA.

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<sup>55</sup> SEO Amsterdam Economics, 2018, External Evaluation 2SCALE, 2012-2017 Final report, SEO Amsterdam economics, 2021, Mid-term Review of 2SCALE, Bonilla & Rai, 2018, Impact Evaluation of 2SCALE: Endline Report.

<sup>56</sup> The mid-term Phase 1 evaluation was apparently well used according to the program as it was used to make some changes in the set-up. The IA and final evaluation were both hardly used. The IA focused on impacts on SHFs and was of good quality according to peer reviewers, but 2SCALE questioned the findings. Also, the Operations Evaluation Department (IOB) evaluation on climate finance that assessed the additionality of six Phase 1 partnerships was not used.

<sup>57</sup> SEO Amsterdam Economics, 2021, Mid-term Review of 2SCALE.



### 3.5. Impact, Sustainability and Contribution Analysis

The evaluation of Phase 2 focussed mainly on the assessment of relevance and effectiveness, which are closely linked to the assessment of impact and sustainability. Both impact and sustainability consider to what extent results will endure over time. Impact focuses on the time dimension in terms of measuring transformational change, while sustainability looks at the continuation of benefits. While it was already challenging to find robust evidence on outcomes, it is even more challenging for impact and sustainability indicators. The partnerships have relatively short durations. In most cases, it is too early to find concrete evidence on impact and sustainability. Therefore, an IA on Phase 1 partnerships is also part of this evaluation (see Section 2). The Phase 2 evaluation does not include a rigorous IA as presented in Section 2 for two Phase 1 PPPs, but in line with OECD-DAC evaluation criteria and guidelines, the plausibility of significant positive or negative, intended or unintended higher-level effects has been assessed. The impact definition also includes transformational change, which means that root causes of inequality (including gender equality) are addressed. For 2SCALE, also the assessment of the degree to which replication has taken place is related to impact. Furthermore, the impact criterion interacts with other evaluation criteria, and for this evaluation, especially with effectiveness and sustainability<sup>58</sup>. The assessment of effectiveness considered to what extent objectives were achieved in relation to the results chain of the ToC, while the assessment of impact focus is on higher-level effects or transformational changes. The contribution analysis in this Section starts with an analysis of the self-assessments, followed by an analysis of the strengths of the outcome claims and, finally, the validation of underlying assumptions.

**Answer to the evaluation questions on impact and sustainability: What difference did 2SCALE make and will the benefits last?**

- It is likely that yields have increased for those partnerships that have had reasonable SHF-outcomes, such as adoption of eco-efficient farming practices, for sufficient numbers of farmers during a period of at least three years (which is the case for probably less than half of the portfolio). It is likely that yields have increased for those partnerships that have had reasonable SHF-outcomes, such as adoption of eco-efficient farming practices, for sufficient numbers of farmers during at least three years (which is the case for probably less than half of the portfolio).
- It is unlikely that farmers' incomes have increased, given external factors affecting income (see also Section 2, IA), but some micro-entrepreneurs may have benefitted from increased incomes.
- There is insufficient evidence (and too early) for a sustainable 2SCALE contribution to the terms of inclusion.
- There is evidence of sustained benefits for only four out of ten partnerships.
- The main driver of sustainability is the strength and the commitment of BCs to inclusive agribusiness and serving BoP-markets.
- For four out of ten cases, the 2SCALE claims are strong. Overall, 2SCALE tends to overestimate its own contribution as there are many other influences and actors that may be contributing to the positive changes.

<sup>58</sup> <https://www.oecd-ilibrary.org/sites/543e84ed-en/1/3/4/index.html?itemId=/content/publication/543e84ed-en&csp=535d2f2a848b7727d35502d7f36e4885&itemGO=oecd&itemContentType=book#section-d1e4269>

### 3.5.1. Impact and Replication

Given the definition and measurement problems related to the UIIs, it is very challenging to make firm assessments of 2SCALE impact on productivity, income, improved access to nutritious food or changes in the enabling environment. Formally, the definition of the UII2 indicator is “the number of SHFs (women/men/youth) who have improved productivity and net income”, but it is important to make a distinction between productivity and income, as was shown in the Phase 1 IA (see Section 2). Section 0 showed that there have been proxy calculations of the number of SHFs reached, but the 2SCALE M&E system does not provide any insight into actual impact in terms of increased productivity and income. The same applies for the proxy calculations of the number of BoP consumers reached. Nevertheless, the 2SCALE reporting suggests that impact in terms of productivity and income has been realised. For example, the 2SCALE Annual report 2022 states that the original targets for the UIIs have been achieved, without mentioning that there is no concrete evidence on impact. In addition, the evidence on achievement of outcomes is also somewhat scattered as presented in Section 0.

SHFs have likely increased their productivity/yields, although there is important variation among the partnerships, and it cannot be assessed for how long this has been the case and for how many farmers. In the assessment of the effectiveness of impact Pathway 1 SHF for Phase 2, and the Phase 1 IA showed that SHFs did adopt eco-efficient farming practices, albeit at a variable scale. Although there are important variations among the partnerships, in most cases there is evidence that SHFs – independent of the evidence on target achievements- have been able to increase their productivity, due to a change of agricultural practices, use of improved seeds and other inputs, initiated by 2SCALE and its partners (see also the Section on contribution analysis below). Therefore, it is plausible that indeed SHFs have been able to increase their productivity. However, as no surveys have been done by 2SCALE<sup>59</sup>, and given the fluctuations in the number of SHFs reached per partnership, there is no indication on the number and characteristics of SHFs, or the proportion of the number of SHFs reached for whom this has been the case. The Phase 1 analysis showed improved productivity in only one of the two partnerships. Given the variable SHF outcomes for the ten case studies and the portfolio information (see section 3.4.1), it is plausible that for not more than half of the partnerships – probably less- productivity has improved for a longer period. Of course, there many external factors affecting this impact as set out in Section 2.

It is not possible to assess whether SHFs have increased incomes as there are many external factors, such as changes in input prices, changes in market access, crop diversification, climate changes, that affect income. The Phase 1 IA was not able to find evidence for increased farmers’ incomes due to external factors such as market access challenges and price volatility. Also, for the Phase 2 partnerships, it is likely that farmers that were able to increase their productivity benefitted at least for a short period of time of increased income. This was indicated in FGDs and interviews during the field visits and the 2SCALE reports also provide anecdotal evidence on increased income for SHFs. However, as market dynamics change and also other factors affect farmers income, it is not possible to assess sustained income increases.

<sup>59</sup> Although simple surveys among SHF beneficiaries cannot be considered as a rigorous assessment of impact, these surveys could have provided essential information on the plausibility that 2SCALE achieved its intended impact.

**It is plausible that there are micro-entrepreneurs (especially women) who have increased their income.** Some partnerships have contributed to the development of profitable microbusiness, and in these cases, it is plausible that the micro-entrepreneurs (often women) have been able to increase their income. However, the number of MSMEs has remained relatively small.

2SCALE aims to change the terms of inclusion, which can be considered as transformational change, and indeed the case studies show that transformational change processes have been initiated, but uptake is still limited and variable. A few of the ten case studies focus on transformational change, i.e. holistic and enduring changes in systems or norms, for example, the dairy and oil palm cases in Nigeria and the poultry case in Burkina Faso. There is evidence that indeed transformational change processes have started as pastoralists now provide good quality milk to milk collection points of the BC and poultry farmers raise chicklets of a new hybrid race. However, uptake in most cases is still limited or variable at best. BC should play an important role and change their ways of doing business and becoming more inclusive. In practice, there is some tension between the 'viable business case' for a BC and the 'inclusive agribusiness' demand from 2SCALE. Ultimately, BCs (and other value chain partners) are driven by profit motives and self-interest may be prioritised over 'a seat at the table' for value chain partners. This tension means that the evidence for better terms of inclusion for SHFs and MSMEs is rather thin. Changing the terms of inclusion also takes more time than the duration of a partnership. There is no evidence that 2SCALE has already increased gender or youth equality, although the intentions are clear. Nevertheless, women and youth are mainly active in additional (non-agricultural) income-earning activities, which sometimes generate stable incomes (see Section 3.4.2).

**There are no clear signs of replication in terms of adoption of inclusive agribusiness, that would have been inspired by 2SCALE.** 2SCALE has defined various types of replications over time, and the definitions are not always well pinned down. Replication is even considered as a separate impact pathway in the 2SCALE program-level ToC, but not in the reconstructed ToC, where it is one of the underlying assumptions. The distinction between replication within 2SCALE and outside 2SCALE makes sense. For this evaluation, in relation to the impact definition the focus is on replication outside 2SCALE. 2SCALE does make reference to replication of impact pathways or similar partnerships in the same industry, however, this type of replication is not related to impact. 2SCALE considers 'horizontal scaling' as similar to replication. This horizontal scaling refers to companies and organisations adopting inclusive on replication according to this strict definition. There is some evidence on other types of horizontal scaling up, such as organic business growth/expansion (e.g., Kenya sorghum).

### 3.5.2. Sustainability

As Phase 2 is still ongoing, and given the scattered evidence on outcomes, it is very difficult to assess whether benefits for the beneficiaries will last. The partnerships that showed convincing evidence for achieved outcomes on one or more of the impact pathways are likely to have some sustained benefits. In contrast, the partnerships that face challenges to achieve their outcomes, are less likely to lead to sustained benefits for a longer period. Table 20 shows the sustainability assessment for the ten case studies.

Table 20: Sustainability assessment for the ten case studies

PPP code	Country & product	Sustainability assessment	Comments
BF28	Burkina Faso Poultry	?	SHFs were able to improve chicken farming practices (eg using improved chicken feed) but given the problems with the hatchery and market access problems in this fragile country, sustainability is questionable.
ET23	Ethiopia Honey	?	The BC has faced a serious financial challenge and has not aggregated any honey since 2023. Whether the finance constraint can be resolved is unclear. If not, this partnership will be forced to close.
ET25	Ethiopia Teff	yes	This partnership appears to be working well. The BC has invested significant own funds, and internal management capacity has been strengthened. SHF are engaged and B2B output market linkages are strong. In the absence of external shocks – notably security, the partnership may be sustainable.
ML25	Mali Fonio	no	One of the BCs, the fonio aggregator faced serious problems, and stopped buying, thus negatively affecting benefits for the SHFs. Distribution of fonio products to the local BoP markets just started and too early to assess sustainability, esp. also in view of the overall security and economic problems in Mali.
NE26	Niger Potatoes	no	The potato production in Niger is affected by various problems, such as the import of potato seed. The effort to produce local seed (sub-sector system change) is an attempt to achieve sustainable benefits. In the meantime, SHFs are switching to other alternative cash crops, and it is too early to assess sustainability.
KE21	Kenya Vegetables	yes	The partnership is characterised by strong and committed BC that has demonstrated capacity to leverage access to finance. The prospect for sustainability is strong, although expansion to other markets is dependent on product acceptability and possibly pricing given cheaper (if less nutritional) competing products.
KE30	Kenya Sorghum	yes	The BC is expanding operations to source from additional farmers, and forging linkages with other projects to ensure input and service provision to SHF. If the output market for sorghum from BC remains stable, the prospects for long-term sustainability are good.
NG01	Nigeria Dairy	?	Although transformational change has started for some SHFs, there are various factors affecting sustainability. The BC offers a lower price than competitors, which negatively affects the willingness of farmers to deliver milk. Moreover, the overall economic situation in Nigeria affects prices of inputs, and makes access to finance even more problematic, thus affecting sustainability.
NG25	Nigeria Sorghum	yes	There are benefits both for SHFs, for MSMEs (fura processors) and for BoP-consumers in a volatile context, which may affect the sustainability of results. Nevertheless, there is sufficient evidence that some benefits are likely to be sustained, also because sorghum is an important food crop in the region and there is a clear demand from big factories.
NG09	Nigeria Oil palm	no	The benefits for SHFs are still too volatile given the timid adoption of this perennial crop and the alternative possibly more profitable cash crops.

The assessment of sustainability is positive for four out of the ten case studies, i.e. in these cases it is likely that at least some of the benefits for SHFs, MSMEs or BoP-consumers will be sustained, while for three cases no sustainability assessment can be made and for three cases it is not likely that there will be sustained benefits. 2SCALE is the glue in a partnership and the main question is what happens after the withdrawal of 2SCALE support. For most of the case studies that were assessed in the period March-May 2024, the 2SCALE support already stopped in practice. One partnership had already a new external donor, but BCs and BSS often made a plea for continued 2SCALE support.

There are internal explanatory factors for the positive or negative assessment of sustainability, in particular the strength of the partnership or ABC, which is directly related to the role of the BC. The partnerships with strong BCs that have a clear interest for good quality supply by SHFs and the BCs that developed a good approach for BoP markets have a clear interest in continuation of these efforts. The partnerships with strong BCs may also have strengthened ABCs, but this is very difficult to assess in practice. In hardly any of the cases, groups of SHFs were able to negotiate good prices with the BCs. Just as was the case for the Phase 1 PPP in Ghana (see Section 2), where the BC withdrew its market facilitation services, this has also been the case in at least two of the ten case studies for Phase 2 (Mali, fonio and Ethiopia, honey). This leaves farmers with fewer options to secure favourable prices for their crops, but also in other cases, the BCs are only able to buy part of the SHF production and the farmers are dependent on the volatility of the market. In other cases, such as dairy Nigeria, the BC offers lower prices in Nigeria than competitors.

There are questions around insufficient 'stake' or ownership by value chain partners to ensure sustainable engagement, even though 2SCALE has developed a graduation approach, which cannot always be implemented in practice. 2SCALE has elaborated PPP phasing out guidelines to assess the maturity of partnerships. This is done by the country teams in a partnership portfolio quick scan, but the ET did not receive such a scan, while it was also not referred to or shared by the country teams during the portfolio discussions. The 2SCALE PPP protocol indicates as the seventh step for partnerships: "Design and implementation of an exit strategy for partnerships from which 2SCALE disengages (successful PPPs or stops support (non-successful PPPs), including end-of partnership support". It appears that in theory a graduation approach has been developed. However, given the short duration of the partnerships, the end of the 2SCALE support appears to be more determined by the end of the 2SCALE programming period and budgetary constraints than by an actual assessment of maturity of the partnership. This is confirmed by the interviews. Also, the fact that 48 of the 55 active Phase 2 partnerships in the portfolio were exited in the period November 2023-June 2024 (and 33 PPPs were exited during the period April-June 2024) is an indication that budgetary constraints are the most important factor for exit, and not graduation. In none of the ten case studies, a clear exit strategy was found.

There are important external drivers of sustainability as well, such as changes in the political and security context, market access, input availability, and climate variability, which make changes fragile. 2SCALE is operating in many fragile countries, which are also affected by climate variability. Although no adverse climate events were identified, climate change does affect sustainability and is to a large extent beyond the scope of 2SCALE, although these factors should be taken into account in identification and implementation.

### 3.5.3. Contribution Analysis

The self-assessment contribution analysis reports were meant to be complementary to the external evaluation and provide solid information on contribution that could be validated by the external evaluation. This has not been the case due to methodological problems and delays. This external evaluation, particularly the case studies, is intended to be complementary to the 2SCALE self-evaluation, as indicated in the ToR (Annex 1). The 2SCALE self-evaluation consisted of 13 partnership cases that were subject to a contribution analysis by the MEAL team. A methodological guide<sup>60</sup> was developed with an approach that follows closely the Mayne approach to contribution analysis. The guide explicitly states that a final rigorous assessment of evidence will be conducted by the external evaluators. The self-evaluation started substantially later than planned and most reports became only available in end April- early May 2024. Moreover, the information captured in the contribution analysis reports for the 13 selected PPPs is superficial and of limited value to the ET. The following methodological constraints affected the usefulness of the self-evaluation contribution analysis reports:

- Despite adherence to the formal methodological approach, the impact pathways are not meticulously analysed and no flaws in the theories of change are indicated.
- Not all impact pathways of the PPPs are analysed, but the focus is mainly only on SHFs.
- The Sections 'Contribution story' are a mix of intentions, and actual results without referring to specific sources.
- The Sections titled 'Strength of the claim' indicate report that in most cases "the claims are supported by solid/compelling/robust/strong/relevant evidence", but without any presentation of said evidence.
- The reports do not pay any attention to the fluctuating numbers of beneficiaries and how this may affect outcomes and impact.
- No reference is made to internal or external factors that may have affected performance.
- No indication of progress over time in line with the impact pathways has been presented.

Given the concerns about the quality of the self-evaluation reports, the ET decided to not consider most of the reporting and instead assess 2SCALE contribution on own collected and observed evidence.

The evaluators' assessment of the strengths of the 2SCALE contribution claims for the SHF and BoP impact areas, shows a mixed picture with solid evidence for good contribution in less than half of the cases.

Table 21: Strength of the 2SCALE contribution claim regarding UII1 and UII2

PPP code	Country and product	Strength of UII1 BoP claim	Strength of UII2 SHF claim	Comments
BF28	Burkina Faso Poultry	NA	Below target	The SHF claim is to a large extent based on the introduction of improved chicken feed, and it is likely that the BC would have done this also without 2SCALE. The core intervention, introduction of hybrid chicken race, is facing many problems

<sup>60</sup> Marijn Faling and Sietze Vellema, 1st December 2023, Contribution analysis manual, Version 3 - for discussion with MEAL team, for 3 pilots in December 2023.



ET23	Ethiopia Honey	No claim for 2023	Above target	#SHF claim is questionable. BC has not been aggregating honey since 2023, and farmers are selling their honey through alternative channels, on local markets or to middlemen.
ET25	Ethiopia Teff	Below target	Below target	BoP claim is moderately credible, with large volumes of teff procured by urban consumer cooperatives. SHF contribution is moderate, the claim is based on better access to improved inputs.
ML25	Mali Fonio	Below target	Below target	BoP claim is credible given the contribution to product development, but there is no clear evidence for the SHF claim given the serious BC issues
NE26	Niger Poatoes	Far below target	Far below target	Despite many value chain problems, which is the reason for non-achievement of the targets, the claims are credible
KE21	Kenya Vegetables	Above target	Below target	Very clear 2SCALE contribution to BoP product development, but no clear SHF contribution
KE30	Kenya Sorghum	Below target	Near target	No clear 2SCALE contribution to BoP product development, but reasonable contribution to SHF
NG01	Nigeria Dairy	Far above target	Below target	The claim regarding the SHFs is strong, but this is not the case for the BoP claim (see Table 17 in Section 0)
NG09	Nigeria sorghum	Above target	Below target	For both BoP and SHF the 2SCALE contribution is clear, even if there are questions around the specific Ull numbers achieved
NG25	Nigeria Oil palm	Below target	Below target	Clear 2SCALE contribution to engage SHFs in better oil palm management despite non-achievement of targets, but no clear BoP contribution

The following observations regarding the strength of the contribution claims can be made, based on Table 21 above:

- There is no clear relation between the strength of the claim and the achievement of the targets. Claims can be strong even when targets are not met, conversely claims can be weak in cases where targets have been achieved.
- For BoP outcomes the claims are not always based on solid evidence. In these cases, the BC reported having decided on BoP strategies with no clear 2SCALE involvement or role.
- For SHFs, the analysis of the 2SCALE contribution is slightly more positive with four cases with clear evidence of a positive 2SCALE contribution, and five PPPs with a weaker claim.

In general, the assessment of the 2SCALE contribution is complicated as in most cases there are many other actors intervening in the same value chain at the same time, or the BC was already active in the same area prior to 2SCALE involvement. As 2SCALE does hardly provide any direct support to beneficiaries, it is complicated to assess the contribution in practice.

**Most of the following underlying assumptions of the reconstructed ToC cannot be validated:**

- *2SCALE provides support to complementary partners that are in the driving seat and will continue to lead the change processes:* in practice, 2SCALE partners appear to continue looking for external support prior to the partnerships and for the future.



- *2SCALE's focus on incubating partnerships lays the foundation for fundamental change:* in practice, 2SCALE cannot be considered as a “traditional” incubation programme as no new businesses are incubated, while the sustainability of partnerships beyond the support of 2SCALE is not guaranteed.
- *2SCALE has an elaborate adaptive management approach (including reflection sessions and MEAL) at all levels, which allows to learn lessons and achieve results:* indeed, there is much emphasis on the adaptive management approach, but, in practice, there must also be room to learn from failures.
- *The 2SCALE approach is specifically suited to addressing agri-food business bottlenecks at sub-sector/value chain level:* this assumption does not automatically hold as 2SCALE works with only one or two BCs at sub-regional level, whereas sub-sector system change usually requires other forms of engagement and commitments than those existing at partnership level and related to a specific value chain. This concurs with findings of the IOB study on aid and trade, as addressing agri-food challenges requires a focus on various aspects of the enabling environment rather than on individual businesses.<sup>61</sup>
- *When 2SCALE demonstrates strong evidence of inclusive agribusiness models, replication without 2SCALE support will happen:* the ET was unable to find evidence to support this.

## 3.6. Additionality

Answer to the evaluation question on additionality: What does the private sector add?

- The private sector, i.e. the BCs, have substantially contributed to the 2SCALE partnerships and in 40 out of 55 active Phase 2 PPPs the financial private sector contribution was larger than the 2SCALE financial contribution. However, the calculation of the private sector contribution cannot always be related to the 2SCALE partnership activities, as also in-kind contributions are included. This means that the contribution of the private sector is probably overestimated.
- The assessment of non-financial input additionality is mainly positive, which means that 2SCALE provided additional technical support that the private sector did not have, especially in terms of inclusive agribusiness and development of BoP markets by smaller grassroots BCs.
- The assessment of financial input additionality is also mainly positive, but this assessment is more challenging as the focus of 2SCALE has not been on the possibilities to bridge the gap between an unviable case of product or market development towards a less viable case.
- The assessment of output additionality is positive for most cases, although there are methodological challenges, and there is some evidence that 2SCALE triggered private sector investments that would not have happened without the program.

The key question for assessing additionality is whether 2SCALE funding has stimulated the private sector to do something different (better, more, faster) or something new that it would not have done without 2SCALE support. The starting point is that both public and private/commercial funding (blended finance) is used for 2SCALE program. The Dutch policy is that public (ODA) funding should be additional and/or complementary to the market, which means that the government will fund projects that the private sector cannot fully fund by itself. This is the case for 2SCALE and applies specifically to activities that are not (yet) commercially viable related to reaching SHFs or supplying BoP consumers. 2SCALE can be considered as a non-revolving blended

<sup>61</sup> IOB, 2021, Coherence or Co-existence, A Study on the Implementation of the Aid, Trade and Investment Agenda in three Partner Countries; Bangladesh, Ethiopia and Kenya

finance program<sup>62</sup> providing subsidies complementing a private sector contribution, which is common for projects with uncertain business cases.

**For this evaluation, the ET has distinguished and assessed financial and non-financial input additionality.** The ET focuses on the extent to which the 2SCALE financial and non-financial support has bridged the gap between the temporary phase of product or market development up to the commercial business case. 2SCALE states that its support is needed for business champions to work on the terms of inclusion for SHFs, MSMEs and BoP consumers. At the end of the 2SCALE support, the inclusive agribusiness should continue and even be replicated without 2SCALE support.

Here, the focus is on the actual assessment and validation of the private sector contribution as it is assumed that 2SCALE support has triggered additional private sector investments. 2SCALE is monitoring and quantifying the private sector contribution.

Before presenting the findings on input and output additionality, some specific methodological challenges regarding the assessment of the additionality of 2SCALE support deserve attention:

- The 2SCALE financial overviews of the private sector contributions and the 2SCALE contributions include cash and in-kind contributions. However, the inclusion of in-kind contributions is contested in literature<sup>63</sup>. This issue is further addressed below.
- Although 2SCALE assesses some elements of additionality in the partnership documents, in particular in the screening process, the assessment of additionality receives relatively limited attention.
- Development additionality, merging development outcomes and development impact additionality, focuses on changes in the enabling environment that could not have been changed by the private sector alone. Furthermore, the expected development impact should be more than what could have been achieved by the public sector alone or the private sector alone.
- Originally, as indicated in the inception report, the ambition was to assess also development additionality.
  - This was meant to focus on changes in the enabling environment that could not have been changed by the private sector alone, while also the expected development impact should be more than what could have been achieved by the public sector or the private sector alone. However, it has not been possible to sufficiently assess changes in the enabling environment and development impact caused by 2SCALE. Therefore, the ET had to refrain from an assessment of development additionality
- Assessment of additionality is notoriously difficult as indicated in literature and evaluation reports<sup>64</sup>. For example, financial additionality is hard to assess *ex ante* in a non-transparent marketplace, but even more difficult *ex post*, while non-financial contributions are a bit easier to assess, but are hampered by a lack of clear expectations, poor monitoring and limited use and availability of

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<sup>62</sup> As compared to a revolving blended finance program providing equity and loans that need to be paid back.

<sup>63</sup> IOB evaluation 2021, May 2021, Funding commitments in transition. Dutch climate finance for development 2016-2019, p.80-103, incl. six 2SCALE partnerships.

<sup>64</sup> DCED, 2017, Demonstrating additionality in working with the private sector, A summary. Evaluation Cooperation Group, 2022 (?), Report on Additionality

benchmarks.

- While 2SCALE pays attention to the ex-ante assessment of additionality in the partnership preparation process and documents, 2SCALE approaches additionality in a slightly different way than what is usual in literature. The establishment of good partnerships focusing on the common goal of contributing to inclusive agribusiness is key, while there is no explicit focus on the assessment whether the private sector can also pay for the 2SCALE contribution or obtain this in the market in another way. This has led to different interpretations.

### 3.6.1. Input Additionality

2SCALE follows a similar process-oriented approach for all partnerships, independent of the country or industry. This explains the relatively limited variation in 2SCALE financial contributions per partnership. The overview of 2SCALE financial contributions per partnership included in the analysis shows that the average contribution per partnership is € 723.000 while there is some variation between approximately € 400.000 per PPP on the low side and near € 1.5 million on the high side (see Figure 4, in Section 3.2). Nevertheless, the 2SCALE contributions vary less than the private sector contributions (see Section 3.6.2). For the ten case studies, the 2SCALE contribution varies between approx. € 0.5 and € 1 million. The 2SCALE financial contributions include all partnership related activities plus overhead costs. Costs of direct partnership related activities include all costs of 2SCALE staff that work on the partnership, costs of Business Support Service providers, costs for workshops, travel costs, consultancy costs, etc. paid for by 2SCALE. 2SCALE overhead costs are distributed among partnerships. In line with the program approach, there are no direct contributions to SHFs for input supply, or to MSMEs for credit or so, but all costs are related to training, extension services, advice, facilitation, etc. For six out of the ten case study partnerships the private sector contribution is (substantially) higher than the 2SCALE contribution and in four cases the 2SCALE contribution is higher, which is consistent with the overall portfolio as shown in Figure 4.

Regarding non-financial input additionality, the assessment is positive for most of the ten case studies. 2SCALE offers technical support especially regarding inclusive agribusiness, and organisation of SHFs, which is an area of expertise that most BCs don't have. In addition, in a few of the case studies, the non-financial input additionality of 2SCALE became clear through the support provided to the BC regarding their BoP market approach, such as product development, packaging, marketing, etc. This support was additional and targeted at the smaller BCs. The large international firms with big sales and marketing departments that have their own expertise regarding BoP markets did not need the 2SCALE support. For them, 2SCALE's non-financial input additionality is less convincing.

2SCALE staff, and sometimes also the BSS, do not always have the needed or right technical knowledge or expertise. The ET did find important differences in the ten case studies. In at least half of the case studies, the BC already had the technical expertise to expand its activities, or they contracted their own extension agents or suppliers.

The assessment of financial input additionality is positive (for six of the ten case studies), but slightly less positive than the non-financial input additionality. The explanation for the difference is that when large multinational companies take on the BC-role, they have most likely the means to pay for the 2SCALE support.

However, this has never been investigated in-depth and was not part of the due diligence process. On the other hand, in two out of the ten cases the BCs faced serious financial problems during the partnership, which affects the possibility to develop a viable business case

From an input additionality perspective, the due diligence processes require the assessment of the BC capacity to invest, and the possibilities to bridge the gap between an unviable case of product or market development towards a viable business case. However, the 2SCALE due diligence processes show some challenges. In addition to the case studies issues, attention should be paid to the main reason for suspending or early stopping of 18 partnerships in phase 2, which is related to BC issues. This includes financial problems – inability or unwillingness to make the agreed investments- as well as limited commitment to inclusive agribusiness. The partnership documents and the interviews for the ten case studies indicate that main attention is paid to the development of the partnerships and the roles of the various partners, but relatively limited attention is paid during implementation to the viability of the business cases. The development of turnover and profits of the BC during implementation of the partnership are not analysed. This also includes a lack of analysis whether the private sector could have funded the 2SCALE contribution.

### 3.6.2. Output Additionality

Private sector contributions per partnership vary substantially between € 12.9 million and € 66.000 (and even lower for some PPPs that were suspended or stopped earlier). Regarding the ten case studies, in six cases the private sector contribution was recorded to be rather high with at least more than € 1 million, all big lead firms and in four cases the private sector contribution was varying between € 200,000 and € 500.000.

The private sector contributions cover financial and in-kind contributions. This includes in most cases investments in new factories, buildings and machines, but also staff time, costs of participating in meetings, training and also calculations of farmer's time to participate in meetings. The inclusion of in-kind contributions to assess additionality is contested. Moreover, it is difficult to assess to what extent all recorded private sector costs are directly related to partnership activities (e.g. investments in processing capacity are not always fully related to increased SHF production). The source of the private sector contribution is not always known as some BCs have access to donor grants that might have been used for reporting the financial contribution to 2SCALE (at least for two out of ten case studies).

Even though the precise volume of the private sector contribution can be questioned, for eight out of the ten case studies, it is found that without 2SCALE support the private sector would not have invested in the activities. This means that 2SCALE has triggered private sector investments that would not have happened without the program. For two case studies, it is likely that the lead firms would have invested anyway and were looking for an NGO as partner anyway to expand their business.

While the ten case studies show a relatively positive assessment of output additionality, the portfolio overview (see Section 3.2) points at challenges regarding the assessment of the capacity and commitment of BCs in partnerships. For almost all 18 partnerships that were suspended or stopped early, objections of with the BC, such as lack of willingness to invest or a commitment to inclusive agribusiness were the main reason.

## 4 Conclusions, Lessons and Recommendations

This section presents the main conclusions, lessons and recommendations of the impact assessment of two Phase 1 partnerships as well as the Phase 2 evaluation. The focus is on overarching conclusions leading to lessons for future inclusive agribusiness programs and specific recommendations for the short extension of 2SCALE, based on the main findings and answers to the EQs. Note that the detailed answers to the EQs are presented in Sections 2 and 3.

### 4.1. Conclusions

#### 4.1.1 General Conclusions

1. **2SCALE is a complex and very ambitious agricultural value chain program with a vast scope, that operates in volatile African environments.** 2SCALE is considered a flagship program by its donor, the Netherlands Ministry of Foreign Affairs, which underlines its level of ambition. This portfolio program operates in more than 10 African countries and consists of public-private partnerships (PPPs). Its overall aim is to develop sustainable and inclusive agribusiness models that can be replicated and scaled up, involving smallholder farmers, private sector actors (business champions and a large number of MSMEs) and Base-of-Pyramid (BoP) consumers, while also realizing sub-sector system change. This approach of bringing together different value chain actors in collaborative partnerships can be considered innovative, although it also entails risks given the challenging contexts in which the program is operating.
2. **With its integrated inclusive agribusiness approach, 2SCALE has addressed key needs of stakeholders including smallholder farmers (men, women, youth), private sector and BoP-consumers. However, necessary program choices and external factors beyond the influence of 2SCALE have affected the relevance of the approach.** 2SCALE pays specific attention to changing the terms of inclusion, and, therefore, focuses specifically on the needs of different smallholder farmers. These needs have been more or less adequately addressed, depending on the contexts and conditions - such as farming systems, climate factors, political and economic conditions, investment climate, security situation. The influence of external factors combined with the focus on specific value chains and products or crops has affected relevance, especially for cash crops for which there might be more attractive alternatives. In general, the needs of women and youth are mainly addressed through the creation of additional income-earning opportunities related to processing, transport, and distribution rather than through the mainstream farming activities the partnership is focusing on.
3. **One of 2SCALE's major challenges has been to manage the complexity of its program. Unfortunately, complexity has gradually increased due to its broad thematic and geographic scope, and the development of too many concepts and guidelines.** As indicated above, 2SCALE has set broad and ambitious goals in many areas. Both at program and partnership levels, different impact pathways were

pursued at the same time, regardless of context. However, the evaluation's case studies clearly showed the difficulty of successfully developing all the impact pathways in the short time available for partnership support. In addition, 2SCALE's approach of operating as a facilitator while maintaining a certain distance from the field further complicated matters. 2SCALE has chosen to develop various generic conceptual approaches, such as 'business as unusual' and 'sub-sector system changes', with related guidelines. The emphasis on developing concepts and guidelines was intended to ensure harmonized approaches whatever the context, but this may have been to the detriment of adapting partnerships to the specificity of the context. This means, for example, that no conflict-sensitive approach has been developed for the fragile countries and regions where 2SCALE is active.

4. **Insufficient risk mitigation has negatively impacted the program's overall performance.** The complexity of the program also entails risks given the challenging contexts in which the program is operating. A series of risks were identified during PPP preparation and screening phases. However, risk mitigation both at the partnership level and at the overall program level has been insufficiently operationalized, especially in view of the relative short duration of the partnerships (approximately 3 years). Despite the program's attention for adaptive management, risks have not always been sufficiently mitigated.
5. **2SCALE can be considered as a hybrid private sector program, with private sector engaged through public-private partnerships, but private sector is not fully in the lead.** The 2SCALE consortium is clearly in the lead. They select and screen private sector companies -business champions- to have a central role in the partnerships, which is laid down in partnership agreements. Therefore, a critical success factor of 2SCALE is the presence of strong and committed business champions embracing the concept of inclusive agribusiness. However, the main reason for prematurely stopping or ending partnerships was the failure of private sector to live up to their engagements. While collaboration with the private sector is very important for 2SCALE, the expertise of 2SCALE regarding viable business cases is limited, which is reflected in the relatively limited attention for additionality. Private sector is certainly interested in engaging with 2SCALE, but business champions perceive 2SCALE as the central leading actor. The partnership agreements focus on the financial contribution of both parties and roles and responsibilities are specified. However, no attention is paid to potential conflicts of interest.
6. **In practice, 2SCALE operates at a distance from the field, which calls into question 2SCALE's value added and value for money.** 2SCALE does not provide direct (financial) support to the beneficiaries and acts as an intermediary in the various partnership processes. In the identification and screening phase a joint problem analysis is conducted, and partners are identified, which is the basis for the specific partnership approach. Then, 2SCALE contracts business support service providers and consultants to provide support to beneficiaries and to initiate sub-sector system change. While this approach is meant to enhance ownership and facilitate sustainability, it leads to distance from the field and relatively high transaction costs.
7. **While 2SCALE Phase 2 evaluation has been able to provide additional information on the scope of results and explanatory factors, the use of robust impact assessment methods to assess the program's impact seven years after concluding the support provided essential information to confirm Phase 2 evaluation findings.**



## 4.1.2 Outcome Achievement

8. 2SCALE has demonstrably contributed to positive outcomes for various value chain actors, including smallholder farmers, private sector actors and BoP consumers, but there are large variations across impact pathways and partnerships. Most tangible evidence points to positive outcomes for smallholder farmers. Evidence for positive outcomes along all four impact pathways – for SHFs, private sector, BoP and sub-sector system change- has been found. The impact pathway for smallholder farmers is more elaborated than other impact pathways and receives more attention in 2SCALE. For SHFs, the most important outcomes achieved are the adoption of improved agricultural practices and the set-up of farmers groups/cooperatives. Positive outcomes for the private sector and BoP include the development of new BoP products and distribution channels with Business Champions and MSMEs, and improved access to affordable nutritious food products to BoP consumers.
9. There is huge variation in performance and results across partnerships operating in many different contexts. Only approximately one third of the Phase 2 partnerships show clear outcomes for one or more of the impact pathways and have achieved their targets. However, the Evaluation Team found no clear pattern of significant better performance for specific value chains, either in less fragile countries or in more favourable eco-systems. 2SCALE has partnerships in fragile countries, such as in the Sahel or Ethiopia that were affected by security issues that in turn negatively affected performance. However, in fragile regions and challenging eco-systems in some partnerships good outcomes were achieved, although the sustainability may be more challenging in these areas. On the other hand, in middle-income countries, such as Kenya and Ghana, there was also considerable variation in partnership performance.
10. 2SCALE has set up a complex and costly M&E system based on ambitious targets for various key indicators leading to number-centric reporting, the accuracy of which may be questionable, while hardly any information at beneficiary-level is collected. While 2SCALE claims that it has achieved its target of reaching 1 million smallholder farmers, in Phase 2, the evaluation found that not more than 800,000 SHFs were reached in 2023 and potentially benefitted from 2SCALE support. 2SCALE and the Netherlands Ministry of Foreign Affairs agreed on quantitative targets for specific Universal Impact Indicators (UIIs) both for Phase 1 and Phase 2. In theory, the SHF indicator refers to SHFs with increased productivity and income. In practice, what is measured is the number of SHFs reached with training or other activities, i.e. the focus is on output level. Measuring these UIIs is the cornerstone of 2SCALE's M&E-system, together with some additional indicators. In practice, a very complicated M&E system has been set up, which is very time-and resource intensive. The M&E system is not robust enough to capture the real outcomes of the program. Despite substantial budget for M&E and lessons that could have been learned from Phase 1, including an external IA, no baselines were conducted for the Phase 2 partnerships. Moreover, almost no primary data at target group level were collected.
11. 2SCALE private-sector-driven value chain approach may not be the most appropriate for achieving the changes in the enabling environment that were intended to contribute to sub-sectoral system change in Phase 2. 2SCALE partnerships may be confronted with challenges in the enabling environment. However, it is often beyond the scope of the partnership actors to tackle these challenges. 2SCALE works with only one or two BCs at sub-regional level, whereas sub-sector system change usually requires other forms of



engagement and commitments than those existing at partnership level. BCs have their own business interests and leading an Informal Change Alliance requires other skills and capacities. Also challenges in the enabling environment often go beyond the 2SCALE focus related to a specific value chain, as demonstrated from the literature that often refers to change in farming systems or agrifood systems.

12. 2SCALE's adaptive management approach is meant to enhance outcomes by adjusting the partnerships to changes on the ground, both in terms of context and in terms of internal changes in partnership relations or performance. While this works well in successful cases, 2SCALE's adaptive management approach is insufficiently focused on learning from failures and from external evaluations. The adaptive management approach is at the core of the 2SCALE program and processes. While 2SCALE's adaptive management is based on firm foundations, in practice, there are some challenges. As with other organisations, it tends to focus on joint successes and is less inclined to learn from failures. There was limited learning from external evaluations, such as the Impact Assessment and final evaluation of Phase 1, but also the Mid-Term Review of Phase 2, even though in some cases 2SCALE did prepare a management response.

### 4.1.3 Impact and Sustainability

13. The impact assessment of two Phase 1 partnerships that were considered as success cases found evidence that the program led to positive short-term impact in terms of productivity, but these effects demonstrated a concerning trend of decline over time after the partnership's conclusion. These findings were confirmed in the Phase 2 evaluation. In addition, it was not possible to assess how many farmers benefitted from these short-term productivity increases. This points to a critical issue regarding the sustainability of productivity gains, which were not robust enough to be maintained without continued external assistance.
14. Attributing or contributing changes in income due to 2SCALE is difficult to establish, given the many factors that influence changes in farmers' income, including 2SCALE's focus on a single crop, changes in input prices, changes in market access, crop diversification and climate change. According to the impact assessment results, income increased at the end of Phase 1, particularly in Kenya. However, these trends were not sustained over time, with income and profits diminishing. Moreover, results across partnerships were inconsistent, with neither productivity nor income increases for the Phase 1 Ghana partnership. This means that there is no solid and robust evidence for lasting income increases for smallholder farmers neither in the sample of Phase 1 nor for Phase 2 partnerships.
15. While improved agricultural practices were adopted, there is no evidence that 2SCALE had a positive impact on farmers resilience, i.e. the ability of farmers to recover from shocks. Both the Phase 1 Impact Assessment and the Phase 2 evaluation found evidence of adoption of improved agricultural practices due to 2SCALE support. These agricultural practices include eco-efficient practices that may potentially enhance resilience but also include the use of inorganic fertilizers and pesticides, depending on the value chain and the approach. In practice, the smallholder farmers adopting these practices were unable to mitigate the adverse impacts of severe weather conditions in recent years. A potential explanatory factor

is that 2SCALE focuses on one crop and its related value chain, and doesn't take a broader, more diverse farming systems perspective, which is needed for strengthened resilience. Another potential explanation might be that some extreme weather conditions might just be too severe to be addressed by improved agricultural practices.

16. 2SCALE has paid due attention to changing the terms of inclusion. There is anecdotal evidence on specific positive outcomes for women and youth, but little evidence for lasting transformational change. The terms of inclusion are at the core of the 2SCALE approach. Women and youth have particularly benefited through the creation of non-agricultural jobs (in part seasonal) by the BC or other value chain actors, such as in aggregation, threshing, processing transport, and warehouses. 2SCALE has also contributed to the set-up of MSMEs run by women or youth, which allowed them to increase their income. Some of these jobs and MSMEs will be sustained over time, but the case studies showed that jobs of weaker BCs are not sustained and some MSMEs also stopped existing.
17. The ambition of 2SCALE, as reflected in the name, is to scale up inclusive agribusiness. Similar partnerships with comparable approaches for specific value chains exist, which 2SCALE considers as horizontal replication. However, there is no tangible evidence of acceleration or replication without external support such as that provided by 2SCALE. In two phases of 2SCALE (2012-2018 and 2019-2024), 130 partnerships were started (of which approximately 20% were suspended or terminated prematurely). 2SCALE emphasizes the need for accelerating and scaling of current partnerships through proven practices of replicable models. In some value chains and regarding specific products, similar partnerships have been set up, such as dairy in Nigeria and sorghum in Kenya. These comparable partnerships all went through the full support cycle and required similar volumes of external support. The specific value added of 2SCALE should be that indeed replicable models are developed and adopted without 2SCALE support.
18. The evaluation of Phase 2 found some limited evidence for sustained outcomes for well-performing partnerships with solid and engaged BCs. However, the impact assessment of Phase 1 did not find any lasting impacts in terms of increased productivity and income. This raises questions about the involvement or insufficient ownership of value chain partners to ensure sustainable engagement, even though 2SCALE has developed a graduation approach, which has not always been implemented in practice. The sustainability of outcomes and impact is a key concern after 12 years of 2SCALE implementation.

## 4.2. Lessons and Recommendations

The ToR emphasised the need for generating evidence and lessons learned on 2SCALE partnership facilitation and learning approach for future inclusive business partnership programs. In discussions with 2SCALE, the program emphasized its willingness to learn from this evaluation and expected the external ET to provide relevant lessons and concrete recommendations.

This evaluation was concluded at the end of Phase 2. Throughout the evaluation period, discussions took place between the donor, the Netherlands Ministry of Foreign Affairs, and the 2SCALE consortium, led by IFDC with SNV and Bopinc as partners, on a possible third phase. The donor decided to provide 2SCALE an extension of maximum one year with a funding of € 6 million. The donor explicitly requested the ET to provide specific recommendations for this extension period. The main findings, answers to the EQs, and conclusions form the basis for the lessons and recommendations below. The lessons are aimed at players wishing to engage in future agro-industrial partnership programs, and the recommendations focus on the last extension period of 2SCALE.

### 4.2.1 General Lessons for Future Inclusive Agribusiness Programs

The Evaluation Team has drawn some general lessons for actors, such as, funders, implementors and partners that are interested to engage in future inclusive agribusiness programs.

1. **While inclusive agribusiness programs are, by definition, complex given their ambitious objectives and the fact that they operate in challenging environments, due attention needs to be paid to managing complexity, which can be done through geographic and thematic scope reduction.** 2SCALE has been active in more than ten African countries in very different environments and agrifood systems, including fragile countries. Operating in so many different fragile contexts and eco-systems prone to climate change in a large range of value chains greatly increased complexity and did not allow for adequate risk management. Therefore, a clear lesson is that such programs should not cover a too broad geographic scope. Furthermore, while at program level different impact pathways can be developed, such as for smallholder farmers, private sector and BoP markets, at partnership level choices should be made regarding a limited number of impact pathways, thus reducing complexity at partnership level.
2. **Inclusive agribusiness programs need an adequate design, including a state-of-the-art Theory of Change at program level that guides implementation at partnership level, which should be used as the basis for adequate monitoring and evaluation.** 2SCALE did not have a Theory of Change during the first phase. For the second phase, they elaborated a program-level Theory of Change along with different theories of change for the partnerships. One of the consequences has been an overly complex and costly M&E system, including excessive overreporting. Future programs should focus on beneficiary-centred M&E, complemented with external M&E as an option as other MFA departments did, to ensure that beneficiaries feedback and experiences are integrated into program adjustments.

3. **Adequate M&E systems, based on a limited number of key qualitative and quantitative indicators, and starting with simple, cost-effective baseline surveys, should enable appropriate learning and adjustment.** The main challenge for complex programs is to select the right number of appropriate key indicators. The Theory of Change should include a limited number of key indicators at output, outcome and impact, both quantitative and qualitative, that should be the basis of an efficient M&E system. A key priority must be measuring changes on the ground for beneficiaries, such as smallholder farmers or BoP consumers.
4. **Impact assessment for inclusive agribusiness programs represent a considerable learning opportunity, provided that they are carefully planned and prepared at the onset of the program and include proper baseline studies.** Rigorous impact assessments for such a large-scale program require a substantial amount of resources, especially when no baseline data are available. Evaluation teams, in collaboration with the program teams, should reflect together on the relevance and feasibility of an impact assessment, considering the context. They should then reflect on the accountability and learning objectives of such a process. As a complement or an alternative to impact assessments, it is important to be able to rely on an effective monitoring and evaluation system, and to consider the use of methods such as simple surveys and the use of GIS and remote sensing, to cover the full portfolio of countries and partnerships, especially when primary data collection is challenging.
5. **A specific aim at improving food and nutrition security should be reflected in the design of inclusive agribusiness programs. This means that other goals, such as private sector development and partnership development should be made subordinate to the food and nutrition security goals.** 2SCALE pursued many different goals, adding to the complexity and management burden. As Phase 2 of 2SCALE became primarily a food and nutrition security program, it would have been good to make this the top priority. Both the food and nutrition security goals can be related to production, including the impact pathway for smallholder farmers, and to BoP markets. However, these two impact pathways do not automatically go well together and should not necessarily always be combined.
6. **Inclusive agribusiness programs focused on specific value chains and in which the private sector plays a central role are not well-suited to (sub-)sector systems change approaches.** This evaluation, in line with previous studies, such as the IOB study on the aid, trade and investment agenda, have shown that private sector driven value chain programs are not well suited to bring about systems change to address bottlenecks in the enabling environment. Strengthening the enabling environment has been difficult to achieve through PSD programs that only engage to a limited extent with government and other actors.
7. **If private sector has a central role in the program, the private sector should also be in the driver seat. This means that the role of lead companies should be better defined, and clear tripartite contracts between private sector partners, the program and the donor need to be agreed upon.** As indicated above, 2SCALE can be considered as a hybrid private sector program with 2SCALE consortium in the lead. Private sector can act as a driver of inclusive agribusiness programs if their role is better defined, conflicting interests are identified as risks and are properly mitigated. Therefore, clear contracts are needed that go beyond generic partnership agreements.

8. Clearly focused inclusive agribusiness programs should adopt tight, inclusive and transparent adaptive management processes, which include adequate risk mitigation at all levels, learning from both successes and failures, and learning from external experts. This would involve setting milestones and intermediate targets and holding periodic meetings to assess whether these targets are being met and reflecting on the internal and external explanatory factors. This approach will enhance the ability to respond to evolving circumstances and challenges within the partnerships and at program-level.
9. Funding of inclusive agribusiness programs should set clear limits to the percentage of overhead costs (based on a clear and detailed definition), and donors should plan for sufficient time and capacity to manage these programs. If the donor has insufficient capacity, external support should be considered. For such complex programs as 2SCALE, donors need to be sufficiently involved to ensure that the program is on the right track to achieve its objectives. This means setting realistic objectives, well aligned with the funding cycle. As donor capacity has tended to decline in recent years, it may be worth considering limited external support to manage risks.

## 4.2.2. Recommendations for Final Extension Period of 2SCALE (2025)

1. 2SCALE should focus explicitly on enhancing the sustainability of specific partnership results, particularly for smallholder farmers, in the remaining short extension period. This requires a drastic change in approach, including a reduction in scope and complexity. As sustainability of results is a key concern, and the extension period is limited in time, hard choices need to be made. Given the findings and conclusions of this evaluation, the achievement of sustainable outcomes and lasting impacts require an immediate limitation of the program's scope. There are various options for scope reduction that can be complementary, such as limiting the number of countries, limiting the number of industries, limiting the number of impact pathways, and of course limiting the number of partnerships. However, difficult choices regarding the program's scope are inevitable across-the-board reductions will not sufficiently reduce complexity. It is inevitable that some impact pathways will be prioritised where there is scope for improving the sustainability of outcomes, in particular smallholder farmers. The other three impact pathways, private sector, BoP-markets and especially sub-sector systems change, would only receive continued support if clear outcomes have been achieved already or are imminent. In all cases it should be made clear how continued support towards an appropriate exit will enhance the sustainability of results.
2. 2SCALE should develop and implement a proper exit strategy at partnership level for those partnerships that are selected for final support for the remaining extension period. The exit strategy of 2SCALE at partnership level is not clear, as was already indicated by the 2021 Mid-Term Review, while recommendations were not sufficiently followed up. In view of the preparation of the expected third phase, most support at partnership level stopped end 2023 or early 2024, without clarity on an exit or continuation of the support. The extension period should focus explicitly on responsible and jointly designed careful exits of 2SCALE support and continuation of the activities and results to the extent possible.

3. 2SCALE should operate closer to the field and engage more directly with beneficiaries, especially with SHFs, while ownership and engagement of key partners, such as the BCs, should be maintained, especially during this final extension period. Some distance from the realities on the ground has limited 2SCALE's knowledge of key drivers of impact and sustainability. Therefore, closer proximity to field-level activities without affecting partner's ownership and engagement should be considered. Together with the scope reduction, this could positively affect the program's value for money at this final stage.
4. In view of the necessary scope reduction, i.e. less countries, less partnerships and less impact pathways per partnership, the M&E system should be completely revised with a focus on collecting information on the ground for some key indicators related to sustainable outcomes. The present M&E system does not generate enough robust information regarding key sustainable indicators, and it would be highly cost-ineffective to pursue it. At program level, considering the lessons from this evaluation, key indicators should be selected for which information on the ground among beneficiaries can be collected. Partners need to be fully engaged in collecting and using information of this revised M&E system that will allow them to continue the activities after the exit of 2SCALE. This would allow continued, flexible adaptive management on the ground. This improved localised adaptive management approach will foster an environment where successes are shared, and failures are openly discussed and analysed to promote continuous learning and improvement within the partnerships.
5. To contribute to sustainable outcomes in the remaining short period of time, 2SCALE should operate closer to the ground and reduce its overhead costs. It is recommended that 2SCALE and the donor agree on a clear and detailed definition of overhead costs and a maximum percentage of expenditures (e.g. 25%) to be spent on overhead costs for the extension period. It is inevitable that resources will need to be concentrated on a few, promising initiatives. This requires on the one hand that 2SCALE start operating closer to the ground for the selected partnerships, and on the other that management and overhead costs be reduced. Due attention is needed to carefully manage the consequences of staff leaving the program in this final period as this may seriously affect sustainability.

