



CTB



MINAGRI

FINAL REPORT

SUPPORT TO SPATII

“MARKET ORIENTED ADVISORY
SERVICES AND QUALITY SEEDS”



RWANDA

RWA0907111

Table of Contents



TABLE OF CONTENTS	2
ACRONYMS	3
INTERVENTION FORM	5
GLOBAL APPRECIATION	6
PART 1 : RESULTS ACHIEVED AND LESSONS LEARNED	8
1. ASSESSING THE INTERVENTION STRATEGY	8
1.1. CONTEXT	8
1.2. IMPORTANT CHANGES IN INTERVENTION STRATEGY	9
2. RESULTS ACHIEVED	13
2.1. MONITORING MATRIX	14
2.2. ANALYSIS OF RESULTS	17
3. SUSTAINABILITY	32
4. LEARNING	35
4.1. LESSONS LEARNED	35
4.2. RECOMMENDATIONS	37

Acronyms

AFSR	Appui à la Filière Semencière au Rwanda
AMIS	Agriculture Management Information System
BTC	Belgian Development Agency
BS	Basic Seed
BXW	Banana Xanthomonas Wilt
CICA	Center for Agricultural Information and Communication
CIDA	Canadian Agency for International Development
CIP	Crop Intensification Programme
CMC	Community Mobilization Campaigns
COMESA	Community of Eastern and Southern Africa States
CS	Certified Seed
DAC	OECD Development Aid Committee
DELCO	Co-Manager
DFID	Department for International Development
DI	Director of Intervention
EDPRS	Economic Development and Poverty Reduction Strategy
EU	European Union
FAO	Food and Agriculture organization of the United Nations
FFS	Farmer Field School
GAP	Good Agricultural Practice
IFAD	International Fund for Agricultural Development
IFDC	International Fertilizer Development Centre
IPM	Integrated Pest Management
ITA	International Technical Assistant
JICA	Japanese Agency for International Development
M&E	Monitoring and Evaluation
MINAGRI	Ministry of Agriculture and Animal Resources
MOU	Memorandum of understanding
MTR	Mid-Term Review
NA	Not available
NAES	National agricultural extension strategy
NGO	Non Government Organisation

NSL	National Seed Laboratory
NSAR	National Seed Association of Rwanda
PASNVA	Projet d'Appui au Service National Agricole
QDS	Quality Declared Seed
RAB	Rwanda Agriculture Board
R-ABC	Rwanda Agro-Biodiversity Center
RSE	Rwanda Seed Enterprise
SC	Steering Committee
SPAT	Strategic Plan for the Transformation of Agriculture
SPIU	Single Project Implementation Unit
SWAp	Sector-Wide Approach
TFF	Technical and Financial File
TOT	Training of Trainers
USAID	United States Agency for International Development
WB	World Bank
WFP	World Food Programme

Global appreciation

Describe your global appreciation of the intervention (max 200 words):	Describe your global appreciation of the intervention (max 200 words):
<p>The Intervention has lived to the expectations and to some components like advisory service (CICA & FFS), the achievements were far beyond the expectation</p> <ul style="list-style-type: none"> • The majority of FFS beneficiaries are happy • We have quality extension material and Websites but most importantly the well trained personnel in CICA that will take it further even after the end of the intervention • The FFS cooperatives based in every district are skilled and well linked to the Government institutions that now use the as private service providers in advisory services. With this, many more farmers will be happy. <p>Though we did our level best to support the seed component including re-allocating more funds for public seed production and multiplication, supporting research and variety release committee, operationalizing gene bank, organizing seed growers and training them, training seed quality control staff and putting in place quality control systems, we wish to express our regrets for the low performance of seed component of this intervention.</p>	<p>The Advisory component of the intervention outperformed expectations. More farmers were reached with a high quality extension approach and the FFS facilitators have become professional services providers who are currently hired by the districts with Government funds. The program successfully applied the principles: "Repeat what works" & "Innovate to get more value for money". The FFS approach is one of the two extension approaches in the new national extension approach.</p> <p>The Seed component faced many challenges and could not reach its ambitious objectives. Nevertheless, the program always continued to search for solutions in many creative ways. The program re-allocated more funds to activities of which it was believed it would make the greatest impact. Sometimes this was successful, other times it was not. At all times, the program worked hard to get the best results possible given the continuously changing context. Even though the results for seed are far below initial expectations, the Program achieved what it promised to deliver in the second half of the intervention. The Program leaves a number of important building block for a better seed sector behind.</p>
Score your global appreciation of the intervention:	Score your global appreciation of the intervention:
B	B
National execution official	BTC execution official
	

Intervention form

Intervention name	Support to SPATII program - Market Oriented Advisory services and Quality Seeds
Intervention Code	RWA0907111
Location	Rwanda
Budget	18000000 EUR
Partner Institution	MINAGRI (Ministry of Agriculture and Animal Resources)
Date intervention start /Opening steering committee	6 Dec 2010
End date Specific Agreement	5 Dec 2016
Target groups	Poor farmers
Impact	Agricultural outputs and incomes increased under sustainable production systems and for all groups of farmers, and food security ensured for all the population.
Outcome	Improved access to advisory services for crops and livestock and access and use of high quality planting materials of food crops for men and women
Outputs	<i>Seed production chains of specific groups of food crops with a market value are professionalized</i>
	<i>Increased private sector involvement in the seed sector.</i>
	<i>Sustainable mechanisms for demand articulation and responsiveness of market-oriented advisory services.</i>
	<i>Proximity agricultural advisors capable of delivering responses to the demands of farmers, livestock keepers and their organizations.</i>
	<i>Lessons learned on agricultural advisory services and seed supply services documented and used in policy and decision-making</i>
Total budget of the intervention	18620000 EUR
Period covered by the report	Jul 2011 - Nov 2016

PART 1 : Results achieved and lessons learned

1. Assessing the intervention strategy

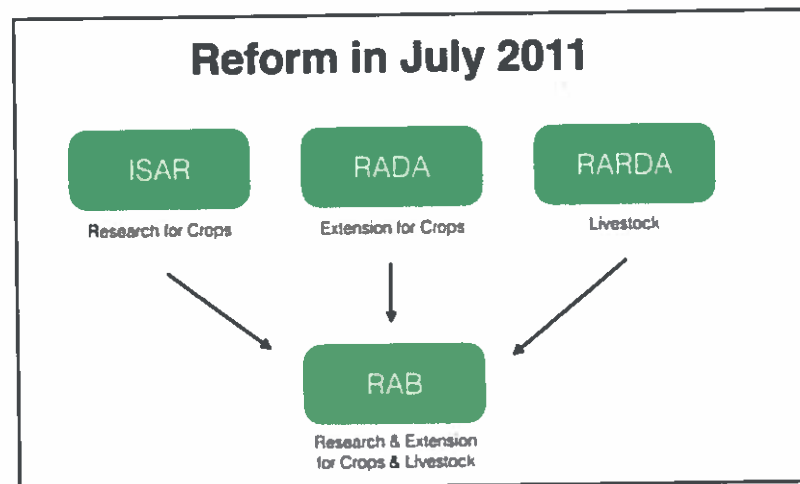
1.1. Context

In this chapter, the Final Report should describe contextual elements/evolutions that had a crucial influence on the intervention, and it's attainment of results (general context, Institutional Context, execution Modalities contexts, Harmo-dynamics context). Only mention the most noteworthy elements.

Program implemented by a brand new institution

While the program management was based in MINAGRI, the majority of the activities (all except the activities implemented by CICA) were implemented by the Rwanda Agricultural Board (RAB). This new implementing agency of MINAGRI was the result of a merge of 3 institutions: ISAR (Research), RADA (crop extension), RARDA (Livestock). RAB is created in 1 July 2011, just a few days before the start of the intervention.

RAB had a decentralized and de-concentrated structure, which means that the 4 RAB zones were managing the staff, while more than 10 (commodity) programs were in charge of their respective activities throughout the country. This "new" context had a particular strong impact on the seed component, while the impact on the advisory component was rather limited. This is explained in detail later in the report.



Revised role for the Centre for Information and Communication in Agriculture (CICA)

The TFF suggested that CICA would take the role of coordination and resource centre in advisory services. However, the role of coordination was given to RAB, while the CICA remained the resource centre.

1.2. Important changes in intervention strategy

Describe how the intervention was supposed to work and how it worked out in reality. If you have visual representations of the initial and/or present intervention logic, include them here (diagram, scheme, photo, etc.) If important strategic reorientations were made, mention why this decision was made.

Seed component

Original intervention logic:

The proposed strategy was to implement a participatory process of crop prioritization, study the specific seed chains for each crop and develop adapted strategies to build capacity for basic seed production in the public system and for certified seed production by private seed multipliers. Quality control mechanisms would be reinforced and would become independent.

The program formulation aimed at making basic seed production more sustainable by fostering the emergence of a cost recovering seed enterprise (for basic seed). Downstream, the program would support the involvement of the private sector in certified seed production and articulate a market for private certified seed production as seed subsidies were being phased out.

Important guiding principles at the formulation were that Government would focus on those tasks that cannot be run profitably by private entrepreneurs and that the routine multiplication tasks taken on by RAB would be financed through a revolving fund.

Changes to the intervention logic:

At the start of the intervention, the Ministry made it clear that they needed the program's immediate support to finance public seed production for all kinds of crops in order to have enough seed for the government run subsidy program. There was no crop prioritization.

In the structure of RAB, the public seed production was fragmented due to a decentralized and de-concentrated planning and execution mechanisms. This did not allow the creation of a cost recovery seed production unit or enterprise. In fact, the cost recovery was not considered a high priority.

The amount of seed subsidy has reduced but remains in place until today for a number of priority crops. In the first half of the intervention, the private seed multipliers were buying basic seed from RAB and selling certified seed back to RAB/CIP to be distributed/sold as subsidized seed. Such operations did not allow a true commercial free market to be developed. Activities to support the private seed multipliers and seed companies remained but in the given situation it was nearly impossible to develop a real demand and thus a real commercial seed supply system.

The exact expected role of the private sector was not very clear. Although the Government aims at supporting the private sector, the Government also continued to perform tasks that could be done by the private sector. An element that created confusion at the start of the intervention was the investment of government in a large seed processing plant that had the capacity to process most of the certified seed of Rwanda. The seed quality control also remained under RAB while, this was supposed to become independent from the institution producing seed.

In 2013, following a push from MINAGRI and the program to improve the efficiency, effectiveness and sustainability of the seed production, RAB reorganized the public seed production by creating the centralized Seed Production Unit. The idea behind this unit was based on the design of the Rwanda Seed Enterprise described in the TFF. The unit aimed at producing large amounts of high quality basic seed in a cost recovery spirit by selling the seed to private seed multipliers. The unit performed fairly well in the period 2013-2015 with a realistic planning, timely planting and improved procurement productivity. Unfortunately, seed production was once again decentralized at the latest reform in RAB in 2015.

In the last two years of the intervention, after the arrival of the new seed expert, the program decided to seriously reduce the ambition and to focus support in a few areas where it was considered feasible and desirable to make a change: (1) Assist to improve the seed production planning; (2) Assist with improving quality control system to improve the data management of the seed quality control system, in order to track seed lots through the seed production chain and link the data coming from field inspection, lab testing and post control plots (3) Assist with the comprehensive training program of seed growers and (4) Assist with support to informal seed production.

Summary of changes at the start of the intervention compared the TFF - Seed

	TFF	Implementation
Crops	Selected crops (Priorization)	All crops (no priorization)
Public seed production (Pre basic and basic seed)	By a cost recovery enterprise or separate unit	Fragmented from 2011 - 2013 (decentralized in the 4 RAB zones & De-concentrated by all crop programs)
Private seed production (Certified and QDS seed)	By private seed growers selling their seeds to farmers (subsidies phased out)	By private seed growers selling their seed back to RAB (subsidies not phased out)
Public/Private	Government would focus on those tasks that cannot be run profitably by private entrepreneurs	Division between public and private less clear. Government invested in seed processing plant
Quality control	By an independent unit	By RAB

Advisory services component

Original intervention logic:

The formulation suggested to build on PASNVA experience to set up district agricultural platforms where actors meet, exchange and coordinate their activities for agricultural development. The program would strengthen the platforms' capacities and mechanisms to effectively assess needs for services, orient service providers, coordinate efforts and assess advisory service quality delivered to farmers and producer organization. Hence it contributes to the institutionalization of a demand-driven, accountable, pluralistic system of proximity advisory services.

The ambition of the program was to build up the capacity of a pool of service providers and network of sustainable non-public service providers while using the diversity of approaches as an asset. The Centre for Information and Communication in Agriculture (CICA) would be further strengthened as a coordination and resource centre for agricultural advisory services.

Changes to the intervention logic:

The approach suggested in the formulation assumed that the platforms created by PASNVA in 11 districts were functioning and that a number of non public service providers were available to perform advisory services for farmers. However, the baseline study demonstrated that the District Agricultural Platforms were no longer functioning and that only a very limited number of service providers were actually available. Furthermore, the most important finding of the baseline survey was that only 32% of the farmers had access to any kind of service in the 12 months prior to the study and that 70% of these services were provided by district and sector agronomist.

On the other hand, the results of the Farmer Field Schools (FFS) which were implemented under the IPM program with 25,000 farmers showed very effective. An important element of FFS is that the training of each group of farmers is based on the demands, challenges and expectations of the specific group.

Based on this situation on the ground, the intervention resolutely choose to aim at offering FFS to as many farmers as possible and to let the FFS facilitators evolve into a new kind of private service providers. Frankly, the management considered it a waste of resources to once again trying to create 30 agricultural platforms to assess the need, coordinate services, evaluate service etc, while the approach of creating 11 platforms with much lower ambition had already failed under PASNVA. The expectation that such platforms would coordinate the demand driven services which would be applied by a range of non public service providers was not realistic based on the information from the baseline survey.

Later on in the intervention, the FFS became one of the two pillars of the national extension program Twigire Muhinzi. Furthermore, the FFS Facilitators also play a crucial role in the capacity building of the Farmer Promoters, which form the other pillar of Twigire Muhinzi. Together, the FFS facilitators and the Farmer Promoters are the proximity extension agents which were not available at the start of the intervention.

Summary of changes at the start of the intervention compared the TFF - Advisory

	TFF	Baseline survey/ Implementation
District Agricultural Platforms (DAP)	Functional DAPs in 11 districts need to be strengthened	11 DAP created under PASNVA are no longer operational
Non public service providers	There is a pool of non public service providers	There are very few non public service providers: Only 32% of farmers has access to any kind of service and 70% of that service is provided by the Government agronomists
Farmer Field Schools	Considered as one of the approaches to be expanded	Found to be very effective and is taking the specific challenges of farmers groups into account
Approach to build the extension system	DAPs assess the needs, coordinate the service providers and assess the quality of service provision + Capacity building of a pool of non public service providers	FFS facilitators become a new kind of non public service providers who sign a performance contract with the Districts FP become another kind of non public service providers Two approaches (FP and FFS) are coordinated in a national extension model: Twigire Muhinzi

A Rwandan home grown solution to increase farm yield and foster solidarity

- ▶ Reach all farmers immediately through Farmer Promoters (FP) and Demo plots
- ▶ Reach all farmers gradually through Farmer Field Schools (FFS)

Farmer Promoter
14,200



FFS Facilitators
2,500



FFS facilitators train Farmer Promoters in the establishment of DEMO plots, based on FFS best practices

FFS Facilitator facilitate the learning process in the FFS groups

DEMO PLOT



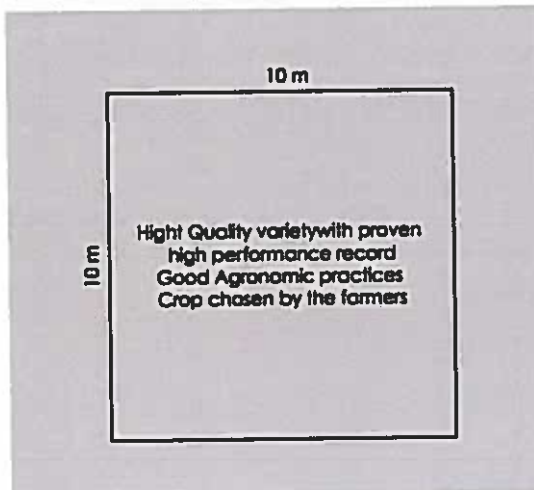
Farmer Promoters facilitate access to inputs and invite all farmers to visit the village demo plot 3 x per season to learn good agronomic practices

FFS PLOT

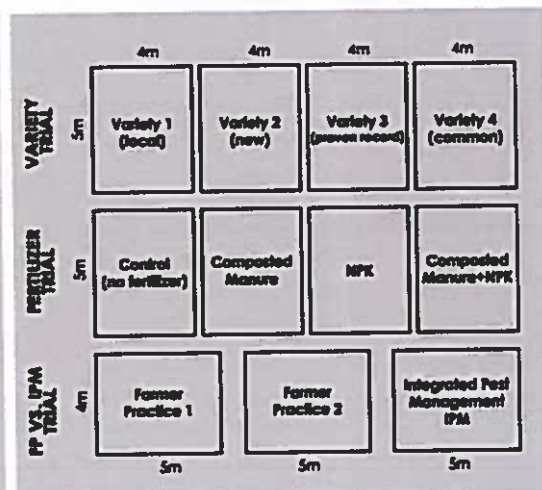


FFS group members work every week in the FFS plot and get deep understanding of crop production through observation & analysis

DEMO PLOT Twigire group:



FFS PLOT FFS group:



Note: This is a typical layout: each FFS group decides if's self which experiments to undertake

2. Results achieved

2.1. Monitoring matrix

Results / Indicators	Baseline Value	End Target	End Value obtained	Comments
IMPACT: Agricultural outputs and incomes increased under sustainable production systems and for all groups of farmers, and food security ensured for all the population.				
NA				The intervention has no impact indicators
OUTCOME: Improved access to advisory services for crops and livestock and access and use of high quality planting materials of food crops for men and women				
% of household farmers who received advice in the last 12 months (disaggregated by gender)	32%	64%	69% (of which 54% are women)	
% of farmers satisfied regarding access to relevant information and advisory services (disaggregated by gender)	33%	66%	98%	
Quantity of basic seed purchased by seed growers to use in the season reported on (in MT) - True seed - Potato	70 135	As to operational plan	59 NA	Data from National recording system. The target does not allow proper assessment of achievements
Quantity of seed produced by private sector (in MT) - QDS - CS	NA 79	As to operational plan	611 6958	Data from National recording system. The target does not allow proper assessment of achievements
OUTPUT 1: Seed production chains of specific groups of food crops with a market value are professionalized				
% of inspected fields meeting the quality standards	NA PB NA B NA QDS 80 CS	100 PB 100 B 100 QDS 100 CS	92 PB 86 B 23 QDS 84 CS	Target of 100% is not realistic. Performance of 80 - 90% is acceptable
% of seed lots meeting the quality standards	NA PB NA B NA QDS 67 CS	100 PB 100 B 100 QDS 100 CS	0 PB 77 B 76 QDS 90 CS	Target of 100% is not realistic. Performance of 80 - 90% is acceptable

% of area planted compared to (seasonal) operational plan	NA PB NA B NA QDS NA CS	95 PB 95 B 95 QDS 95 CS	92 PB 92 B NA QDS NA CS	QDS and CS are planted by private seed growers - area was not assessed.
% of quantity of seed produced compared to (seasonal) operational plan	NA PB NA B NA QDS NA CS	95 PB 95 B 95 QDS 95 CS	NA PB NA B NA QDS NA CS	Data not systematically available. For the future, the newly introduced database should provide these figures.
OUTPUT 2: Increased private sector involvement in the seed sector				
Number of active registered seed growers (true seed & potato) CS (All/Males/Females/Coop)	127/56/19 /52	400	365	365 seed growers were involved in our training program
% of active registered seed growers who have open credit for seed business purpose disaggregated by gender CS (All/Males/Females/Coop)	27/31/33/ 21	60	NA	The program did no longer focus on this activity and therefore did not measure this indicator.
Quantity of seed produced by private sector (in MT) - QDS - CS	NA 79	As to operationa l plan	611 6958	Data from National recording system
OUTPUT 3: Sustainable mechanisms for demand articulation and responsiveness of market-oriented advisory services.				
Number of FFS Facilitators disaggregated by gender Total % Female	627 26%	2500 30%	2531 28%	
Number of FFS groups Total/Male/Female	2547 7/8/6	5000 50/50/50	8700 93%	
% of FFS Facilitators being member of a Facilitators' cooperative/company Total/Male/Female	0 7/8/6	100 50/50/50	100% 93%	
% of Facilitators' cooperatives/ companies being paid for the advisory services they provide	0	100	100%	

% of FFS Facilitators providing paid services in agriculture Total/Male/Female	7/7/6	30/30/30	93%	
% of FFS groups paying for the advisory services received from qualified trainers (from 2 nd season)	0%	30%	0%	
% of FFS groups selling more than 50% of the production to the market	50%	90%	62%	
OUTPUT 4: Proximity agricultural advisors capable of delivering responses to the demands of farmers, livestock keepers and their organizations.				
Number of trained farmers through FFS: Total FFS: % females CMC: Total CMC: % Female	24,500 NA 0 0	120,000 50 200,000 45	200,000 53 242,000 NA	
% of trained farmers who adopted the appropriate production practices Total/%Male/%Female	68/71/66	80/80/80	73	
Number of identified varieties (genetic resources) maintained and appropriately used through FFS	82	110	95	
% of commodity programmes of RAB which adopted and use the FFS approach	40	60	69	
Number of projects/programmes who received FFS technical advice from RAB/SSPAT2	6	12	16	

2.2. Analysis of results

2.2.1. To what extent will the intervention contribute to the impact¹ (potential impact)?

IMPACT: Agricultural outputs and incomes increased under sustainable production systems and for all groups of farmers, and food security ensured for all the population.

Compared to the baseline situation a considerable increase in access to agricultural extension services was achieved in Rwanda. In 2012, 32% of the surveyed households reported having received advice in the year prior to the survey. In 2015, this was more than doubled to 69% whereby 54% of service users were women. The number of advice sessions increased also from 5.4 to 8.3.

The agricultural extension system has also become more pluralistic. Farmer Promoters and Farmer Field School (FFS) Facilitators, the two pillars of the Twigire Muhinzi agricultural extension model, have become important service providers. In 2012, only 5% of all extension services was provided by Farmer Promoters and less than 1% by FFS Facilitators. Nowadays, Farmer Promoters are providing 21% while FFS Facilitators are responsible for 13% of all services.

The FFS component of the intervention directly impacted the agricultural productivity and income of 200,000 FFS Farmers (>10% of the farming population). Furthermore, the FFS Facilitators are also the key resource people for the Farmer Promoters, who work with more than 1,000,000 farmers (>50% of the farming population). The measured productivity increase for farmers trained in FFS is 46% while farmers trained by Farmer Promoters increase their productivity by 10%. More than 70% of the FFS Farmers report that their income has increased by at least 50%.

These figures clearly demonstrate that the expected impact has been achieved for an important part of the population. With the ambitious plan to reach all Rwandan farmers with the FP and FFS approach, the potential impact is huge. However, funding as well as organizational capacity is not yet secured.

It is important to note that FFS promotes sustainable and climate smart agriculture through for example in vivo conservation of local varieties, reduced pesticide use, smart mulch and fertilizer use and biological insect control. Probably most importantly, the FFS approach builds decision making skills, which makes farmers more resilient to challenges, including the ones caused by climate change. Through their experiments, the FFS Farmers become researchers of their own kind.

The contribution of the seed component in this success is probably limited. There is no evidence that the access to and use of quality seed is increased as a direct consequence of the intervention. This does not mean that such an effect did not happen. Surely, the use of improved seed combined with other good agricultural practice has increased the productivity of thousands of farmers. But the question remains if farmers are ready to invest in higher quality seed, once the subsidies are removed. At this moment there is no compelling evidence of an increased demand for certified seeds, especially when farmers have to integrate their cost.

¹ Terminology : Impact = General Objective ; Outcome = Specific Objective; Outputs = Expected Result

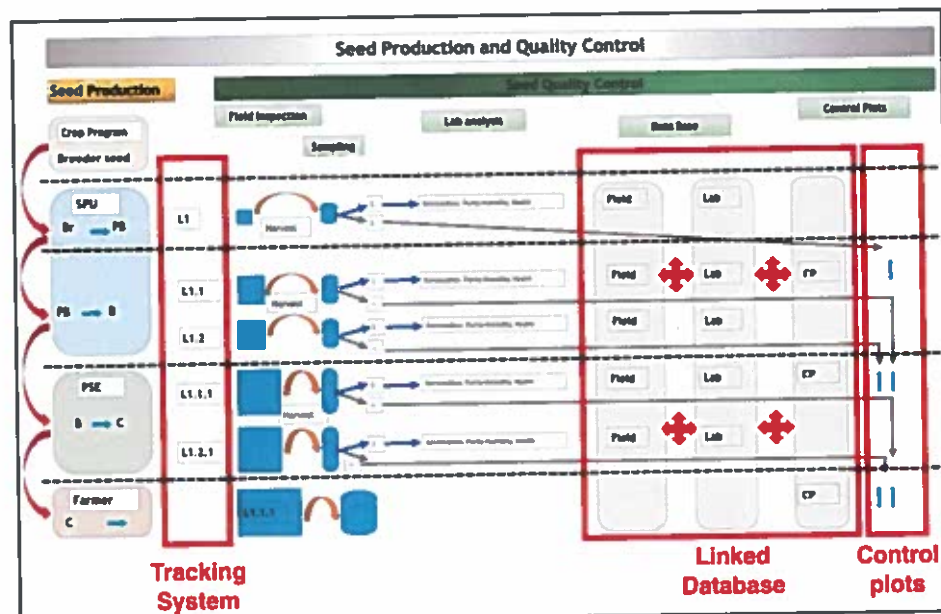
2.2.2. To what extent have outputs been achieved? Explain

Seed component

The intervention did not achieve its ambitious objectives of professionalizing specific seed value chains. Considerable funding went into production of pre-basic and basic seeds at RAB level, but seed production remains hampered by a combination of factors: institutional issues, procurement issues, technical issues, difficulties in matching planning versus demand in the absence of an effective seed market to stimulate the seed chains. It also faces uncertainties as the role of the public and private sector in seed production is under revision after the approval of the Seed Law.

Nevertheless some important building blocks conducive to these final objectives were achieved:

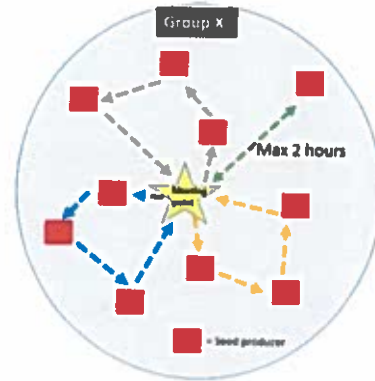
1. **Capacity building and strengthening of the seed quality control system:** The program's support allowed to double the number of seed inspectors at 2 per zone, an improvement although far from adequate coverage. Seed inspectors received capacity building on key aspects of their work: revision of seed certification procedures, field inspection procedures, sampling etc. The staff of the seed laboratory were trained and the range of test was expanded, especially by supporting a seed pathologist. Two important elements were added to the quality control system: control plots and a central seed quality control database, which are both an obligation under COMESA seed trade agreement. The control plot system is the backbone of the whole system and the seed quality database is a true professionalization. While in the past nobody had an overview of all seed produced, this system allows now to trace back any seed lot to its origin. The system puts together all data from the field inspection, the lab analysis and the control plots. Finally, it allows for correct and instant reporting.



2. **Capacity building of private seed producers:** 653 individuals representing 300 registered seed growers were trained. After using traditional training methods in a first phase, the program successfully adapted the FFS approach to seed growers groups. Training is based on discovery based learning principles conducted in field with rotational visits to every group member seed production plots. It is giving excellent results.

Comprehensive training of private Seed growers

1. Participatory and based on lessons learned from FFS.
2. One day practical hands-on training in seed growers own fields.
3. All seed producers divided into groups of 15-30 (similarity of crops, max 2 hr to meeting point (MP)).
4. Trainers: SPATII, RAB crop program, FFS Master Trainers, fellow SP in the group.
5. Five field visit/group during the growing season.



3. **Training on informal positive seed selection:** the program has conducted successful training of farmer groups through FFS, on the techniques of positive seed selection (especially in potato). These groups can market informal quality seeds where access to certified seeds is not guaranteed. The system had potential to be upgraded to formal Quality Declared Seed.

POSITIVE SELECTION IN POTATO



1. Select the "best field" of the "best farmer"



2. Remove "not perfect" plants in that field

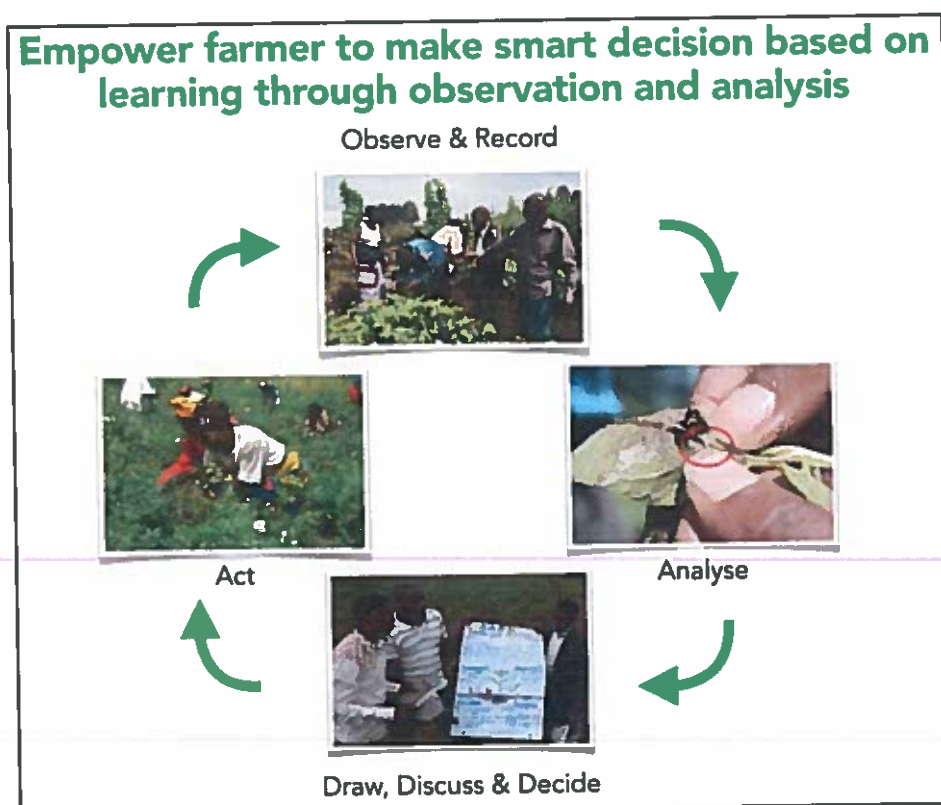


3. Select the best potatoes from the harvest of that plot



4. Store well

4. **Rwanda Agro-Biodiversity Centre (Gene bank):** the gene bank was created in 2012 and established in a building built with support from a previous BTC project. The support of the SPAT II program allowed to collect 340 accessions of diverse crops, to build capacity of the staff including the support of an international expert. The procedures were revised and organized. Five (5) gene bank staff are now retained into the permanent structure. Some essential repairs and the installation of a new generator were also financed by the Program.



The advisory services component achieved a resounding success in scaling up the FFS approach with good quality levels, and in making important steps towards its institutional mainstreaming. Key achievements were:

1. **Training of a national team of Master Trainers:** Master Trainers are responsible for the training and quality control of FFS Facilitators. The program trained 44 national Master Trainers in different thematic areas, reducing the dependence on international experts. This team was essential in the rapid expansion of the FFS coverage. Although most of the Master Trainers are retained within RAB structure, many have moved to other posts;
2. **Training and set up of a national network of farmer facilitators:** more than 2.500 Farmer facilitators were trained during intensive season long training. In the same season, they start working with their first farmer group in their village. Facilitators were trained not only on technical aspects but also on facilitation skills, group formation, group dynamics, conflict resolution and other skills. The quality of their work, and the dedication of the vast majority of these facilitators testify for the quality of the process. Facilitators are widely acknowledged as capable resource persons and increasingly involved into local development processes.

Training of FFS Facilitators



Season long training

Provided by specialized FFS Master Trainers

8 to 12 weeks away from home

Technical skills, Facilitation skills, group building skills

3. **Organization of FFS groups (IAMU):** in most cases farmers involved in FFS have formed more or less permanent groups. More than 8.500 such groups have been created, involving over 200.000 farmers, of which more than half women. Groups meet on a weekly base to work, learn and exchange on the FFS plot, creating a unique process of discovery based learning and empowerment. Besides, most groups practice saving and loans on the "tontine" model, engage in economic activities (group sales and group input procurement) as well as social work (trainings over HIV-AIDS). 86% of groups created in 2009-2012 were still found active in a 2015 survey.



4. **Rate of adoption of Good Agricultural Practices (GAP):** studies conducted for the program show compelling evidence of high rates of adoption of Good Agricultural Practices among FFS groups' participants, with increases in productivity (+46 compared to non trained), greater engagement with markets and improved incomes.
5. **Creation of Facilitator's Cooperatives:** in 2015 a facilitators Cooperative was created in each district. The key objective of these cooperatives is to act as local service provider. Cooperatives have signed a tripartite contract with RAB and districts to provide to create

new FFS groups and to train and coach the farmer promoters. Since 2016, the districts receive earmarked budget transfer to continue contractual engagement with these cooperatives. The targets are included in their 'imihogo' or performance contracts and the Rwanda Public Procurement Authority has allowed the district to contract the cooperatives using the single source procurement method. The cooperatives received training on Cooperative business development in order to diversify services and clients.

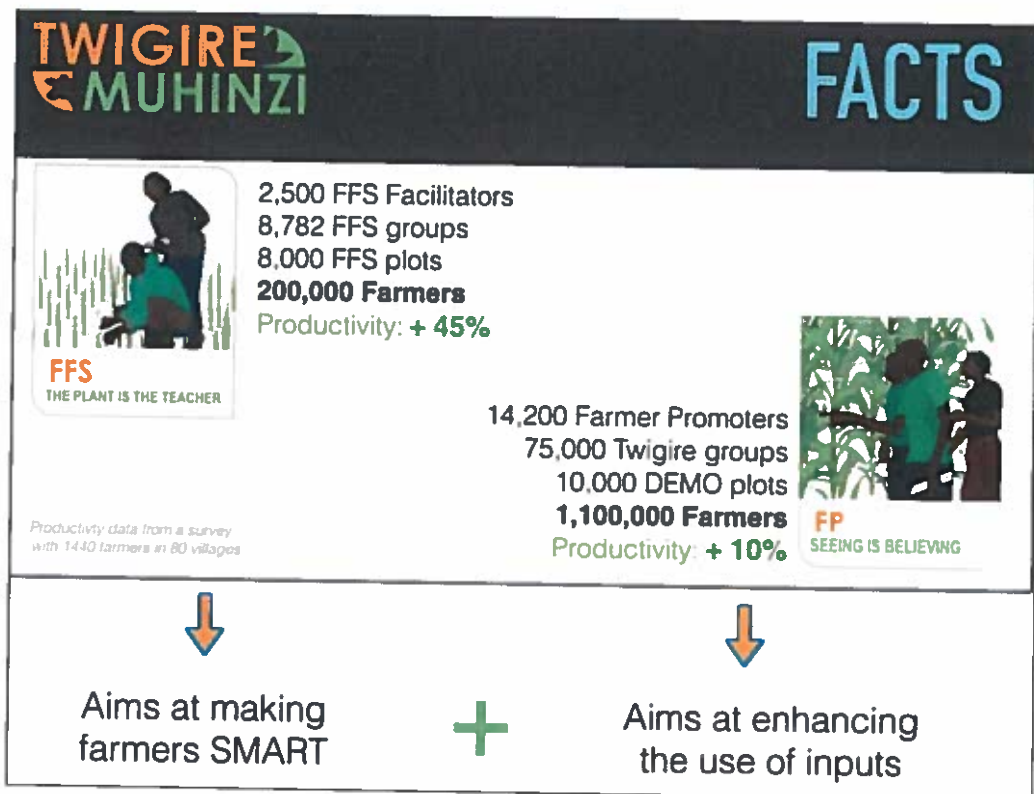


- Integration of FFS approach within Twigire Muhinzi model:** the FFS approach has been officially mainstreamed into the national extension strategy which is based in combining two approaches: FFS and Farmer Promoters. FFS facilitators have two main functions in the model: (1) expanding the FFS approach by creating new FFS groups and (2) Training and coaching the Farmer Promoters. This is a resounding policy achievement, although there are still challenges ahead regarding long term funding and coordination mechanisms



- Agricultural Information and Communication Centre (CICA):** the Centre, previously supported by PASNVA project, received further funding to identify gaps in capacities, and develop necessary procedures and capacities in production of training videos, MINAGRI website improvement, and most significantly, the "Nozbuz" website dedicated to extension. 22 booklets were edited, several "Ikivi" training videos available on DVD, a photo bank was established. The library, the GIS and the Agricultural Management Information System (AMIS) were further strengthened. Procedures for extension material field testing were introduced, enhancing quality and usefulness. There were trainings for agriculture journalists. 7 staff were supported by SPAT II funding; 6 are retained in core staff and funded through the SPIU (Single Project Implementation Unit).

Situation in 2016B



Despite the clear achievement of output 4, the sustainable systems for demand articulation as described in output 3 were not achieved. The main reason is that the agriculture platforms at district level, which were foreseen to play a key role in demand articulation had proven not to be effective in the PASNVA project. The program management and MINAGRI decided not to invest in something that failed because there was serious doubt that such agricultural platforms at district level could truly play a role in demand articulation and organization of extension services. Instead, the program continued to train the FFS facilitators to conduct a gap and expectation analysis at the start of each season in each group, ensuring that the specific needs and demand of FFS group members were addressed.

Influencing strategies and policies

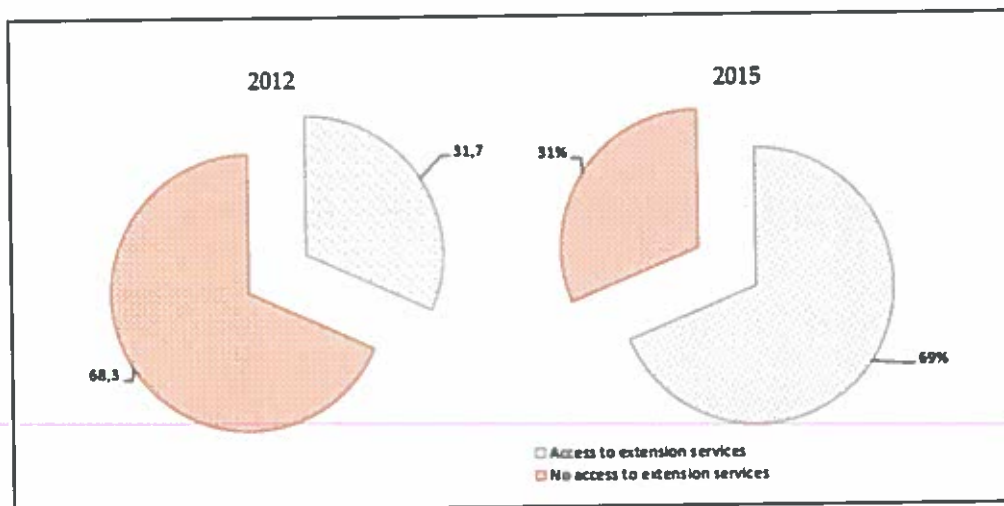
With regards to discussions about strategies and policies related to the agricultural sector, the program is part of the Agriculture sector working group and is co-chairing the sub-sector working group on extension. The Program is also an active player in the sub-sector working group on seeds. The Program was involved in the development of the new Twigire Muhinzi model.

Unfortunately, the program was not involved in the reform of institutions. Especially for the seed component, this is regrettable because the centralized seed production unit was not maintained in the latest reform. In a period of 4 years the seed production was decentralized, centralized and decentralized again.

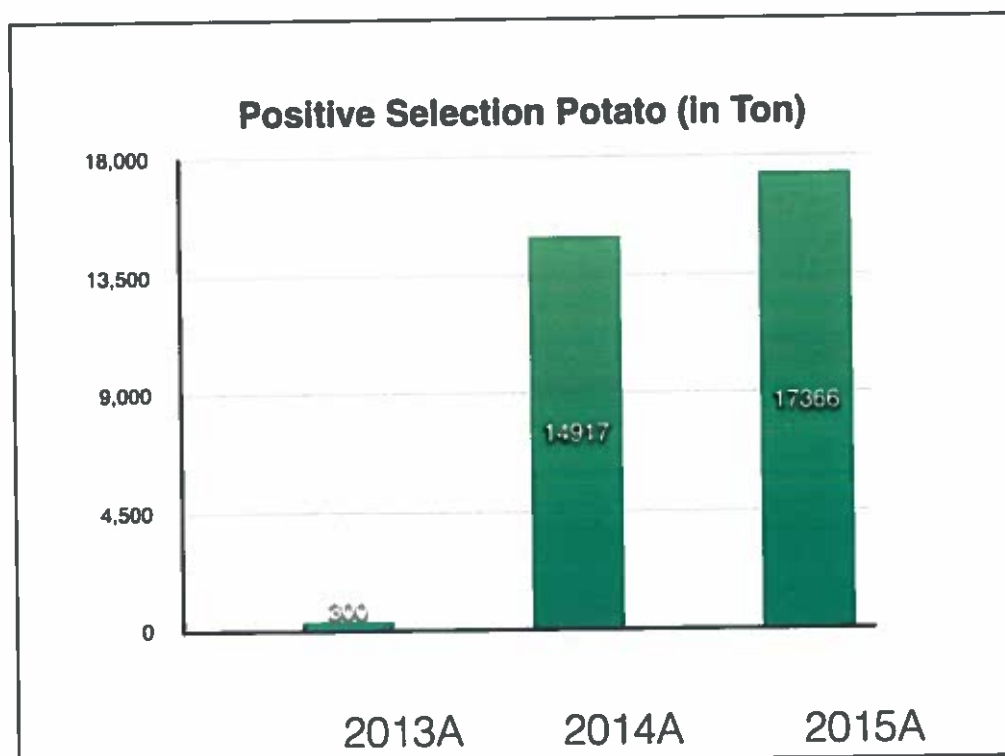
2.2.3. To what extent did outputs contribute to the achievement of the outcome

OUTCOME: Improved access to advisory services for crops and livestock and access and use of high quality planting materials of food crops for men and women

As explained under 2.2.1, the outputs clearly contributed to increased access to advisory service for crops and livestock for men and women. Survey showed that the overall access to advisory services increase from 32% to 69% in less than 4 years. Although this includes all kind of service providers, the direct contribution of the intervention is very large through the FFS facilitators (200,000 households) as well as through the Farmer Promoter (>1,000,000 households) who are trained and coached by the FFS facilitators.



On the other hand, there is no evidence of an increased access and use of high quality planting material, apart from the strong increase in the use of informal positive selected potato seed.



2.2.4. Assess the most important influencing factors. What were major issues encountered? How were they addressed by the intervention?²

Lack of clear and consistent vision on how to develop the seed sector professionally.

In the time between the formulation and the implementation, important institutional changes took place in the agricultural sector in Rwanda. At the time of the formulation, pre-basic and basic seed was produced by ISAR, the research institute, while certified seed was produced by or under the supervision of RADA, the extension institute. Both ISAR and RADA were centrally managed and operated in about 10 field stations. Both institutions received support from previous BTC interventions and both were performing reasonable well. Exactly at the same time as the start of the intervention (July 2011), RAB, the merge of ISAR, RADA and a livestock institution, came into operation. The seed production was now managed by the different commodity programs and the 20 field stations operated under the supervision of the four heads of zones. This had several consequences:

1. While seed production was previously managed by well trained experienced 'seed' staff, it was now managed by each and every commodity program and thus by staff with no or limited specific experience in seed production. Yet, this lack of technical capacity was not sufficiently recognized and therefore not appropriately addressed.
2. The plan to create a self-financing seed unit (called the Rwanda Seed Enterprise in the TFF) was abandoned in the first two years of the program.
3. The focus of RAB was on operationalization of the new seed production system rather than analyzing how the private sector could get increasingly involved. Also, their concern was to produce enough seed for the Government run seed subsidy program (CIP) rather than being concerned about becoming more market-oriented (producing the varieties which are preferred by the farmers)

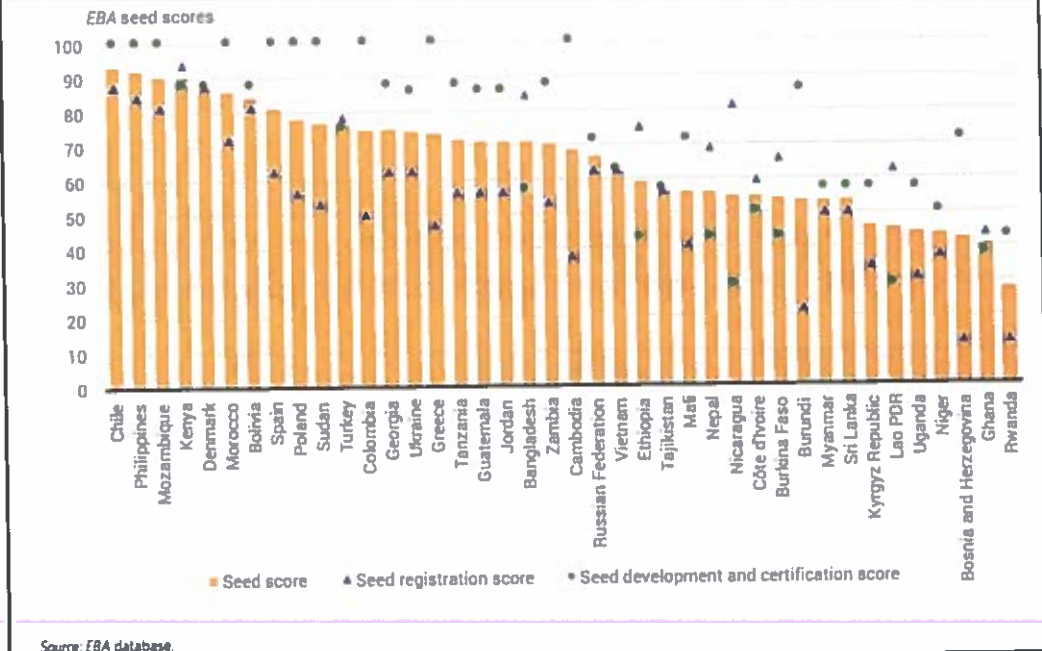
The request of RAB towards the intervention was to finance the production of pre basic, basic and even certified seed. As it was considered that former ISAR and RADA staff were technically strong, no technical support for seed production was requested by RAB. Therefore, all technical support of the intervention was allocated to the attempt of building up a private seed sector as well as to seed quality control system.

Two years down the road, the Ministry realized that the seed sector was not moving into the right direction. And while RAB was still preliminary focused on simply trying to produce sufficient seed (but failing to do so), the Ministry wanted to see a more professional seed chain being developed, with a more financially sustainable role of RAB and a more important role for the private sector. Finally, RAB proposed to start with the creation of self financing seed unit as envisioned in the TFF. Based on the promising plans presented to the steering committee, the program agreed to inject considerable funds into the new Seed Unit, by reallocation funds from budget that was foreseen to support the private sector development.

Serious efforts were made by a dedicated team to put the ambitious plan into operation, and the situation looked promising. However, the recovery of seed production cost by sales of seed was still very low, mainly due to the low productivity and the downgrading of seed to grain, which is sold at a much lower price than seed. Although the situation did not look good, all such challenges could possibly have been overcome when there would have been a clear vision and willingness to make it work. But the seed unit received its final blow at the latest reform of RAB in 2015. The structure and way of working of the seed unit as planned in 2013 was not confirmed, yet the seed production was once again decentralized to the zones. So even though a seed production unit appears in the RAB structure it does not operate as a specific unit with dedicated staff to plan, produce and sell basic seed in a cost recovery spirit.

² Only mention elements that aren't included 1.1 (Context), if any.

FIGURE 2.1 Countries mostly score better on seed development and certification indicators, while seed registration proves more challenging



In conclusion, the seed sector development suffered from a lack of unified vision on how it should develop. In principle, there are multiple ways to improve the performance of the sector, but it is important to choose one way and then go for it. During the implementation, it appeared that the Ministry, RAB central level and RAB zonal level were not convinced about one and the same way. Without a unified vision for the seed sector in Rwanda, it will remain difficult to make serious progress.

The fact that Rwanda does need such serious improvements is also demonstrated by the World Bank's Enabling the business of Agriculture 2016 report. While Rwanda is performing reasonably well in most of the assessed topics, it is the weakest of all investigated countries on seed

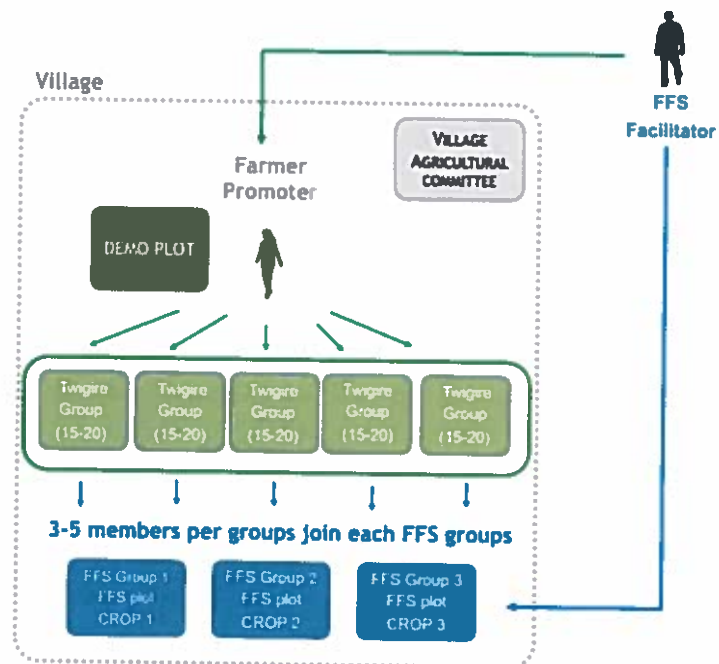
The Twigire Muhinzi extension model

Half way into the intervention, the government decided to put two parallel extension approaches in one extension model: Twigire Muhinzi. This had an important influence on the role of the FFS Facilitator and on the impact of the intervention. While the FFS Facilitators were previously working more or less on their own under overall supervision of RAB, they are now working closely with the sector and district agronomists.

The most important influence of merging the two approaches into one model is the fact that both approaches work in a truly complementary manner: Therefore the combined results are much higher than the sum of both approaches separately. This is best demonstrated by the following two facts:

1. The FFS Facilitators train and coach the Farmer Promoters
2. The new FFS groups are made of members of various Twigire village groups which increase the outreach of the FFS results.

The ultimate goal is that all farmers will have access to both approaches.



- Farmer Promoters ensure that eligible farmers in the village are included in the input requirement lists of the subsidy program of MINAGRI (CIP)
- In each village, the Farmer Promoter is responsible to create a Demo plot, which demonstrates Good Agricultural Practices
- The farmers in the village are divided in "Twigire groups". These groups are not crop specific. The groups visit the Demo plot 3 times per season.
- Whenever a new FFS group is created in the village, 3 to 5 members from each of the Twigire group who grow the specific crop of this particular FFS group will join the new FFS group.
- The FFS Facilitator has two main functions: (1) Facilitate the learning process in the FFS group, who meet every week in their FFS experimental plot and (2) Train the Farmer Promoter in how to set up a demo plot & provide technical backstopping.

2.2.5. Assess the unexpected results, both negative and positive ones

Social benefits in FFS

The FFS methodology was introduced by the IMP project as a solution to promote Integrated Pest Management practices. It quickly became clear that FFS does not only bring good agricultural practices which result in increased production but it also brings important social benefits. First of all, the organized farmers in FFS groups are an important result in itself. The weekly meetings which always include a special topic form the perfect entry point for group discussions on topics such as health insurance, family planning, gender, nutrition etc. 74% of the groups has set up an internal savings and credit system. Groups implement economic activities together: 61% buy input as a group, 26% sell products as a group, 21% has a group economic activity. The importance of belonging to a group cannot be overstated. A survey conducted in 2015 showed that "*Belonging to a strong group where members can help each other*" was selected by 38% of FFS farmers as the most important reason for joining an FFS group, scoring higher than "*Having more food on the table -33%*" and "*to be able to sell more products -29%*".

The power of peer trainer goes far beyond expectations

The FFS approach is not new. However, a key innovation that the program introduced is that FFS facilitators are farmers who become professional service providers. The training offered to the facilitators is also much more intensive (3 months) than the usual 3 weeks. The FFS Facilitators do not only get technical skills, but also facilitation and group dynamic skills. As a result, most of the FFS facilitators are very confident and are therefore highly respected and recognized as role models in their communities. That is the reason why the intervention tried out if these peer trainers could also be effective peer trainers on non agricultural issues such as Gender and HIV prevention and awareness (for details see below 2.2.6). The results are very encouraging. According to the Rwanda Biomedical Centre, the reference institution for HIV awareness campaigns, it is the first time that non medical staff were trained to provide such kind of information session.

FFS Facilitators are recognized as local resource persons

The skills of the FFS Facilitators were recognized and are utilized beyond the FFS activities. This is demonstrated in 2 specific cases:

Community Mobilization Campaigns (CMC)

CMC is an effective approach in the control of crop diseases, particularly BXW in banana and *Striga* in cereals. It involves the mobilization of thousands of farmers, hence called Community Mobilization Campaigns (CMC). Under the overall coordination of RAB, local leaders with the support of governors and mayors mobilize the communities to implement large scale control measures which take place under the technical supervision of the well trained FFS facilitators. In total, more than 240,000 farmers were involved in CMC campaigns. Interestingly, even the sector agronomists recognize that FFS Facilitators have better practical knowledge in crop specialization than themselves.

Training of Farmer Promoters

Within the Twigire Muhinzi extension model, the 2500 FFS facilitators provide the first line technical backstopping for the 14200 Farmer Promoters (FP). In the beginning of the season, they train the farmer promoters on how to set up village demonstration plots based on FFS best practice and during the season they continue to follow up and coach them.

2.2.6. Assess the Integration of Transversal Themes in the intervention strategy

The program achieved a good gender balance among the final beneficiaries: 53% of FFS farmers are female. Among the FFS facilitators, the percentage of women is 28%. But the intervention did not stop with gender balance as it introduced a training program to address gender inequality at its roots. The program collaborated with the Rwanda Men's Resource Centre (RWAMREC) to introduce the "Men engage gender approach". This approach is fully in line with the HeForShe Campaign from the United Nations, which receives full support of the HE President Paul Kagame

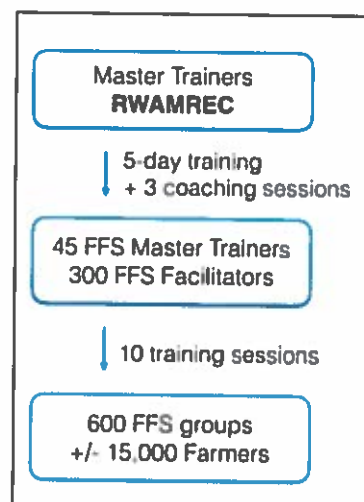
Methodology:

A total of 300 FFS facilitators were trained as peer trainer on gender equality. The overall objective of the training was to equip the FFS Facilitators with practical knowledge and skills in gender equality and prevention of gender-based violence and discrimination.

After completing a 5-day training course, the FFS facilitators organized 10 working sessions with 2 FFS groups each, involving 15,000 farmers. During this time they received 3 coaching sessions from RWAMREC in their district. The follow up revealed that the majority of FFS Facilitators were able to engage participants in deep reflections about their own lives/gender experiences, and how they intended to apply these gender messages to real life back home.

The training includes the following topics:

- Social construction of gender norms and roles
- Gender boxes
- Source of Gender Powers
- Discovering positive masculinity and positive femininities
- Gender Based Violence & gender discrimination
- Women's Rights
- Gender responsive laws and policies
- Gender mainstreaming in the Value Chain
- Family dialogue
- The Journey of Change and transformation in gender power
- Training techniques and facilitation skills –



Is gender Training needed?

The participants in the 5 day training course were asked to agree or disagree with 7 statements at the start of the training. The results show that there is indeed a clear need for such training: 38% of men and women said that women sometimes need to be beaten especially when they did not fulfill women's duties; 75% find that women should respect and implement their husbands' rules and decisions regarding the management of the household because men are the heads of the families; and 99% said that the division of labor between men and women is based on the biological differences and God's will.

Results

The sessions were highly appreciated by the participants and by local leaders. The majority of FFS Facilitators were able to engage participants in deep reflections about their own lives/gender experiences. Participants showed their intentions to apply these gender messages to real life back home. It appears that the pilot of Peer to Peer training on Gender Equality is a success.

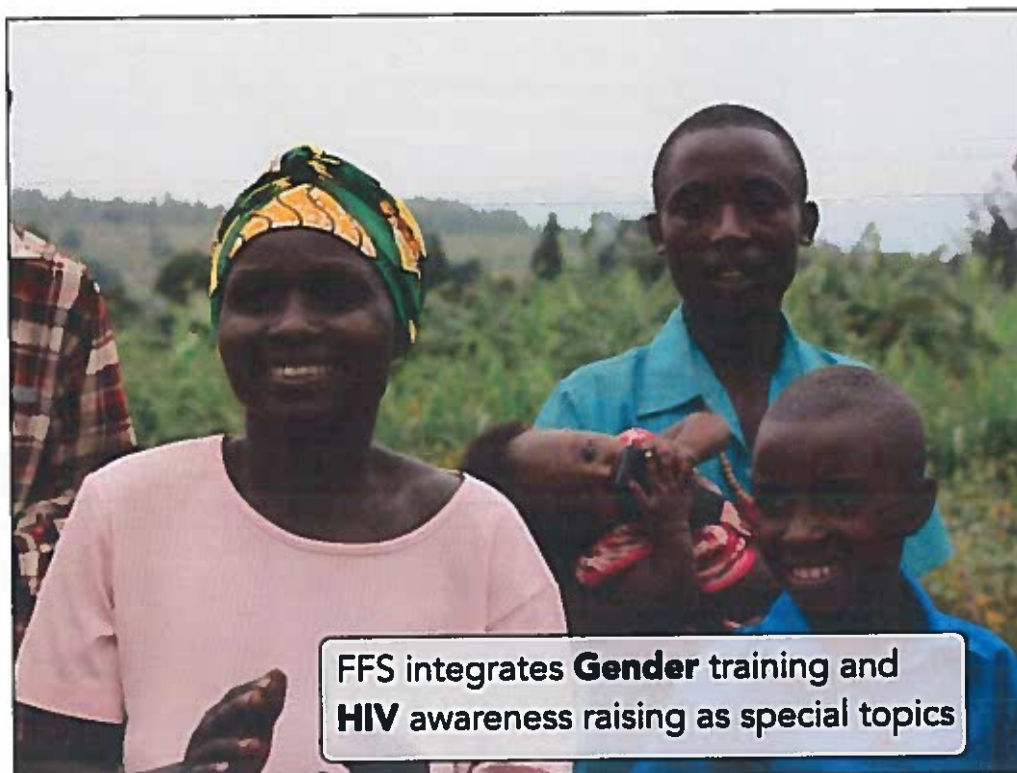
An important concern is that RWAMREC states that our program might have contributed to gender issues: The FFS program contributes to increasing productivity of various crop and livestock but due unequal gender power relations at individual and household levels, the agricultural gains were rather contributing to domestic violence or discriminations/conflicts over resources. Therefore, sensitization of FFS groups on gender equality is key to preventing gender-based violence (GBV) and increase participation of women in economic decision-making at household level, and in management as equal partners of farming activities.

HIV Prevention and Awareness

The program applied a similar training methodology for HIV/AIDS prevention and awareness raising as for Gender. A total of 60 FFS facilitators received a 5-day training course to become a peer trainer. The training was provided by the Rwanda Biomedical Centre (RBC). Each of the 60 FFS Facilitators then organized information sessions with 22 FFS groups (33,000 Farmers in total).

The goal of the Rwandan Government is that everyone knows if he or she is HIV positive or not. All people who are HIV positive receive free medications. Based on the knowledge that HIV positive people who take their medication are much less likely to infect other people, this strategy makes a lot of sense. The indicator to assess the effectiveness of the information sessions provided by the trained FFS Facilitators was therefore the number of people that did a voluntary testing in the weeks following the meeting. The results are quite encouraging as 57% of the participants did the test.

It is worth noting that according the RBC, this was the first time that they trained non medical staff to conduct such kind of information sessions.



Climate smart agriculture

The program is contributing to promote the use of ICM (Integrated Crop Management) practices in all the training sessions organized for farmers. This has an impact in terms of better management of natural resources like (i) rational use of inputs reducing the quantities of mineral fertilizers, (ii) a decreased use of pesticides for crop protection, (iii) protection and conservation of natural enemies which contribute to control insect pests, (iv) conservation of genetic resources, (v) global improvement of soil fertility and improvement of soil structure through continuous increase of organic matter content of the soil.

Based on these various facts, we can state that this program is effectively contributing to improving environment protection through the use of the ICM package as the basis for FFS.

2.2.7. To what extent have M&E, backstopping activities and/or audits contributed to the attainment of results? How were recommendations dealt with?

The data on indicators in the monitoring exercise were useful in the advisory component, but much less so in the seed component. For the advisory services it allowed us to assess the effectiveness and efficiency of services and it guided us to make adjustments in planning. For example, in order to increase the value for money (efficiency), we took a resolute decision to stop training new FFS facilitators but to increase the number of FFS groups trained per facilitator.

For seed there were two main reasons why the indicators did not provide us with useful information: 1. We were fully depending on RAB to provide us the data, which they were not able to do in a consistent and timely manner. 2. The indicators were not well selected. They would only have been useful if the program would have had a massive impact on that national seed production. This was indeed the ambition but it is clear that this was not the reality. I would have made more sense to have indicators which were more closely related to the activities of the program.

The recommendations from backstopping, reviews and audits were always discussed at program management level as well as at steering committee level. If the recommendation were valid and feasible, the team tried to implement them. Unfortunately, many recommendations from the MTR for the seed component were not considered valid or feasible as they were not within the scope of the intervention. They were addressed at the seed sector in general but not at what intervention could do different to address the issues. Such recommendations were rejected at SC level. Other recommendations were not feasible because they were related to specific choices the program had made. The reviewer can indeed have another opinion, but the program should also be consistent. The example we can give here is the choice to go for scale rather than to expand the kind of services: the program decided to try to reach out to as many farmers as possible with an approach focused on increasing productivity. This choice was driven by the result of the baseline which proved that the access to basic service was very low. Furthermore, in order to address food security, the production of as many farmers as possible needs to increase. A consequence of this decision, was that the business development and marketing support (Farmer Business Schools) were not developed. A recommendation that this should have been done was, in the program's opinion, more based on personal preference. Therefore, the SC decided to continue the approach of trying to reach as many farmers as possible.

The final review came with a number of very valid recommendations yet the program neither had the time nor the resources to address them. However, the important recommendation to provide business development training to the FFS Facilitator's cooperatives was still implemented. Other recommendations remain valid for the Rwandan Government and other development partners.

3. Sustainability

In this chapter, by answering the questions underneath, interventions need to describe how results achieved will be sustained and whether a specific exit-strategy has been developed in order to guarantee this.

3.3.1. What is the economic and financial viability of the results of the intervention? What are potential risks? What measures were taken?

Advisory component

The economic and financial viability should be considered at various levels: (1) Will the created FFS groups remain and will the farmers continue to apply good agricultural practices? (2) Will the FFS Facilitators and their cooperatives continue to train farmers and thus further expand the reach of the intervention? (3) Will the Government continue to train new FFS facilitators?

Concerning the farmer and group level, a study conducted in 2015 showed very promising results: 86% of the FFS groups created in the period 2009 - 2012 were still active, proving that FFS has a long lasting impact. However, it should be noted that the FFS facilitators were still involved in program activities at that moment. They were no longer directly financed to work with these older groups, but we believe that still played an important role. If the FFS facilitators are no longer active, it could result in much less FFS groups remaining active as well. At farm level, studies showed that 73% of the trained farmers is applying good agricultural practices. Since this has led to increased production and income, it is unlikely that farmers will go back to their old practices. It is important to note that the program never provided any direct financial or in-kind support to the FFS farmers. Therefore, the achieved results are much more sustainable than when increased production levels were reached thanks to use of subsidized inputs such as fertilizer and quality seed.

The FFS Facilitators are organized in cooperatives who work as service providers for the Government, NGOs and even private companies. A new 3 party service contract between them, RAB and the districts was signed in October 2016, with a validity of 2 years. For the Fiscal Year 16/17, these contracts are financed through earmarked budget transfers from MINAGRI to the districts. So there is a fair chance that the FFS Facilitators cooperatives will be able to continue to create new FFS groups and train FP until 2018. This has the potential to reach an additional **720,000 farmers** with FFS, bringing the total close to a one million FFS farmers.

However, this requires that the Government continues to allocate budget and that RAB and/or the district continue to coordinate the activities. Both are not fully ensured at this moment. The Government does receive a large amount of budget support from the EU to support the agriculture sector and extension is one of the key areas, but ultimately it is the decision of the Rwandan Government to allocate the budget.

The strategy of the program has been to raise awareness about the success of FFS at various levels and to formally link the FFS cooperatives to both RAB and MINAGRI in a multiyear performance contract. Furthermore, some cooperatives already managed to sign service contracts with NGO's and private companies.

A main concern which is correctly highlighted in the final review is that FFS facilitators cooperatives are still incipient and lack basic business and management skills. The program tries to link the cooperatives to other organizations and interventions who can support and coach the cooperatives over a longer period of time. However, since no organization was found yet, the program decided to organize a 'quick' training course on Cooperative Management as well as on Cooperative Business Development. The main goal is to convince the cooperatives to hire professional managers to attract new business in the advisory services.

At national level, FFS is one of the two pillars of the national extension model Twigire Muhinzi. On paper, the Twigire Muhinzi "project" foresees to an additional 2500 FFS Facilitators and to integrate cross cutting themes such as Gender & HIV, Nutrition, Climate smart agriculture etc for all FFS groups. However, as explained above, both budget and coordination are not guaranteed. Probably the most important drawback is the lack of true leadership for Twigire Muhinzi. As of now, there is no national Twigire Coordinator. Such large project involving 20,000 frontline extension workers and being implemented by various ministries needs a real Champion. This issues has been addressed by the SPAT program at all possible occasion, but it did not yet had the desired result.

Concerning the sustainability of CICA, the good news is that CICA is taken up as a key program in the SPIU of MINAGRI. Unfortunately, the funds for the SPIU are not guaranteed.

The seed component

There are three parts of the seed component for which it is worth to talk about sustainability: (1) Seed Quality control system, (2) the training program of private seed growers and (3) The production go quality informal seed.

The budget for the routine activities of quality control is taken up in the Government 's budget the FY 16/17. As of now, it also appears that the innovation introduced by the program (seed quality control data base & control plots) will remained to be used since the involved staff recognizes the added value. Furthermore, both elements are essential to be part of the COMESA seed trade.

The training program for the private seed growers will always have a cost. Until now, all costs where paid by the intervention. The relevance to continue with these training activities is recognized by the seed growers themselves, RAB as well as by the seed companies and the National Seed Trade Association of Rwanda. Especially the opportunity to gradually evolve from training on technical aspects towards real business development training has been highlighted. However, none of institutions mentioned above seem to be ready to carry to costs. Cost sharing mechanisms have been proposed and discussed but it did not results in a continuation of these training activities.

The production of quality informal seed was particularly important in the potato sector where there is a huge lack of formal seed. The approach of "positive selection" was applied by the FFS groups. What started as an approach to foresee the group's members with quality seed potatoes, became a commercial activity of selling quality seed potatoes. At this moment it is not clear if the activity will be sustained for a long period or not. One would expect that if it is lucrative, the groups will continue. However, it appears that RAB staff, whose mission allowance were paid by the program, played in important role in advising the FFS groups. In 2016, the Minister of MINAGRI announced that the FFS Facilitators should continue with this activity.

3.3.2. What is the level of ownership of the intervention by target groups and will it continue after the end of external support? What are potential risks? What measures were taken?

Advisory component

The FFS groups and the FFS Facilitators cooperative demonstrate a high level of ownership. In other words, many of them will be able to continue their activities. On the other hand, there are concerns about the future development of the FFS facilitators cooperatives. In order to function well as a local service providers, they need to have good business and management skills. A strong point is that the majority of the FFS groups have group saving and 1 out of five also has a group income generating activity. This are important elements to keep the group together. For the FFS Facilitator cooperatives keep a part of the income in the cooperative's account. This is an important element for the continuation. The main purpose of the training was to convince them to hire a manager who should find new business opportunities.

The future of the seed producer groups does not look promising unless other interventions decide to continue working with them. The members of the groups live quite far from each other and simply coming together as a group involves traveling costs. As these groups have no income-generating activity as a group, their survival is questionable. However, there is some hope since the NSAR has shown interest to continue to support the groups. However, they have no own funds to do it. Syngenta foundation also has shown interest, but no concrete support has been promised/provided.

The program ensured that the activities of the program are well known with MINAGRI, RAB, NSAR, Seed companies, other projects etc. It is likely that future intervention to support the seed growers will pick up where we leave it behind, but there are no guarantees so far.

3.3.3. What was the level of policy support provided and the degree of interaction between intervention and policy level? What are potential risks? What measures were taken?

The program always worked closely with the policy level. For example, the permanent secretary of MINAGRI is chairman of the SC. And for the last 4 years, BTC was co-chair of extension working group and was a member of seed working group. Both groups operate as sub groups of the Agriculture Sector Working Group (ASWG). It should be noted that the turnover in the policy level is rather high. During the 5-year intervention, we have worked with 5 Director Generals of RAB and with 4 Permanent Secretaries of MINAGRI.

We also note that many important decisions such as the reform of RAB and the first design of Twigire Muhinzi are taken outside these forums.

3.3.4. How well has the intervention contributed to institutional and management capacity? What are potential risks? What measures were taken?

The program invested a lot of resources in technical capacity building in the institutions. In advisory services, 44 RAB staff were trained and coached during 18 months and graduated officially as FFS Master Trainers. The majority of the Master Trainers were permanent RAB staff; 13 were hired by RAB with funding from the program. The staff of CICA received on the job advice and support.

In the seed component, a total of 16 staff were recruited and trained as seed technical assistant (8), seed quality control officer (4), and seed business development advisor (4). Staff of the genebank received on the job advice and training.

The biggest risk that the staff will not remain in the institution or that they will be assigned to tasks which are not linked to the training they received. At the end of the intervention, the situation was as follows:

FFS Master Trainers: As two out of three were already permanent RAB staff at the start of the training, the majority is still in RAB in various positions including research position, extension positions and station managers. Of the 13 additionally hired FFS Master Trainers, 3 had left RAB before the end of the intervention, 1 moved to MINAGRI and 1 became Director of extension in Northern zone RAB. The remaining 8 were not taken up in the RAB structure and lost their job.

Seed staff: All Seed business development advisors and ... Technical assistants had left RAB before the end of the intervention. One Seed quality control officer became the advisor to the DG of

RAB. The 6 remaining seed staff (3 quality control officer and 3 technical assistants) were not taken up in the RAB structure and lost their job.

CICA staff: As the funding for SPIU is not secured, the CICA staff received a 6 month contract from MINAGRI (July to Dec 2016). The future beyond these 6 months is uncertain.

4. Learning

4.1. Lessons Learned

Capture important Lessons Learned from the intervention's experience. Lessons Learned are new insights that must remain in the institutional memory of BTC and partners. The Lessons learned can be drawn from activities, outputs, outcome, risk management, cross-cutting themes, sector policies, etc. (or a combination of levels or any other aspect of the intervention and its environment).

The upscaling strategy

In order to have real impact on a poverty reduction and development, solutions need to be brought to scale. This intervention was in the position to do that. However, it did not happen by itself. The management team took deliberate decisions in order to be able to reach so many households without compromising the quality.

- 1. Respect the success factors:** The FFS approach is not new. It is being implemented since the 80^{ties} and the success factors are well known. Most important is that every farmer gets the opportunity to discover what works best through weekly sessions in the group's experimental plot. This intervention always respected and implemented the success factors
- 2. The facilitators are farmers:** In many other FFS programs the FFS Facilitators are either Government staff or NGO staff. It is clear that the costs to send them to a group of farmers (usually traveling with a car and receiving a rather high mission allowance) is multiple times higher than paying a small facilitation fee to a farmer-facilitator.
- 3. FFS facilitators are intensively trained:** The training we provided for the FFS facilitators was much more comprehensive and therefore much longer than the usual 3 weeks. In our case, the facilitators would spend a total 60 to 90 days in Training of Trainer sessions in various periods of 3 to 5 days. In between they travel back home to work with their group. The acquired skills include technical skills, facilitation skills, and group building skills.
- 4. FFS facilitators become real extension agents:** Each season the FFS facilitators are paid to work with new FFS groups. Initially they were paid as individuals, but since 2015, they have created FFS Facilitator's cooperatives who work as professional service providers. Therefore, they are paid through their cooperative.
- 5. Adjusting to the local systems:** The Rwandan government is applying performance contracts (Imihigo) throughout the government system. These contracts set the targets a person or institution will achieve and evaluation is done against the fixed indicators. In the same spirit, the FFS Facilitators cooperatives signs performance contract with the District and RAB (tripartite contract). Also the number of new FFS groups/FFS Farmers is one of the indicators of the performance contract of the district.

The strategy of scaling up can be summarized with the 3 building blocks: Repeat what works, Innovate and Localize

STRATEGY FOR SCALING UP



Reallocate budget from less performing activities to better performing ones

In every intervention, there are some activities and result areas that perform well and others that are turning out more difficult than expected. One of the reasons why this intervention was successful in expanding FFS and building Twigire Muhinzi, was because the management focused on what was working well and reallocated more budget to it. As a consequence, some elements that were foreseen in the TFF could not be implemented.

In the seed component, we tried to apply a similar philosophy. However, the Seed Production Unit to which more budget was allocated was not yet a success story. Yet the management believed it could have become one. Unfortunately, it turned out differently.

Investing in a strong network of local service providers pays off

The heavy investment in building the skills of the FFS Facilitators paid off. Not only are they recognized as the key locally based agriculture resource persons, they also showed their value in addressing non agricultural cross themes such as Gender and HIV. With the right support, meaning receiving proper multiway training on any new topic, these facilitators could probably train the farmer groups on any topic. An interesting one to explore would be nutrition. This could include providing knowledge about nutrients in food, cooking classes, planning to grow diversified food etc.

Look for specific opportunities to address Gender Equality rather than "mainstreaming"

The common practice in promoting gender equality is "mainstreaming". This can be understood as keeping Gender in your mind in every decision you make to every activity

you plan. This program applied gender mainstreaming to some extent (53% of FFS farmers are women, Gender talks as special topic in FFS) but focused more on finding the opportunity to really make a difference. Gender based violence in households is a very serious problem in Rwanda and should be addressed in an appropriate way. By leveraging the role model function of the FFS facilitators, great impact can be made. Unfortunately, the pilot came very late in the program and could not be followed by a scaling phase. Only 8% of the FFS farmers had an opportunity to be involved in Gender Equality training.

4.2. Recommendations

A recommendation is a decision to be taken, to the attention of a user of the final report. Recommendations should be as specific as possible. Operationalize recommendations by adding 'Source' and 'Target Audience'.

Recommendations can be relevant for:

- *Country strategy*
- *Sector strategy*
- *A next intervention*
- *The exit-strategy*

Recommendation	Source	Target audience
<i>Description of the decision to be taken.</i>	<i>The source to which the recommendation refers</i>	
<p>Repeat what works!</p> <p>The FFS approach is performing very well with an amazing efficiency and effectiveness (FFS costs only 5,000 Rwf per farmer per season). Do not change the winning formula!</p> <p>Implementers are always tempted to try to reach results faster, but this often comes at a reduced quality. The FFS approach as implemented in Rwanda at this moment can reach all Rwandan farmers in 4 to 5 years when implemented correctly. Innovation to make it more efficient have already been made.</p>	Twigire Muhinzi model - update October 2016	MINAGRI RAB MINALOC FFS Fac's Cooperatives

<p>Ensure budget for Twigire Muhinzi in 17/18 and beyond:</p> <p>For Twigire Muhinzi to be implemented properly, RAB needs budget and the districts need to receive earmarked budget transfers. The transfer is meant to be used for various activities within Twigire Muhinzi, including those of FP, FFS and the districts/sectors.</p> <p>The Twigire Budget is prepared as follows: <u>the essential budget</u> allows to utilize all capacity that has been built up. This can be considered as the minimum budget that should be ensured. If more budget can be availed, extra investments can be made in (1) training additional FFS Facilitators (by RAB Master Trainers) and/or (2) integrate more crosscutting and additional themes. The budget details are provided in annex.</p>	<p>Budget for Twigire Muhinzi FY17/18 and beyond</p>	<p>MINAGRI (DG Planning, PS) RAB MINALOC</p>
<p>Ensure that the tripartite contract with the FFS Facilitators cooperatives has proper content including the continuous expansion of FFS and the continued training and coaching of FP on technical issues and cross cutting themes. It is highly recommended NOT to include assisting the FP with mobilization and input distribution as this should be entirely the responsibility of the FP themselves. It should also be avoided to request the FFS facilitators to do things which are beyond their capacity (such as training FP on nutrition, while they themselves are not trained in such topic).</p>	<p>Twigire Muhinzi model - update October 2016</p>	<p>RAB DISTRICTS FFS Facilitator's cooperatives</p>
<p>Scale up the "Men engage" Gender approach</p> <p>The program has successfully demonstrated that FFS Facilitators can be excellent peer trainers on topics such as HIV prevention and Gender equality, when properly trained and coached by qualified master trainers. The pilot on Gender Equality concluded that increasing productivity and income at household level without addressing the existing unequal gender power relations might actually results in more violence, discrimination and conflicts in the family. Therefore it is essential to address this by expanding the "Men Engage" Gender equality training approach.</p> <p>WARNING: Each trainer on such sensitive topics should be properly trained by qualified master trainers! An FFS facilitators or a farmers promoter who is trained by a qualified FFS Facilitators should be considered as a trained farmer and they are not qualified to conduct training sessions themselves! Only a full course by a master trainer wouldd equip them with the correct knowledge and skills to be a peer trainer themselves</p>	<p>Report on Gender Training by Rwamrec</p>	<p>MINAGRI RAB DISTRICTS FFS Facilitator's cooperatives</p>

<p>Provide business development coaching to the FFS Facilitator's Cooperatives</p> <p>The committee members of the FFS Facilitator's cooperatives were trained on Cooperative management and business development. Each of the 29 cooperatives have a unique action plan and business plan. However, in order to increase their changes for becoming successful private service provider in agriculture, it would be best if they are coached by professional advisors. Ideally, this component would be supported (direct or indirect) by ongoing Belgian funded intervention on local economic development.</p>	<p>Twigire Muhinzi model - update October 2016</p> <p>+</p> <p>Proposal for coaching the FFS Fac's Coops</p>	<p>EMBASSY BTC MINALOC</p>
<p>Ensure that the Seed quality database as well as control plots are continued to be used</p> <p>An important result of the intervention is the creation of the seed quality control database. By continuing to use this database, the Government of Rwanda will be ensured that seed growers are properly registered, that all steps of seed quality control are implemented and all data from the field, the lab and the control plots are connected. Furthermore, every seed lot can be traced back to its origin. Last but not least, the database allows to make any kind of seed production report you wish. When properly implemented the seed quality control system is now in line with COMESA seed trade regulations which facilitates the export of seed.</p>	<p>The database software + Manuel</p>	<p>Seed Quality control unit</p>
<p>Try to continue with the training of seed growers</p> <p>The innovative training program for Seed growers was only established in the second half of the program. All parties involved (seed growers, RAB, Seed companies) were very positive about the approach. The Seed Association of Rwanda (STAR) also showed interested in the training methodology and the network. It would be great if the training can continue and if it could increasingly focus on business development. The costs are estimated at only 100,000 euro per season.</p>	<p>Presentation and article about the training for seed growers</p>	<p>RAB STAR</p>
<p>Try to continue Positive Selection for seed potatoes</p> <p>The FFS groups drastically increased the availability of potato seed by production and sales by of high quality informal seed by applying the process of positive selection. The best way to continue this activity is by supporting the FFS Facilitators to continue to coordination. This can be done through a contract with the FFS Facilitator's cooperatives.</p>	<p>Presentation about Positive Selection</p>	<p>RAB FFS Fac's Coops Districts MINAGRI</p>

