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Evaluation of the Strengthening African Rural Smallholders (STARS) programme (2016-2021)

STARS evaluation - final report

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Royal Tropical Institute, Amsterdam
April 9, 2021



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Cover: Maize farmer in Kamonyi. Photo by Désiré Mushumba.

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Acronyms

A-CAT	Agri-Credit Assessment Tool
AGM	Annual General Meeting
AMIR	Association of Microfinance Institutions of Rwanda
B2B	Business to business
BDS	Business Development Services
BoD	Board of Directors
CIESM	Community Incentivised Extension Services Model
DCED	Donor Committee for Enterprise Development
DinD	Difference-in-Difference
FFS	Farmer Field Schools
FNBS	Fédération Nationale des Boulangers du Sénégal
FUCORIRWA	Federation of Rice Farmers of Rwanda
GAP	Good Agricultural Practice
GIT	Global Industrial and Agro Technologies
HTA	Harvest Tracking Approach
IFAD	International Fund for Agricultural Development
IPOS	Interprofession de l'Oignon Sénégal
ISRA	Institut Sénégalais de Recherches Agricoles
KII	Key Informant Interviews
KIT	Royal Tropical Institute / Koninklijk Instituut voor de Tropen
KPI	Key Performance Indicators
LBA	La Banque Agricole
M4P	Making Markets work for the Poor
MERL	Monitoring Evaluation and Learning
MFI	Micro-Finance Institutions
MoU	Memorandum of Understanding
MSD	Market System Development
MT	metric ton
MTE	Mid-term evaluation
NAIS	National Agriculture Insurance Scheme
NGO	Non-Governmental Organisation
NPLs	Non-Performing Loans
OH	Outcome Harvesting
PAFA	Senegal Agricultural Value Chain Support Project
PERL	Program-Embedded Reflection and Learning
PO	Producer Organisation
RAB	Rwanda Agriculture Board
RCT	Randomised Control Trial
RESOPP	Réseau des Organisations Paysannes et Pastorales du Sénégal
RIM	Reséau Interdiocésain de Microfinance
RSSP	Rural Sector Support Program
RWF	Rwandan Franc
SACCOs	Savings and Credit Cooperative Organizations
SEEP	Small Enterprise Evaluation Project
SHEP	Smallholder Horticulture Empowerment & Promotion
SME	Small- and Medium Enterprises
SRC	Sector Results Chain
STARS	Strengthening African Rural Smallholders
ToC	Theory of Change
VSLAs	Village Savings and Loan Associations
WFP	World Food Programme

Executive Summary

This Report

This report presents the evaluation of the 'Strengthening African Rural Smallholders' (STARS) programme. STARS is a five-year (2016 – 2021) project implemented by ICCO Cooperation in partnership with Mastercard Foundation and ICCO Terrafina. Through a market system development approach, the project focuses on improving access to finance and markets for more than 200,000 smallholder farmers in Ethiopia, Rwanda, Senegal and Burkina Faso.

The evaluation study focused on two of the four countries in which the programme is active, Rwanda and Senegal, for the 2016-2020 period.¹ It studied outcomes the programme contributed to in the realms of capacity development of financial institutions and producer organisations, involvement of private sector suppliers in input and knowledge provision, value chain development in the four value chains in which the programme was active, and provision of farmers with the knowledge to use these products and services profitably.

Using an Outcome Harvesting (OH) design, the evaluation explored the full range of activities implemented by the programme in Rwanda and Senegal for the past four years, focusing on selected outcomes referred to above. This allows a view of the complexity of the programme, the diversity in terms of knowledge areas that it requires, the timeline that is required for these outcomes to come to full fruition, and the wide range of outcomes (or early impacts) the programme has ultimately achieved, both intended and unintended. The programme has been piloting various innovations, and was thus a learning exercise as well, and for this reason this report suggests that the recommendations formulated will not only aid the commissioning agencies in developing interventions, but are relevant for a wider audience as well.

There are many ways in which a programme of this type can be characterised, summarised and understood, but one overarching way is that such a programme needs to take account of the particularities and idiosyncrasies of the country in which it is being implemented, and of the value chains and crops that it aims to develop. In both Rwanda and Senegal, a country-specific Theory of Change (ToC) was developed for example. However, there are a number of common trends discernible in the various problem-solving areas (or 'Solutions') that the programme focused on.

Realising the eight 'Solutions' in STARS

Capacity Development

The study found conclusive evidence of the positive contribution of capacity development of Micro-Finance Institutions (MFIs) and Producer Organisations (POs) to their respective increase in relevance to their clients and members, the quality of their products and services, and their impact in the value chains of which they formed part. STARS assisted MFIs with the development of credit- and risk assessment tools, manuals and methods of delivering these services, and with institutional and management innovations that assisted them in their transformation. Knowledge of agronomy was increased at individual and organisational levels (institutionalising key areas of knowledge). The interest in, and appetite for, investments in the agri-sector noticeably increased, though climate change and weather events, and poverty of the population in general often counteracted this trend and limited further growth of portfolios. POs improved their services to members in many different ways, most interestingly by introducing new forms of agronomic extension and taking up roles in the seed sector, more transparent governance, and better linkages to the markets. For all these outcomes, MFIs and POs have had to train their staff and adapt their management structures, which they did effectively with STARS' assistance. Gender-specific activities have often improved women's access to positions of control (especially in POs), credit delivery systems and value chains where their position was already assured as in the cowpea value chain, or which were particularly appropriate considering

¹ The other two countries are Burkina Faso and Ethiopia.

their options and limitations, for example when they were well-placed to be engaged, individually or collectively, as entrepreneur and small-scale processor. Particularly when the environment was conducive, as in Rwanda where Government policy was supportive, innovations such as Gender Committees in POs were favourably received, improving women's representation in STARS supported POs with 30 percent. These outcomes are therefore not exclusively attributable to STARS, but show the interaction between STARS and its environment.

Business Development Services (BDS)

Another 'Solution' in which STARS was particularly successful, was that of fostering new Business Development Services (BDS) within the value chains, such as seed production and input provision in general, agronomic extension through Farmer Field Schools, and spraying services delivery by spraying teams. In both countries, seed systems were taken up as a particular issue of concern, where Governments had had very limited success in providing these inputs, on time, and of the right variety and quality. STARS-assisted POs have been very effective vehicles for seed multiplication and even basic seed development. The use of improved seeds and other inputs, and their proper application, improves yields but also reduces costs, thus improving the business case of farming as well as the livelihoods of targeted smallholder farmers - the overall program objective.

The Farmer Field Schools (FFSs), a familiar approach to extension but introduced in the 'STARS-style', have been very successful in providing appropriate inputs and knowledge to farmers in their own areas. They also serve successfully as testing grounds for new seed varieties and other inputs for private sector actors. Yield improvements of between 25-70 and 30-200% were found in rice and maize value chains respectively in Rwanda, improved quality led to reduction of the percentage of produce rejected by traders from 10-20% in rice and 60-80% in maize to 0% in rice and 20-30% in maize, and production cost reductions of 20-40% in both value chains. Positive spin-off to other crops in the farm also occurred. In Senegal, we also saw a doubling of yields in cowpeas and onions, as well as the use of increased amounts of aftermath from cowpeas for fodder.

As the FFSs are organised by POs, and as private sector input providers are engaged on a commercial and not a subsidised basis, these FFSs can be considered economically and organisationally sustainable when the issue of payment model is solved. POs are searching for payment models for service providers and trainers that do not imply prohibitive labour law implications. The BDS approach has attracted attention beyond the STARS partnership, and in Rwanda the Federation of Rice Farmers of Rwanda wants to replicate it to non-STARS POs.

The impact on women was to a large degree influenced on local cultural traditions and circumstances. Gendered access to resources (land, financial resources for investment) in the respective value chains and cultures affects the success of this approach for female farmers and entrepreneurs, and in consequence, participating women were able to achieve more beneficial outcomes more rapidly in contexts where traditional gender roles and power dynamics facilitated their effective engagement in the target value chain; for example cowpea in Senegal.

Market Access

STARS linked farmers and their POs to larger offtakers and relevant networks: directly through aggregation of production and adaptation of those products to market demands, and indirectly through capacity building among POs facilitating communication at a professional level. STARS facilitated linkages between POs and buyers through value chain platforms to improve value chain coordination, but with varying degrees of success. Linking POs indirectly through their Unions and new large institutional partners such as the World Food Programme (WFP), was not successful as the Unions were perceived to be less effective than the POs themselves. Directly linking POs with clients proved to be more successful, such as the link with Africa Improved Foods (AIF) and various clients such as millers. Further aggregation (bulking) of produce is going to be conducive to engaging large buyers such as WFP. However, intermediate size offtakers (millers, collectives of bakers) were enthusiastic and some started funding the FFSs when they realised that their supply was being assured by this linkage, firmly improving sustainability of the relationship. The improved management and communication qualities of STARS-assisted POs has also helped them achieve more prominent roles in the value chain, as they have shown ability and professionalism. Many buyers now perceive these

POs to be reliable suppliers. New arrangements such as the 'warrantage' system affect farmers positively in many ways, in many cases doubling prices for farmers, and the lessons learned with piloting of this type of innovation are worth sharing widely for replication elsewhere.

Input systems

Through this solution, STARS establishes and strengthens input supply systems. The programme creates access to inputs such as fertilizer, pesticides and seeds through B2B events and market linkages. The outcomes formulated for this Solution area are bringing different stakeholders together in a number of agreements to improve production of quality seeds as well as the services of farming equipment providers. This Solution is often integrated with other Solutions: inputs are promoted through FFSs, and seed supply is organised through POs. Input providers were often successfully engaged in FFSs to introduce, test and promote their products. Further improvements can be achieved if these actors provide a larger range of effective but affordable inputs for farmers to experiment with, thus maximising the potential of the FFS system.

Loan product development

The loan product development is one of the most successful Solutions introduced, as it focuses on solving one of the biggest problems in smallholder farming: financial resources adapted to the needs and possibilities of the farmer and the crop, to allow access to quality inputs. The adapted credits and successful innovative delivery systems around Group Solidarity Loans, warrantage and solar panel loans have solved much of the severity of this problem in the intervention areas. Financial data show that this is also affecting MFIs positively, expanding their agricultural portfolio, in particular in Rwanda where climatic conditions are generally more favourable for agriculture. Appropriate tools for credit needs assessment and credit risk (the A-CAT tool for instance) have assisted MFIs hugely in this respect, and though MFIs are yet to fully diversify, digitise and institutionalise these tools, their introduction has already improved credit provision practice and the organisation and management of the MFIs. It has also facilitated farmers' access to quality credit services, and to financial literacy services that have helped them manage their farm as a business.

Capital mobilisation

The ability to re-finance loans is an important requirement for portfolio growth of financial service providers. Soon after the successful introduction of new financial products, this became a concern of MFIs and STARS, and STARS has successfully linked MFIs to external funds, some in Europe and the Netherlands. Savings ratios for the participating MFIs in Rwanda are high and have even increased, while in Senegal they were generally low but are increasing. Improving savings ratios bring borrowing -an expensive form of re-financing- down. Though the direct impact of STARS' involvement (actively linking MFIs to Investors, banks and Funds) may have been positive but limited, improving the quality, performance and level of professionalism of MFIs through STARS' capacity building has indirectly contributed to their improved access to external funding. For instance, Non-Performing Loans (NPLs) of partner MFIs in the study period have typically gone down from pre-STARS double digits to the present rates of between 2 and 7%, 5% being a cut-off point for a quality portfolio. This convinces banks to step into lending to MFIs on favourable conditions. At the same time, most MFIs are attracting higher levels of savings, helping in their funding structure at lower cost.

Environment/ partnerships

Of the many outcomes included in the outcome Harvesting exercise, some very successful outcomes were in the realm of linking value chain actors and organisations through STARS partnerships, and in the realm of skills development of all who have been involved in STARS implementation. This is true irrespective of value chain, type and scale of operation of the partners, though the occasional exception (WFP was mentioned earlier) shows that further aggregation of production in some value chains could have facilitated the linkages with even the largest actors. Actors will continue to interact (and many of the partners, including private sector actors, are expected to do so unless profitability is affected by external shocks), and as such, structural improvement of the institutional environment has been achieved. Already this is taking shape, which is quite an achievement for the short period the programme has been implemented.

All these Solutions collectively, even though some of them have not been fully achieved in the relatively short time period of the programme, have structurally improved the position of farmers in the target value chains. Results are most prominent in value chains that were already relatively professionally organised (rice in Rwanda), or when they were particularly well placed to achieve (gender and climate change mitigation) goals that STARS had formulated (e.g. cowpeas in Senegal). Also, results related to gender transformation are dependent partly on the conducive environment of Government policy, as was the case in Rwanda, where Gender Committees in POs were effective in this respect.

Concluding

This Outcome Harvesting study confirms that STARS has largely achieved its goal of supporting smallholder farmers, at least in the two countries studied, and improving the value chains in cooperation with its partner institutions. The achievements are impressive, and show that within the limitations set by the environment and selection of value chains and partners, positive results have been realised and can be replicated elsewhere. The organisations supported by STARS have been achieving their goals, and in a financially and institutionally sustainable way. This shows promise for the future continuation of the activities initiated and outcomes realised even in the absence of the STARS programme itself. Financial, input and off-take services have been developed and sustained, and the relevant organisations have acquired the necessary skills, as well as the commercial incentives, to continue offering their services. Smallholder farmers and their POs engaged in the programme have seen their skills and knowledge improved, and use these to provide better services and improve productivity and production for improved livelihoods.

The ToC was operationalised to fit local conditions, and though the country-specific ToCs have not deviated much from the initial generic ToC, they have proven to be relevant and reflective of the real situation on the ground. Interestingly, a number of spin-off effects have materialised at various levels, such as within-farm effects on other crops, new POs becoming interested in the type of services STARS is providing, and new MFIs becoming interested in the new financial products as well as in capacity development and improved management. However, other expected spill-over effects, in the realm of information sharing among development actors and the various fora active in value chains, have not materialised much yet. We assume that many of those spill-over effects take more time to appear than the duration of the programme.

Overall, the activities have resulted in an enlargement of the number of farmers having access to credit, inputs and markets. Also, the on-farm effects have been considerable in terms of increased yield, reduced costs, and buyers' appreciation of the farmers' reliable volumes and quality of production leading to higher off-take demand and better prices. As far as the data from the Outcome Harvesting exercise show, the overall effect has been an improvement of incomes and investments of smallholder farmers and improved performance of the value chains involved. Both were the ultimate goal of the programme.

Table of Contents

Acronyms	3
Executive Summary	4
1 Introduction	11
1.1 ICCO and Mastercard	11
1.2 The STARS program	11
1.3 The evaluation design, evaluation questions and role of KIT	13
2 STARS programme's strategy development	14
2.1 The issue at hand: small-scale agriculture development	14
2.2 Past Theory of Change of the programme	14
2.3 Market systems for the Poor approach	14
2.4 Access to Finance approach	15
2.5 Value Chain Development approach	15
2.6 Present ToC: focus on short- and medium-term core interventions	15
3 Evaluation methodologies	17
3.1 Introduction: hitting a moving target	17
3.2 Baseline: A DiD and mixed-method approach	17
3.3 Endline: An Outcomes Harvesting approach	17
3.3.1 Why Outcome Harvesting?	17
3.3.2 Defining the outcomes: the OH exercise	18
3.3.3 Methods of data collection	19
3.3.4 Method of data analysis	20
3.3.5 Context and limitations	20
4 Outcomes in Rwanda	22
4.1 Capacity Development of POs	22
4.1.1 Improved decision-making approach	22
4.1.2 Cooperative management and financial procedure manuals	23
4.1.3 Five-year strategic plans	23
4.1.4 Gender committees	24
4.2 Business Development Services	25
4.2.1 BDS services / FFS	25
4.2.2 BDS spraying services	27
4.2.3 Rice processor payments for BDS services	29
4.2.4 Adoption of BDS services by non-STARS POs	29
4.2.5 Harvest tracking approach	29
4.3 Market Access (B2B)	30
4.3.1 World Food Program	30
4.3.2 Other linkages	30
4.4 Input systems (B2B)	31
4.5 Loan product development	33
4.5.1 Financial products	33
4.5.2 The A-CAT tool	36
4.5.3 Change towards commercial agriculture	37

4.5.4	Change of mind-set at MFI level	37
4.6	Capacity building MFIs	39
4.7	Capital mobilisation	40
4.8	Environment/ partnerships	42
4.8.1	Insurance	42
4.8.2	Financial reporting	43
4.8.3	B2B events	43
5	Outcomes in Senegal	44
5.1	Capacity Development POs	44
5.1.1	Business plan development	44
5.1.2	Gender	45
5.1.3	Manuals and tools	46
5.2	Business Development Services	47
5.2.1	Seed multiplication	47
5.2.2	Mlouma platform	47
5.2.3	Farmer Field Schools	48
5.3	Market Access (B2B)	49
5.3.1	Bakers and other cowpea off-takers	50
5.3.2	L'Interprofession de l'Oignon (IPOS)	50
5.3.3	POs and onion traders	50
5.3.4	SHEP / PAFA	51
5.3.5	La Banque Agricole	51
5.4	Input systems (B2B)	52
5.5	Loan product development	52
5.5.1	Group solidarity loans	53
5.5.2	Warrantage	54
5.5.3	Solar panel loans	54
5.5.4	A-CAT tool (and risk management)	55
5.6	Capacity building MFIs	56
5.7	Capital mobilisation	57
5.8	Environment/ partnerships	59
5.8.1	Conferences	59
5.8.2	Client pressure	59
5.8.3	Skills development	59
5.8.4	Agri-loan focus	59
6	Synthesis: answering the evaluation questions	61
6.1	Has STARS achieved its goals of supporting MFIs, POs and private sector clients in achieving their goals?	61
6.1.1	Support given to Micro-Finance Institutions	61
6.1.2	Support given to Producer Organisations	62
6.1.3	Private-sector clients (chain suppliers, market regulators and facilitators)	63
6.2	To what extent is the new Theory of Change valid?	64
6.3	Do the various impact pathways lead to differentiated and relevant impacts?	65
6.4	What is the role of STARS in relation to other actors and wider external trends?	66
6.5	Main question: Improvements to the lives and livelihoods of smallholder farmers	67
7	Conclusions	69
7.1	How has the STARS approach worked?	69

7.2	To what degree has the STARS approach worked?	69
7.3	For whom has the STARS approach worked?	70
7.4	When, or under what circumstances, has the STARS approach achieved the most positive outcomes?	71
7.4.1	Choice of value chains	71
7.4.2	Choice of partners	72
7.4.3	Contextual factors	73
8	Recommendations for STARS and beyond	75
8.1	Strategic recommendations	75
8.2	Practical recommendations	77